## Slippery Rock University Undergraduate Catalog 2021-2022

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## Rock Solid Education

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## H

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- Humanities and Health, Certificate (p. 1009)
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- Writing for the Nonprofit Sector, Certificate (p. 1003)


## College of Business <br> Dean's Office Staff

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## Departments

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## Accounting, Economics, and Finance

| Chair | Secretary | Location | Department <br> Phone |
| :--- | :--- | :--- | :--- |
| Dr. Melanie | Teresa Aspinall | 110 Eisenberg <br> Classroom <br> Anderson | Building |
|  |  |  |  |

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

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

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

## The Rock Difference

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

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

## Our Vision

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

## Our Mission

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

## Accreditation

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

## Faculty

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

Lua Augustin
Associate Professor
Accounting,Economics \& Finance
Ph.D., Texas Tech University
M.Ed., Lamar University
M.B.A., Midwestern State University
B.B.A., Midwestern State University

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

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

## Jeffrey Forrest

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

## Benjamas Jirasakuldech

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

## Yi Li

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

## Larry McCarthy

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

## Sunita Mondal

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

## Theresa Phipps

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

## Edward Scott

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

## Pavani Tallapally

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

## Yanbin Tu

Instructor
Accounting,Economics \& Finance
Ph.D., University of Connecticut
M.A., Simon Fraser University
M.A., East China Normal University

## Jesus Valencia

Associate Professor
Accounting,Economics \& Finance
Ph.D., University of Pittsburgh
M.A., University of Pittsburgh
B.A., University of Pittsburgh

## Xintong Wang

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

## Programs

All first-year students who enter SRU in the Summer and Fall terms of 2019 and after will follow Rock Studies. Students who entered SRU before Spring 2019 will follow Liberal Studies. All new transfer students beginning Summer 2019 and after will follow Liberal Studies. We anticipate that transfer students will begin to enter under Rock Studies during the Summer/Fall term of 2021.

## Majors

- Accounting Online, Bachelor of Science in Business Administration (BSBA) (p. 27)
- Accounting, Bachelor of Science in Business Administration (BSBA) (p. 28)
- Economics, Bachelor of Science in Business Administration (BSBA) (p. 33)
- Finance, Bachelor of Science in Business Administration (BSBA) (p. 38)


## Minors

- Accounting, Minor (for BSBA and HCAM students only) (p. 32)
- Economics, Minor (BSBA Majors Only) (p. 36)
- Economics, Minor (Non BSBA Majors) (p. 37)
- Finance, Minor (for BSBA and HCAM students only) (p. 41)


## Certificates

- Accounting, Certificate (p. 32)


## Courses

## ACCT Courses

## ACCT 101- Taxes in America

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

Credits: 3
Term(s) Typically Offered: Offered Summer \& Winter Terms

## ACCT 139 - University Seminar

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

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute

## ACCT 190 - Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ACCT 195 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## ACCT 198-Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ACCT 209 - Financial Accounting

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

Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): International Business, Innovation, Entrepreneurship, and Positive Change, Leadership Development, Transfer Thread Completion Course

## ACCT 210-Managerial Accounting

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

Prerequisite: ACCT 209 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$
Credits: 3

## ACCT 230 - Accounting Information Systems

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

Prerequisites: ACCT $209^{\mathrm{C}}$ and (CPSC $210^{\mathrm{D}}$ or MIS $210^{\mathrm{D}}$ )
${ }^{\mathrm{C}}$ Requires minimum grade of C .
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Every Term

## ACCT 290 - Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ACCT 295 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## ACCT 298 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ACCT 308 - Federal Individual Income Tax

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

Prerequisite: ACCT 209 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ACCT 310-Cost Accounting

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

Prerequisites: ACCT $209^{\text {C }}$ and (ECON $219^{\text {D }}$ or MGMT $219^{\text {D }}$ )
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ACCT 311 - Federal Corporate and Transfer Taxes

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

Prerequisite: ACCT 308 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ACCT 313 - Intermediate Accounting I

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

Prerequisites: ACCT $209^{\circ}$ and ACCT $230^{\text {C }}$ and ECON $202^{\text {D }}$ and
(ECON $219^{\text {D }}$ or MGMT $219^{\text {D }}$ )
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall, Spring, \& Summer
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ACCT 314- Intermediate Accounting II

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

Prerequisite: ACCT 313 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall, Spring, \& Summer
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ACCT 315 - Intermediate Accounting III

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

## Prerequisite: ACCT 314 ${ }^{\text {C }}$

${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ACCT 320 - Forensic Accounting

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

Prerequisites: ACCT $209^{\text {C }}$ and ACCT $313^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ACCT 322 - Business Analysis and Decision Making

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

Prerequisite: ACCT $209^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Every Term
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ACCT 324 - Cost Accounting II

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

Prerequisite: ACCT $310^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ACCT 341 - Legal Environment of Business II

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

Prerequisite: ACCT $340^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

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

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

Prerequisite: ACCT 308 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Enrollment limited to students with a semester level of Junior 2, Post Baccalaureate, Senior 1 or Senior 2.
Enrollment limited to students in the College of Business college.
Enrollment limited to students with department of Accounting,Economics \& Finance.

## ACCT 390-Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ACCT 395-Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ACCT 398 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ACCT 411 - Auditing Theory and Practice

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

Prerequisite: ACCT $315^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ACCT 412 - Accounting Seminar

Analysis of current accounting theory and application in practice. Additional focus on ethics, written and oral communication, organization skills, professionalism, and current topics.
Prerequisite: ACCT $314^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ACCT 413 - Advanced Accounting

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

Prerequisite: ACCT $315^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ACCT 419 - Auditing Systems

Continuation of ACCT 411 with emphasis on computerized accounting systems and auditing procedures.
Prerequisite: ACCT $411^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ACCT 423 - Advanced Accounting II

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

Prerequisite: ACCT 413 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

## ACCT 429 - Accounting Data Analytics

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

Prerequisite: ACCT $230^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

## ACCT 450 - Internship

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

Credits: 1-12
Term(s) Typically Offered: Offered Fall, Spring, \& Summer
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ACCT 490 - Independent Study

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ACCT 495 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ACCT 498 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ECON Courses

## ECON 105-Economics of Social Issues

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

Credits: 3
Term(s) Typically Offered: Offered Winter, Spring\&Summer
Thematic Thread(s): Transfer Thread Completion Course

## ECON 139-University Seminar

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

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## ECON 190-Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
ECON 195 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## ECON 198 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ECON 201 - Principles of Macroeconomics

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

Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): Transfer Thread Completion Course

## ECON 202 - Principles of Microeconomics

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

Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): Transfer Thread Completion Course

## ECON 211 - Real Estate Finance

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

Credits: 3
Term(s) Typically Offered: Offered as Needed
ECON 219 - Business Analytics I
Probability and statistics in a business environment encompassing descriptive statistics, probability theory, hypothesis testing, linear regression and correlation. Prerequisites: Algebraic proficiency and microcomputer proficiency. Cross-listed as MGMT 219

Credits: 3
Term(s) Typically Offered: Offered Every Term

## ECON 290 - Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ECON 295 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## ECON 298 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
ECON 301 - Macroeconomic Analysis
Determination of national income and employment. National income accounts as measures of aggregate economic behavior. Analysis of income stability, unemployment, inflation and growth.

Prerequisites: ECON $201^{\text {D }}$ and ECON $202^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

ECON 302 - Microeconomic Analysis
Intermediate price theory including theories of demand, supply, production, resource allocation, market structure, general equilibrium and risk analysis.

Prerequisites: ECON $201^{\text {D }}$ and ECON 202 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

ECON 304 - Money and Banking
Emphasis is upon monetary policy, how it is implemented, the theories on which it is based, and the implication of this policy on our economy.

Prerequisite: ECON 201 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ECON 312 - Critical Choices in Health Care Policy

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

Prerequisite: ECON 202 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): 21 st Century Healthcare, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ECON 315 - Economics of Sustainable Development

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

Prerequisite: ECON $202{ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Sustainable International Development,
Sustainability, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ECON 318 - Intermediate Statistical Analysis

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

Prerequisites: ECON $219^{\text {D }}$ or MGMT $219^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ECON 319-Business Analytics II

This course introduces various methods on how to analyze large sets of business data in order to uncover potential business opportunities. Students will learn both predictive analytics and prescriptive analytics. The predictive analytics include trend analysis, forecasting techniques, data mining, and spreadsheet modeling. Prescriptive analytics covers linear optimization and decision analysis. Business software such as productivity software, data visualization, and business intelligence software will be heavily used as a main focus of learning.
Prerequisites: (ECON $219^{\mathrm{D}}$ or MGMT $219^{\mathrm{D}}$ or STAT $152^{\mathrm{D}}$ ) and (MATH $113^{\mathrm{D}}$ or MATH $115^{\mathrm{D}}$ or MATH $117^{\mathrm{D}}$ or MATH $118^{\mathrm{D}}$ or MATH $122^{\mathrm{D}}$ or MATH $123^{\mathrm{D}}$ or MATH $125^{\mathrm{D}}$ or MATH $131^{\mathrm{D}}$ or MATH $210^{\mathrm{D}}$ or MATH $225^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Every Term
Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.

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

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

Prerequisite: ECON $202{ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

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

## ECON 326 - International Economics

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

Prerequisites: ECON $201^{\text {D }}$ and ECON 202 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): International Business, Sustainable International Development, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ECON 360 - Labor Economics

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

Prerequisite: ECON 202 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ECON 390 - Experimental

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

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ECON 395-Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ECON 398 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ECON 450 - Internship

Supervised placement and research in selected public and private agencies at appropriate institutions. Course can be taken for 1-12 credits, 3 credits are recommended.
Prerequisites: ECON $201{ }^{\text {D }}$ and ECON 202 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 1-12

Term(s) Typically Offered: Offered Fall, Spring, \& Summer
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ECON 490 - Independent Study

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ECON 495 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ECON 498 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN Courses

## FIN 100 - Personal Financial Planning

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

Credits: 3
Term(s) Typically Offered: Offered Winter, Spring\&Summer
Thematic Thread(s): Innovation, Entrepreneurship, and Positive Change, Transfer Thread Completion Course

## FIN 139 - University Seminar

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

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## FIN 190 - Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
FIN 195 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## FIN 198 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## FIN 290 - Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## FIN 295 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## FIN 298 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
FIN 304 - Money and Banking
Emphasis is upon monetary policy, how it is implemented, the theories on which it is based, and the implication of this policy on our economy.

Prerequisite: ECON $201{ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN 318 - Intermediate Statistical Analysis

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

Prerequisites: ECON $219^{\text {D }}$ or MGMT 219 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$. Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN 320 - Managerial Finance

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

Prerequisite: ACCT 209 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall, Winter, \& Spring
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN 321 - Investments

Introduction to security markets and their operation; investment alternatives; fundamentals of investment analysis.
Prerequisite: FIN $320^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, \& Summer
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN 322 - Bank Financial Management

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

Prerequisite: FIN $320^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN 323 - Financial Markets and Institutions

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

Prerequisite: FIN $320^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall, Winter, \& Spring
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN 326 - Intermediate Corporate Finance

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

Prerequisite: FIN $320^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall, Spring, \& Summer
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN 329 - Principles of Insurance

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

Prerequisite: FIN $320^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN 340 - Real Estate Investment

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

Prerequisite: FIN $320^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN 341 - Entrepreneurial Finance

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

Prerequisite: FIN $320^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Innovation, Entrepreneurship, and Positive Change, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN 390 - Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN 395 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN 398 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN 409 - Retirement and Estate Planning

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

Prerequisites: FIN $321^{\text {D }}$ and FIN $329^{\text {D }}$ and ACCT 308 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## FIN 410 - Personal Financial Planning Seminar

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

Prerequisites: FIN $321^{\text {D }}$ and FIN $329^{\text {D }}$ and ACCT $308^{\text {D }}$ and FIN $409^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN 420 - Finance Seminar

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

Prerequisite: FIN 320 ${ }^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN 421 - Portfolio Theory

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

Prerequisite: FIN 320 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN 427 - International Financial Management

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

Prerequisite: FIN $320^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN 430 - International Banking

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

Prerequisites: FIN $320^{\text {D }}$ and FIN $323^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## FIN 450 - Internship

Supervised placement and research in selected public and private
agencies at appropriate institutions. Course listed as 1-12 credits, 3
credits are recommended.
Credits: 1-12
Term(s) Typically Offered: Offered Fall, Spring, \& Summer
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## FIN 490 - Independent Study

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN 495 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN 498 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

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

## Program Learning Outcomes

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


## Related Links

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

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

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

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher Overall GPA: 2.0 or higher Core GPA: 2.0 or higher

## Summary*

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

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


## Rock Studies Requirements

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

## Basic Math Requirement

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

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra | $\mathbf{0 - 3}$ |
| Total Hours |  |  |

## Computer Competency

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

## Major Requirements

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Business Administration Core Requirements |  |  |
| ECON 201 | Principles of Macroeconomics ${ }^{1}$ | 3 |
| ECON 202 | Principles of Microeconomics ${ }^{1}$ | 3 |
| ECON 219 | Business Analytics ${ }^{1}$ | 3 |
| or MGMT 219 | Business Analytics I |  |
| ECON 319 | Business Analytics II ${ }^{1}$ | 3 |
| or MGMT 319 | Business Analytics II |  |
| ACCT 209 | Financial Accounting ${ }^{1}$ | 3 |
| ACCT 310 | Cost Accounting (Accounting Majors) ${ }^{1}$ | 3 |
| MGMT 320 | Operations Management I ${ }^{1}$ | 3 |
| MRKT 230 | Principles of Marketing ${ }^{1}$ | 3 |
| MGMT 351 | Organizational Behavior ${ }^{1}$ | 3 |
| BUSA 303 | Issues in Global Business ${ }^{1}$ | 3 |
| or MRKT 303 | Issues in Global Business |  |
| FIN 320 | Managerial Finance ${ }^{1}$ | 3 |
| BUSA 340 | Legal Environment of Business ${ }^{1}$ | 3 |
| MGMT 458 | Business Capstone ${ }^{1}$ | 3 |
| MIS 265 | Management Information Systems ${ }^{1}$ | 3 |
| Subtotal |  | 42 |

Required Computer Science Course

| CPSC 210 | Productivity Software |
| :---: | :--- |
| or MIS 210 | Productivity Software |

Subtotal
Required Accounting Courses

| ACCT 230 | Accounting Information Systems ${ }^{2}$ | 3 |
| :--- | :--- | :--- |
| ACCT 308 | Federal Individual Income Tax ${ }^{2}$ | 3 |
| ACCT 313 | Intermediate Accounting I ${ }^{2}$ | 3 |
| ACCT 314 | Intermediate Accounting II ${ }^{2}$ | 3 |
| ACCT 315 | Intermediate Accounting III $^{2}$ | 3 |
| ACCT 411 | Auditing Theory and Practice ${ }^{2}$ | 3 |
| ACCT 413 | Advanced Accounting ${ }^{2}$ | 3 |

Subtotal
Electives
Select two of the following:

| ACCT 311 | Federal Corporate and Transfer Taxes ${ }^{2}$ |
| :--- | :--- |
| ACCT 320 | Forensic Accounting ${ }^{2}$ |
| ACCT 324 | Cost Accounting II $^{2}$ |
| ACCT 412 | Accounting Seminar ${ }^{2}$ |
| ACCT 419 | Auditing Systems ${ }^{2}$ |
| ACCT 423 | Advanced Accounting II $^{2}$ |
| ACCT 429 | Accounting Data Analytics $^{2}$ |
| ACCT 450 | Internship $^{2}$ |

Subtotal

## Total Hours

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


## Co-Curricular and Experiential Learning

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

## 1. Internships

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

## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
ACCOUNTING - BSBA (2339)
This program is effective as of Spring 2020.
Revised 10.28.2021
UCC 10.13.2020

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

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

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

## Program Learning Outcomes

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


## Related Links

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

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

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

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher Overall GPA: 2.0 or higher Core GPA: 2.0 or higher

## Summary*

Code Title Hours
Rock Studies Requirements ..... 42-43
Other Basic Requirements ..... 0-3
Computer Competency ..... 0-3
Major Requirements ..... 72
Electives ..... 6

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


## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| Select one of the following: |  | 3-4 |
| MATH 117 | Quantitative Reasoning |  |
| MATH 123 | Introduction to Applied Calculus |  |
| MATH 225 | Calculus I |  |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15-16 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| ECON 202 | Principles of Microeconomics | 3 |
| Natural Sciences Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Sciences Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |



## Major Requirements

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


## Business Administration Core Requirements

| ECON 201 | Principles of Macroeconomics ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| ECON 202 | Principles of Microeconomics ${ }^{1}$ | 3 |
| ECON 219 | Business Analytics ${ }^{1}$ | 3 |
| or MGMT 219 | Business Analytics I |  |
| ECON 319 | Business Analytics II ${ }^{1}$ | 3 |
| or MGMT 319 | Business Analytics II |  |
| ACCT 209 | Financial Accounting ${ }^{1}$ | 3 |
| ACCT 310 | Cost Accounting (Accounting Majors) ${ }^{1}$ | 3 |
| MGMT 320 | Operations Management I ${ }^{1}$ | 3 |
| MRKT 230 | Principles of Marketing | 3 |
| MGMT 351 | Organizational Behavior ${ }^{1}$ | 3 |
| BUSA 303 | Issues in Global Business ${ }^{1}$ | 3 |
| or MRKT 303 | Issues in Global Business |  |
| FIN 320 | Managerial Finance ${ }^{1}$ | 3 |
| BUSA 340 | Legal Environment of Business ${ }^{1}$ | 3 |


| MGMT 458 | Business Capstone ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| MIS 265 | Management Information Systems ${ }^{1}$ | 3 |
| Subtotal |  | 42 |
| Required Computer Science Course |  |  |
| CPSC 210 or MIS 210 | Productivity Software ${ }^{1}$ Productivity Software | 3 |
| Subtotal |  | 3 |
| Required Accounting Courses |  |  |
| ACCT 230 | Accounting Information Systems ${ }^{2}$ | 3 |
| ACCT 308 | Federal Individual Income Tax ${ }^{2}$ | 3 |
| ACCT 313 | Intermediate Accounting I ${ }^{2}$ | 3 |
| ACCT 314 | Intermediate Accounting II ${ }^{2}$ | 3 |
| ACCT 315 | Intermediate Accounting III ${ }^{2}$ | 3 |
| ACCT 411 | Auditing Theory and Practice ${ }^{2}$ | 3 |
| ACCT 413 | Advanced Accounting ${ }^{2}$ | 3 |
| Subtotal |  | 21 |
| Electives |  |  |
| Select two of the following: |  | 6 |
| ACCT 311 | Federal Corporate and Transfer Taxes ${ }^{2}$ |  |
| ACCT 320 | Forensic Accounting ${ }^{2}$ |  |
| ACCT 324 | Cost Accounting II ${ }^{2}$ |  |
| ACCT 345 | Volunteer Income Tax Assistance (VITA) ${ }^{2}$ |  |
| ACCT 412 | Accounting Seminar ${ }^{2}$ |  |
| ACCT 419 | Auditing Systems ${ }^{2}$ |  |
| ACCT 423 | Advanced Accounting II ${ }^{2}$ |  |
| ACCT 429 | Accounting Data Analytics ${ }^{2}$ |  |
| ACCT 450 | Internship ${ }^{2}$ |  |
| Subtotal |  | 6 |
| Total Hours |  | 72 |

1 Course counts for $50 \%$ of Major and not for Major GPA
2 Course counts for $50 \%$ of Major and Major GPA

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


## Co-curricular and Experiential Learning

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

## 1. Internships

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

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled

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

PASSHE - Pennsylvania State System of Higher Education Institutions
ACCOUNTING - BSBA (2341)
This program is effective as of Summer 2021.
Revised 10.28.2021
UCC 03.30.2021

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| ECON 201 | Principles of Macroeconomics | 3 |
| ENGL 102 | Critical Writing | 3 |
| Select one of the following: |  | 3-4 |
| MATH 117 | Quantitative Reasoning |  |
| MATH 123 | Introduction to Applied Calculus |  |
| MATH 225 | Calculus I |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| $\begin{aligned} & \text { CPSC } 210 \\ & \quad \text { or MIS } 210 \end{aligned}$ | Productivity Software or Productivity Software | 3 |
| INDS 101 | FYRST Seminar* | 1 |
|  | Hours | 16-17 |
| Spring |  |  |
| ECON 202 | Principles of Microeconomics | 3 |
| ENGL 104 | Critical Reading | 3 |
| ACCT 209 | Financial Accounting ${ }^{4}$ | 3 |
| $\begin{aligned} & \text { SCI } 101 \\ & \quad \text { or SCI } 102 \end{aligned}$ | Science of Life or Understanding the Physical World | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
|  | Hours | 15 |

## Second Year

| Fall |  |  |
| :--- | :--- | :--- |
| ACCT 230 | Accounting Information Systems | 3 |
| ECON 219 | Business Analytics I |  |
| or MGMT 219 | or Business Analytics I | 3 |
| SCI 101 <br> or SCI 102 | Science of Life <br> or Understanding the Physical World | 3 |

Select one of the following: 3

| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |

Creative \& Aesthetic Inquiry (p. 1378) 3
Declare a Thematic Thread ${ }^{3}$
Hours 15

## Spring

| ACCT 310 | Cost Accounting | 3 |
| :--- | :--- | :--- |
| ACCT 313 | Intermediate Accounting I | 3 |


| ECON 319 <br> or MGMT 319 | Business Analytics II or Business Analytics II | 3 |
| :---: | :---: | :---: |
| MGMT 320 | Operations Management I | 3 |
| MRKT 230 | Principles of Marketing | 3 |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| ACCT 314 | Intermediate Accounting II | 3 |
| ACCT 308 | Federal Individual Income Tax | 3 |
| MGMT 351 | Organizational Behavior | 3 |
| MIS 265 | Management Information Systems | 3 |
| Thematic Thread Requirement (p.1378) 3 |  |  |
|  | Hours | 15 |
| Spring |  |  |
| ACCT 315 | Intermediate Accounting III | 3 |
| FIN 320 | Managerial Finance | 3 |
| BUSA 303 or MRKT 303 | Issues in Global Business or Issues in Global Business | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Elective |  | 3 |
|  | Hours | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| ACCT 413 | Advanced Accounting | 3 |
| Accounting Elective 1 |  | 3 |
| BUSA 340 | Legal Environment of Business | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Elective |  | 3 |
| MAcc Course ${ }^{2}$ |  | 0-3 |
|  | Hours |  |
| Spring |  |  |
| ACCT 411 | Auditing Theory and Practice | 3 |
| Accounting Elective 2 |  | 3 |
| MGMT 458 | Business Capstone | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Elective |  | 3 |
| MAcc Course ${ }^{2}$ |  | 0-3 |
|  | Hours |  |
|  | Total Hours** |  |
| Course offered in multiple subjects; cannot take course in first major subject. |  |  |
| Accounting undergraduates may take up to 4 Master of Accountancy (MAcc) graduate courses as seniors. |  |  |
| 3 Work with you Thread by the year. Click her ResponsePag VJnD6riXkdM declare a thre | cademic Adviser to declare a Thematic d of your fall semester in your second https://forms.office.com/Pages/ spx?id=ul1VhjsH90-30bc6d8W9kIM7 NEFHMUNHOEISTkJOWIRHVzRCMz |  |
| 4 Accounting m Accounting m Students are | should register for course section d s only. <br> ouraged to take INDS 101 as a Free |  |

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

Major Code: 2341
Revised: 10.06.2021

## Accounting, Certificate

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

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

## Program Requirement

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

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

## Related Links

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

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

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

## Curriculum Guide

## GPA Requirement

Overall GPA: 2.0 or higher
This certificate permits students interested in a career as a Certified Public Accountant (CPA) who have a non-accounting bachelor's degree or are currently enrolled in a non-accounting bachelor's degree program to pursue a program of study that will prepare them for the uniform CPA exam

## Certificate Requirements <br> Code Title

Hours
Required Related Business Courses

| CPSC 210 | Productivity Software | 3 |
| :--- | :--- | :--- |
| ECON 202 | Principles of Microeconomics | 3 |
| ECON 219 | Business Analytics I | 3 |


| FIN 320 | Managerial Finance | 3 |
| :--- | :--- | ---: |
| MGMT 351 | Organizational Behavior | 3 |
| Subtotal |  | 15 |

Required Accounting Courses
Select 10 Credits from the courses listed below:

| ACCT 209 | Financial Accounting |
| :--- | :--- |
| ACCT 230 | Accounting Information Systems |
| ACCT 308 | Federal Individual Income Tax |
| ACCT 310 | Cost Accounting |
| ACCT 313 | Intermediate Accounting I |
| ACCT 314 | Intermediate Accounting II |
| ACCT 322 | Business Analysis and Decision Making |
| ACCT 411 | Auditing Theory and Practice |
| ACCT 413 | Advanced Accounting |
| BUSA 340 | Legal Environment of Business |
| Select 3 credits from the following: | 3 |
| 300 level ACCT elective |  |
| 400 level ACCT elective | 33 |
| 300 level FIN elective | $\mathbf{4 8}$ |
| 400 level FIN elective |  |
| Subtotal |  |
| Total Hours |  |

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


## Additional Certificate Requirement

Students must complete at least 12 credit hours from SRU

## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions

Certificate in Accounting (234C)
Effective Spring 2009
Revised 10.28.2021
UCC 3.26.2019

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

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

## Related Links

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

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

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

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher

## Minor Requirements

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

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

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


## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN ACCOUNTING for SBUS Program Students - (10C)
This program is effective as of Fall 2019.
Revised 07.26.2021
UCC 10.29.19

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

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

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

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

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

## Program Learning Outcomes

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


## Related Links

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

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

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

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher Overall GPA: 2.0 or higher Core GPA: 2.0 or higher

## Summary*

| Title | Hours |
| :--- | ---: |
| Code | $42-43$ |
| Rock Studies Requirements | $0-3$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | 63 |
| Major Requirements | 14 |
| Electives |  |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |

Hours

SUBJ 139
University Seminar

| ENGL 102 | Critical Writing | 3 |
| :---: | :---: | :---: |
| ENGL 104 | Critical Reading | 3 |
| Select one of the following: |  | 3-4 |
| MATH 117 | Quantitative Reasoning |  |
| MATH 123 | Introduction to Applied Calculus |  |
| MATH 225 | Calculus I |  |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15-16 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| ECON 202 | Principles of Microeconomics | 3 |
| Natural Sciences Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Sciences Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |
| Thematic Thread |  |  |
| Select 12 Credit | 1378) ${ }^{2}$ | 12 |
| Total Hours |  | 42-43 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Ar |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |

PE 202
Technology for Wellness

## Total Hours

## Major Requirements

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Business Administration Core Requirements |  |  |
| ECON 201 | Principles of Macroeconomics ${ }^{1}$ | 3 |
| ECON 202 | Principles of Microeconomics ${ }^{1}$ | 3 |
| ECON 219 | Business Analytics ${ }^{1}$ | 3 |
| or MGMT 219 | Business Analytics I |  |
| ECON 319 | Business Analytics II ${ }^{1}$ | 3 |
| or MGMT 319 | Business Analytics II |  |
| ACCT 209 | Financial Accounting ${ }^{1}$ | 3 |
| MGMT 320 | Operations Management I ${ }^{1}$ | 3 |
| ACCT 322 | Business Analysis and Decision Making ${ }^{1}$ | 3 |
| MGMT 351 | Organizational Behavior ${ }^{1}$ | 3 |
| MRKT 230 | Principles of Marketing ${ }^{1}$ | 3 |
| BUSA 303 | Issues in Global Business ${ }^{1}$ | 3 |
| or MRKT 303 | Issues in Global Business |  |
| FIN 320 | Managerial Finance ${ }^{1}$ | 3 |
| BUSA 340 | Legal Environment of Business ${ }^{1}$ | 3 |
| MGMT 458 | Business Capstone ${ }^{1}$ | 3 |
| MIS 265 | Management Information Systems ${ }^{1}$ | 3 |
| Subtotal |  | 42 |

Required Computer Science Course

| CPSC 210 | Productivity Software ${ }^{1}$ | 3 |
| :---: | :--- | :---: |
| or MIS 210 | Productivity Software |  |
| Subtotal |  | 3 |


| Required Economic Courses |  |  |
| :--- | :--- | :--- |
| ECON 301 | Macroeconomic Analysis ${ }^{2}$ | 3 |
| ECON 302 | Microeconomic Analysis ${ }^{2}$ | 3 |
| ECON 326 | International Economics ${ }^{2}$ | 3 |
| Select one of the following: | 3 |  |
| ECON 304 | Money and Banking ${ }^{2}$ |  |
| or FIN 304 | Money and Banking |  |
| FIN 323 | Financial Markets and Institutions ${ }^{2}$ | 12 |

## Required Electives

Select any two 300-400 level Economic Course (Excluding

| ECON 304 | Money and Banking |
| :---: | :--- |
| or FIN 304 | Money and Banking |
| ECON 312 | Critical Choices in Health Care Policy |
| ECON 315 | Economics of Sustainable Development |
| or BUSA 315 | Economics of Sustainable Development |
| ECON 318 | Intermediate Statistical Analysis |
| or FIN 318 | Intermediate Statistical Analysis |
| ECON 324 | Game Theory, Behavioral and Experimental <br>  <br> Economics |
| LCON 360 | Labor Economics |


| ECON 390 | Experimental |  |
| ---: | :--- | ---: |
| ECON 490 | Independent Study |  |
| Subtotal |  | 6 |
| Total Hours |  | 63 |

1 Course counts for $50 \%$ of Major and not for Major GPA
2 Course counts for $50 \%$ of Major and Major GPA

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


## Co-curricular and Experiential Learning

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

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

## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions
ECONOMICS - BSBA (2316)
This program is effective as of Fall 2021
Revised 10.28.2021
UCC 09.21.2021

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| ECON 201 | Principles of Macroeconomics | 3 |
| ENGL 102 | Critical Writing | 3 |
| $\begin{aligned} & \text { CPSC } 210 \\ & \text { or MIS } 210 \end{aligned}$ | Productivity Software or Productivity Software | 3 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| Select one of the following: |  | 3 |
| MATH 117 | Quantitative Reasoning |  |
| MATH 123 | Introduction to Applied Calculus |  |


| MATH 225 | Calculus I |  |
| :---: | :---: | :---: |
| INDS 101 | FYRST Seminar | 1 |
|  | Hours | 16 |
| Spring |  |  |
| ECON 202 | Principles of Microeconomics | 3 |
| ENGL 104 | Critical Reading | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
| $\begin{aligned} & \text { SCI } 101 \\ & \quad \text { or SCI } 102 \end{aligned}$ | Science of Life or Understanding the Physical World | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
|  | Hours | 15 |
| Second Year |  |  |
| Fall |  |  |
| ECON 219 or MGMT 219 | Business Analytics I or Business Analytics I | 3 |
| ACCT 209 | Financial Accounting | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| $\begin{aligned} & \text { SCI } 101 \\ & \quad \text { or SCI } 102 \end{aligned}$ | Science of Life or Understanding the Physical World | 3 |
| MIS 265 | Management Information Systems | 3 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 15 |
| Spring |  |  |
| ECON 301 | Macroeconomic Analysis | 3 |
| ECON 319 or MGMT 319 | Business Analytics II or Business Analytics II | 3 |
| MGMT 320 | Operations Management I | 3 |
| MRKT 230 | Principles of Marketing | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 15 |


| Third Year |  |  |
| :--- | :--- | ---: |
| Fall |  |  |
| ECON 302 | Microeconomic Analysis | 3 |
| ECON 326 | International Economics | 3 |
| FIN 320 | Managerial Finance | 3 |
| MGMT 351 | Organizational Behavior | 3 |
| Thematic Thread Requirement (p. 1378) | 3 |  |
|  | Hours | $\mathbf{1 5}$ |

## Spring

Select one of the following:

| $\begin{aligned} & \text { ECON } 304 \\ & \text { or FIN } 304 \end{aligned}$ | Money and Banking or Money and Banking |  |
| :---: | :---: | :---: |
| FIN 323 | Financial Markets and Institutions |  |
| ECON elective |  | 3 |
| ACCT 322 | Business Analysis and Decision Making | 3 |
| $\begin{aligned} & \text { BUSA } 303 \\ & \text { or MRKT } 303 \end{aligned}$ | Issues in Global Business or Issues in Global Business | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |

Hours


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

## Related Links

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

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

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

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.0 or higher

## Minor Requirements

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

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Economics Courses |  |  |
| ECON 301 | Macroeconomic Analysis (Required) | 3 |
| ECON 302 | Microeconomic Analysis (Required) | 3 |
| ECON 300/400 level |  | 3 |
| ECON 300/400 level | 3 |  |
| Required Business Courses |  |  |
| FIN 320 | Managerial Finance | 3 |
| MGMT 320 | Operations Management I | 3 |
| MGMT 351 | Organizational Behavior | 3 |
| MRKT 230 | Principles of Marketing | 3 |
| Total Hours |  | $\mathbf{2 4}$ |

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


## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN ECONOMICS (16D)
This program is effective as of Summer 2017.
Revised 07.26.2021

## Economics, Minor (Non BSBA Majors)

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

## Related Links

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

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

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

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.0 or higher

## Minor Requirements

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

| Code | Title | Hours |
| :--- | :--- | ---: |
| Economics Minor Core |  |  |
| ECON 201 | Principles of Macroeconomics (Required) | 3 |
| ECON 202 | Principles of Microeconomics (Required) | 3 |
| ECON 301 | Macroeconomic Analysis | 3 |
| or ECON 302 | Microeconomic Analysis |  |

Required Economics Courses 9

ECON 300-level or higher Economics course

| POLS 255 | Introduction to Public Policy |
| :--- | :--- |
| POLS 359 | Policy Analysis and Evaluation |
| HIST 336 | American Economic History |

Total Hours

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


## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN ECONOMICS (16A)
This program is effective as of Summer 2017.
Revised 2.4.2022

## UCC 3.21.2017

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

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

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

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

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

## Program Learning Outcomes

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


## Related Links

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

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

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

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher
Core GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | $42-43$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 63 |
| Electives | 14 |

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


## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |


| ENGL 102 | Critical Writing | 3 |
| :---: | :---: | :---: |
| ENGL 104 | Critical Reading | 3 |
| Select one of the following: |  | 3-4 |
| MATH 117 | Quantitative Reasoning |  |
| MATH 123 | Introduction to Applied Calculus |  |
| MATH 225 | Calculus I |  |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15-16 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| ECON 202 | Principles of Microeconomics | 3 |
| Natural Sciences Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Sciences Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |
| Thematic Thread |  |  |
| Select 12 Cred | 1378) ${ }^{2}$ | 12 |
| Total Hours |  | 42-43 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 Categories; no more than 6 credits from one department; 6 credits must be 300 -level or above

## Basic Math Requirement

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete on | following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | uter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |

PE 202 Technology for Wellness

## Total Hours

## Major Requirements

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Business Administration Core Requirements |  |  |
| ECON 201 | Principles of Macroeconomics ${ }^{1}$ | 3 |
| ECON 202 | Principles of Microeconomics ${ }^{1}$ | 3 |
| ACCT 209 | Financial Accounting ${ }^{1}$ | 3 |
| ECON 219 | Business Analytics I ${ }^{1}$ | 3 |
| or MGMT 219 | Business Analytics I |  |
| ECON 319 | Business Analytics II ${ }^{1}$ | 3 |
| or MGMT 319 | Business Analytics II |  |
| ACCT 322 | Business Analysis and Decision Making ${ }^{1}$ | 3 |
| MGMT 320 | Operations Management I ${ }^{1}$ | 3 |
| MRKT 230 | Principles of Marketing ${ }^{1}$ | 3 |
| MGMT 351 | Organizational Behavior ${ }^{1}$ | 3 |
| BUSA 303 | Issues in Global Business ${ }^{1}$ | 3 |
| or MRKT 303 | Issues in Global Business |  |
| FIN 320 | Managerial Finance | 3 |
| BUSA 340 | Legal Environment of Business ${ }^{1}$ | 3 |
| MGMT 458 | Business Capstone ${ }^{1}$ | 3 |
| MIS 265 | Management Information Systems ${ }^{1}$ | 3 |
| Subtotal |  | 42 |
| Required Computer Science Course |  |  |
| CPSC 210 | Productivity Software ${ }^{1}$ | 3 |
| or MIS 210 | Productivity Software |  |
| Subtotal |  | 3 |

## Required Finance Courses

| FIN 321 | Investments $^{2}$ | 3 |
| :--- | :--- | :--- |
| FIN 323 | Financial Markets and Institutions $^{2}$ | 3 |
| FIN 326 | Intermediate Corporate Finance ${ }^{2}$ | 3 |
| FIN 427 | International Financial Management ${ }^{2}$ | 3 |

Subtotal ..... 12

## Required Electives

Select one of the following options:
Six credits of FIN 300/400 level electives
Three credits of FIN 300/400 level electives and one of the following:

| ECON 301 | Macroeconomic Analysis |  |
| :--- | :--- | ---: |
| ECON 302 | Microeconomic Analysis |  |
| ECON 304 | Money and Banking |  |
| ECON 318 | Intermediate Statistical Analysis | 6 |
| Subtotal |  | $\mathbf{6 3}$ |
| Total Hours |  |  |

[^0]* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

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

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

## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
FINANCE - BSBA (2342)
This program is effective as of Fall 2019.
Revised 11.02.2021
UCC 10.13.2020
Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| ECON 201 | Principles of Macroeconomics | 3 |
| $\begin{aligned} & \text { CPSC } 210 \\ & \text { or MIS } 210 \end{aligned}$ | Productivity Software or Productivity Software | 3 |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar * | 1 |
| Select one of the following: |  | 3-4 |
| MATH 117 | Quantitative Reasoning |  |
| MATH 123 | Introduction to Applied Calculus |  |
| MATH 225 | Calculus I |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
|  | Hours | 16-17 |
| Spring |  |  |
| ECON 202 | Principles of Microeconomics | 3 |
| ENGL 104 | Critical Reading | 3 |


| $\begin{aligned} & \text { SCI } 101 \\ & \quad \text { or SCI } 102 \end{aligned}$ | Science of Life or Understanding the Physical World | 3 |
| :---: | :---: | :---: |
| Humanities Inquiry (p. 1378) |  | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
|  | Hours | 15 |
| Second Year |  |  |
| Fall |  |  |
| $\text { ECON } 219$ <br> or MGMT 219 | Business Analytics I or Business Analytics I | 3 |
| ACCT 209 | Financial Accounting | 3 |
| MIS 265 | Management Information Systems | 3 |
| SCI 101 or SCI 102 | Science of Life or Understanding the Physical World | 3 |
| Free Elective |  | 3 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 15 |
| Spring |  |  |
| $\begin{aligned} & \text { ECON } 319 \\ & \text { or MGMT } 319 \end{aligned}$ | Business Analytics II or Business Analytics II | 3 |
| MGMT 320 | Operations Management I | 3 |
| MRKT 230 | Principles of Marketing | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 15 |
| Third Year |  |  |
|  |  |  |
| BUSA 303 or MRKT 303 | Issues in Global Business or Issues in Global Business | 3 |
| FIN 320 | Managerial Finance | 3 |
| MGMT 351 | Organizational Behavior | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Free Elective (suggested ECON 302) |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| ACCT 322 | Business Analysis and Decision Making | 3 |
| BUSA 340 | Legal Environment of Business | 3 |
| FIN 321 | Investments | 3 |
| FIN 323 | Financial Markets and Institutions | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| FIN 326 | Intermediate Corporate Finance | 3 |
| Finance Elective |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Free Elective (suggested ECON 326) |  | 3 |
| Free Elective |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| FIN 427 | International Financial Management | 3 |



Major Code: 2342
Revised: 10.05.2021

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

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

## Related Links

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

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

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

## Curriculum Guide

GPA Requirement
Minor GPA: 2.0 or higher

## Minor Requirements

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

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  |  |
| FIN 320 | Managerial Finance | 3 |
| FIN 321 | Investments | 3 |
| FIN 323 | Financial Markets and Institutions | 3 |
| FIN 326 | Intermediate Corporate Finance | 3 |
| FIN 427 | International Financial Management | 3 |
| MGMT 320 | Operations Management I | 3 |
| MGMT 351 | Organizational Behavior | 3 |
| or HCAM 360 | Healthcare Organizational Dynamics | $\mathbf{3}$ |
| MRKT 230 | Principles of Marketing | $\mathbf{2 4}$ |
| Total Hours |  |  |

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


## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN FINANCE for SBUS Program Students - (16B)
This program is effective as of Fall 2019.
Revised 11.2019
UCC 07.26.2021

## Government Contracting Assistance Center (GCAC)

## Department Phone

724-738-2346

Department Web Site URL (https://www.sru.edu/offices/government-contracting-assistance-center-ptac/)

## Contracting Specialist

Renee Decker

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

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

## Healthcare Administration and Information Systems

| Chair | Secretary | Location | Department <br> Phone |
| :--- | :--- | :--- | :--- |
| Dr. David Jordan | Teresa Aspinall | 110 Eisenberg <br> Classroom | $724-738-4865$ |
|  |  | Building |  |

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

Healthcare Administration and Management Fact Sheet (https:// www.sru.edu/documents/programs/factsheets/undergraduate/FSHCAM.pdf)

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

## Faculty

John Cotter

Instructor
Healthcare Adm \& Info Systems
Ph.D., Virginia Commonwealth University
M.A., SUNY of Buffalo
B.A., Canisius College

## Natalie Dick

Assistant Professor
Healthcare Adm \& Info Systems
M.H.A., University of Pittsburgh
B.A., Penn State University

## Nancy Dobay

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Healthcare Adm \& Info Systems
M.S.N., Duquesne University
B.S.N., Carlow University

## John Golden

Assistant Professor
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B.A., California University of Pennsylvania

## Abel Gyan

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M.S., Northern Kentucky University
M.B.A., University of Leicester
B.A., University of Science and Technology

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M.S., Cranfield University
B.S., Cranfield University

## David Jordan

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## Stephen Larson

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M.P.A., Brigham Young University
B.A., Brigham Young University

Roger Lutz
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Healthcare Adm \& Info Systems
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M.B.A., University of Pittsburgh
B.A., Haverford College

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Alyshia Ravida
Instructor
Healthcare Adm \& Info Systems

## James Rodger

Professor
Healthcare Adm \& Info Systems
D.B.A., Southern Illinois University
M.B.A., Indiana University of PA
B.S., University of Pittsburgh

## Programs

All first-year students who enter SRU in the Summer and Fall terms of 2019 and after will follow Rock Studies. Students who entered SRU before Spring 2019 will follow Liberal Studies. All new transfer students beginning Summer 2019 and after will follow Liberal Studies. We anticipate that transfer students will begin to enter under Rock Studies during the Summer/Fall term of 2021.

## Abdou Karim Jallow

Associate Professor
Healthcare Adm \& Info Systems

## Majors

- Business Undeclared (p. 51)
- Health Care Administration and Management, Bachelor of Science (BS) - Concentration in Financial Management (p. 54)
- Health Care Administration and Management, Bachelor of Science (BS) - Concentration in Information Systems (p. 57)
- Health Care Administration and Management, Bachelor of Science (BS) - Concentration in Leadership (p. 61)
- Health Care Administration and Management, Bachelor of Science (BS) - Concentration in Leadership - Online (p. 64)
- Health Care Administration and Management, Bachelor of Science (BS) - Concentration in Leadership / Pre-Occupational Therapy (SRU) (3+3) (p. 66)
- Health Care Administration and Management, Bachelor of Science (BS) - Concentration in Leadership / Pre-Occupational Therapy (SRU) (Traditional) (p. 70)
- Health Care Administration and Management, Bachelor of Science (BS) - Concentration in Leadership / Pre-Physical Therapy (SRU) (3+3) (p. 73)
- Health Care Administration and Management, Bachelor of Science (BS) - Concentration in Leadership / Pre-Physical Therapy (SRU) (Traditional) (p. 77)
- Health Care Administration and Management, Bachelor of Science (BS) - Concentration in Leadership / Pre-Physician Assistant (SRU) (3+2) (p. 81)
- Health Care Administration and Management, Bachelor of Science (BS) - Concentration in Leadership / Pre-Physician Assistant (SRU) (Traditional) (p. 85)
- Health Care Administration and Management, Bachelor of Science (BS) - Concentration in Long-Term Care (p. 88)
- Health Care Administration and Management, Bachelor of Science (BS) - Concentration in Marketing and Sales (p. 92)
- Information Systems, Bachelor of Science (BS) (p. 95)


## Minors

- Health Care Administration \& Management, Minor (p. 53)
- Information Systems, Minor (p. 99)


## Courses

## BUSA Courses

## BUSA 130-Dynamics of Global Commerce

Exploration of the challenges of business operations in the global market place. Topics discussed include the business, economic, social and political aspects of the global market place. this may include, but not be limited to, topics such as e-commerce, entrepreneurship, sustainability and business ethics.

## Credits: 3

Term(s) Typically Offered: Offered Summer \& Winter Terms
Thematic Thread(s): International Business, Transfer Thread Completion Course

## BUSA 139-University Seminar

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

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## BUSA 190 - Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
BUSA 195 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## BUSA 198 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## BUSA 290 - Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## BUSA 295 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## BUSA 298 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## BUSA 303 - Issues in Global Business

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

Prerequisites: ECON $201^{\text {D }}$ and ECON $202{ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): Global Citizenship, International Business, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## BUSA 315 - Economics of Sustainable Development

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

Prerequisite: ECON 202 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Thematic Thread(s): Sustainable International Development, Sustainability, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## BUSA 340-Legal Environment of Business

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

Credits: 3
Term(s) Typically Offered: Offered Every Term
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## BUSA 370-Sustainable Entrepreneurship and Innovation

This integrative course introduces students to issues related to sustainable new venture creation. It includes topics such as the importance of innovation and creativity in opportunity recognition and the design of sustainable business models, industry/market analysis, resource acquisition and disposition, assessing a venture's financial strength, and ethical legal issues. Students will learn the entrepreneurial process while acknowledging multiple stakeholders and addressing social, economic and environmental concerns.

Prerequisites: FIN $320^{\mathrm{D}}$ and MGMT $351^{\mathrm{D}}$ and MRKT $330^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Winter Terms
Thematic Thread(s): Innovation, Entrepreneurship, and Positive Change, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## BUSA 390 - Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## BUSA 395 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## BUSA 398 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## BUSA 451 - Employment Law

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

Prerequisites: MGMT $351^{\text {D }}$ or MGMT $250^{\text {D }}$ or MGMT $251^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## BUSA 459 - Sustainable Business Consulting

In this course student teams engage in field-based consulting to analyze actual problem situations involving sustainability for regional businesses.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Innovation, Entrepreneurship, and Positive Change, Transfer Thread Completion Course
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

BUSA 490 - Independent Study
Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## BUSA 495-Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## BUSA 498 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HCAM Courses

HCAM 139-University Seminar
University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## HCAM 190-Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
HCAM 195 - Health Care Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format and on a timely topic.

Prerequisite: HCAM $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## HCAM 198-Selected Topics

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

Prerequisite: HCAM $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## HCAM 230 - US Healthcare Systems

This course offers an overview of the U.S. healthcare delivery system and challenges that confront the industry. It examines legal, technological, economic, political, ethical, and social forces that impact the healthcare industry. Students will learn about the delivery of healthcare services in various settings, as well as the role of government, professional agencies, and other industry related organizations. The allocation of scarce healthcare resources is examined through the lenses of social awareness, civic responsibility, and quasi-market forces. This course also equips students to become informed healthcare consumers and introduces them to healthcare employment opportunities.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms, Offered Summer Terms Odd, Offered Winter Terms Odd
Thematic Thread(s): 21 st Century Healthcare, Being American, Transfer Thread Completion Course

HCAM 250 - Medical Terminology for Healthcare Administrators
This course is designed to provide students with a basic understanding of medical language. Emphasis is placed on basic medical word construction and language derivation related to health care.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): 21 st Century Healthcare, Transfer Thread Completion Course

## HCAM 265 - Managed Care \& Insurance

This course examines Managed Care Organizations, insurance plans, Consumer Directed Health Care plans and Health Care Exchanges. Students will explore the influence of managed health care and the various forms of health care insurance on the organization and delivery of health services in the United States are explored.

Prerequisite: HCAM $230^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

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

## HCAM 275-Health Care Legal \& Ethical Foundations

This course connects theoretical foundations of ethics with practical legal issues facing health care leaders. The course will define the role of the health care provider, payer, consumers, delivery systems, and regulatory bodies in addressing challenges presented by health care law and ethics.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms, Offered Summer Terms Even
Thematic Thread(s): 21 st Century Healthcare, Transfer Thread Completion Course

## HCAM 290 - Experimental

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

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## HCAM 295 - Health Care Workshop

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

Prerequisite: HCAM $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## HCAM 298 - Selected Topics

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

Prerequisite: HCAM $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-3
Term(s) Typically Offered: Offered as Needed
HCAM 300 - Healthcare Systems: Global Perspectives and Analysis This course examines health care systems from other countries in contrast to the United States system of health care. Students will be introduced to larger global perspectives about healthcare systems. Comparisons of healthcare systems' infrastructures, finance systems, level of government involvement, and key metrics of health outcomes will be discussed along with the interconnected socio-political issues across diverse populations.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms, Offered Summer Terms Odd

Thematic Thread(s): 21 st Century Healthcare, Global Citizenship, Fighting Social Problems, International Business, Transfer Thread Completion Course

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

## HCAM 305-Health Care Quality \& Process Improvement

This course examines a systems approach to continuous improvement processes in healthcare settings. Quality and process concepts and theories examined in this course are guided by data and processes at the unit and organization levels that reach beyond regulatory and accreditation compliance.

Prerequisites: HCAM $230^{\text {D }}$ and HCAM $265^{* D}$ (may be taken concurrently).
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms, Offered Winter Terms Even Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HCAM 332 - US Health Care Policy

This course provides an overview of US health care policy in the postwar period. The course will examine the problems of health care costs, access, and quality in depth, consider alternative approaches to health care reform and use a comparative method to examine the health policies of other advanced industrialized countries. In addition, the course aims to introduce students to health policy analysis as an applied social science discipline.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HCAM 335 - Current Topics in Health Care

This course examines current topics in healthcare from the interests of various constituencies and organizations. It is designed to introduce students to the identification and study of current economic, regulatory or operational issues and emerging trends impacting the healthcare industry. Matters of healthcare policy, healthcare reform, current clinical and non-clinical healthcare developments, policy process and advocacy will also be examined.

Credits: 3
Term(s) Typically Offered: Offered Summer Terms Odd, Offered Winter Terms Odd
Thematic Thread(s): 21 st Century Healthcare, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HCAM 360-Healthcare Organizational Dynamics

This course introduces concepts associated with organizational dynamics in the healthcare industry. Students will examine content from individual, team, and organizational perspectives. Organizational dynamics are examined to provide a better understanding of how to deliver value within a competitive and changing healthcare industry.

Prerequisite: HCAM $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms, Offered Summer Terms Even, Offered Winter Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HCAM 390 - Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HCAM 395-Health Care Workshop

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

Prerequisite: HCAM $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## HCAM 398- Selected Topics

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

Prerequisite: HCAM $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## HCAM 400 - Legal Environment of Healthcare

This course acquaints future healthcare managers with legal issues needed to engage with the government, patients, healthcare employees, and contractors. The course is taught from the manager's perspective, rather than the lawyer's perspective, with an emphasis on a wide variety of legal concepts, terms and common-sense tips for avoiding legal trouble, rather than on attorney-level legal analysis.

Prerequisites: (ACCT $340^{\text {D }}$ or BUSA $340^{\circ}$ ) and HCAM $275^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even, Offered Spring Terms, Offered Winter Terms Odd
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## HCAM 410 - Strategic Leadership in Health Care Organizations

This course will examine leadership principles necessary to be effective in a continuously changing health care industry. Concepts covered include cultural competency, patient and family centered care, community outreach, coalition building, teamwork effectiveness, and leading within an environment of change in the US health care system.

Prerequisites: HCAM $230^{\mathrm{D}}$ and (HCAM $360^{\mathrm{D}}$ or MGMT $351^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## HCAM 415 - Marketing for Health Care Organizations

This course covers the application of marketing concepts, tools and techniques to marketing problems, emphasizing strategic thinking and analysis in a healthcare environment. Students will gain a perspective on how a healthcare marketing function links to the overall business system.

Prerequisites: HCAM $230^{\mathrm{D}}$ and (HCAM $360^{\mathrm{D}}$ or MGMT $351^{\mathrm{D}}$ ) and MRKT $330^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HCAM 425 - Long Term Care Management

This course will examine long-term care organizations and care in the United States. Students examine external and internal long-term environments, the organization and delivery of services, administration, management, and leadership of long-term care organizations.

Prerequisites: HCAM $230^{\mathrm{D}}$ and (HCAM $360^{\mathrm{D}}$ or MGMT $351^{\mathrm{D}}$ ) and HCAM $265^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## HCAM 430 - Finance for Healthcare Organizations

This course is designed to build on accounting and financial management strategies used in profit and not-for-profit healthcare organizations. It will expose students to the practical application and theoretical constructs necessary to manage finances in a variety of healthcare organizations.

Prerequisites: HCAM $230^{D}$ and ACCT 209 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

HCAM 450 - Internship-Health Care Administration \& Management This internship provides students with an opportunity to apply theory to practice and develop competencies through a work-related experience in a profit, or not-for-profit healthcare related organization.

Prerequisites: HCAM $230^{\mathrm{D}}$ and HCAM $360^{\mathrm{D}}$ and HCAM $265^{\mathrm{D}}$ and HCAM $400^{\mathrm{D}}$ and (HCAM 405 (may be taken concurrently) ${ }^{\mathrm{D}}$ or HCAM $305^{*}$ ) (may be taken concurrently).
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-12
Term(s) Typically Offered: Offered Summer \& Winter Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HCAM 470 - Healthcare Practice Management

This course will prepare students with the fundamental knowledge needed to manage various types of health care practices. This includes topics such as differentiating between types of medical practices; accreditation, credentialing and licensing; regulatory compliance, compensation, productivity and provider contracting; billing \& the lifecycle of a claim; patient experience \& referral analysis; quality \& utilization management; coordination of care; and innovation in care, payment and organizational models.

Prerequisite: HCAM $360^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## HCAM 480 - Healthcare Value-Based Reimbursement Systems

This course examines payment reform in the healthcare industry, focusing on the shift to value-based reimbursement systems. Students will gain a basic understanding of data sources, the requirements to prepare data for analysis to develop practical applied insights, and the importance of integrating such into healthcare organizational workflows. Students will be able to apply their understanding of the challenges and requirements of performance metrics and systems information in a healthcare environment and learn methods used to improve value in healthcare services through leveraging data and information.

Prerequisites: HCAM $305^{\text {D }}$ or HCAM $405^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

## HCAM 490 - Independent Study

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HCAM 495 - Health Care Workshop

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

Prerequisite: HCAM $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$
Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## HCAM 498- Selected Topics

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

Prerequisite: HCAM $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-3
Term(s) Typically Offered: Offered as Needed
HCAM 499 - Health Care Theory and Research Capstone Seminar This course examines health care theories that focus on the key concepts of individual and population health, access to health care, cost of health care, quality of health care and health care organization structures and processes. Students will research areas of interest based on these theoretical concepts.

Prerequisites: HCAM $230^{D}$ and HCAM $360^{D}$ and HCAM $400^{* D}$ and (HCAM 405 (may be taken concurrently) ${ }^{\text {D }}$ or HCAM $305^{*}$ ) (may be taken concurrently).
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2, Junior 1,
Junior 2, Sophomore 1 or Sophomore 2 may not enroll.

## MIS Courses

MIS 139 - University Seminar
University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## MIS 190 - Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MIS 198 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MIS 210 - Productivity Software

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

Credits: 3
Term(s) Typically Offered: Offered Every Term

## MIS 211 - Information Systems Application Development

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

Credits: 3
Term(s) Typically Offered: Offered Fall Terms

## MIS 265 - Management Information Systems

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

Prerequisites: CPSC $210^{\mathrm{D}}$ or MIS $210^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## MIS 290 - Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MIS 298 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MIS 300-Challenges of Computer Technology

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

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): The Future, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MIS 301 - Practical Computer Security

A practical introduction to the threats present to the online, electronic community, and how to protect yourself and your organization from them. We will explore the connectivity structure of the Internet, along with the security and criminal threats to members of the online community. The legal, ethical and technical issues related to threats such as viruses, worms, and identity theft will be covered.

Prerequisites: CPSC $099^{\mathrm{D}}$ or CPSC $110^{\mathrm{D}}$ or CPSC $130^{\mathrm{D}}$ or CPSC $100^{\mathrm{P}}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{\mathrm{P}}$ Requires minimum grade of P .
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MIS 310 - Business Data Analysis and Visualization

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

Prerequisites: MIS $210^{\circ}$ or STAT $152^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

## MIS 323 - Data Base Systems

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

Prerequisites: CPSC $130^{\mathrm{D}}$ or CPSC $146^{\mathrm{D}}$ or CPSC $210^{\mathrm{D}}$ or MIS $210^{\mathrm{D}}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Students cannot enroll who have a program in Information Systems.

## MIS 328 - Exploring Big Data for Business I

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

Prerequisites: MIS $210^{C}$ and (ECON $219^{C}$ or MGMT $219^{C}$ ) and (MIS $323^{C}$ or CPSC $323^{\text {C }}$ )
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.
Enrollment limited to students in a Bachelor of Science degree.
Enrollment limited to students in the College of Business college.

## MIS 333 - Introduction to Computer Forensics

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

Prerequisites: CPSC $099^{\mathrm{P}}$ or CPSC $100^{\mathrm{P}}$ or CPSC $110^{\mathrm{D}}$ or CPSC $130^{\mathrm{D}}$ or CPSC $210^{\mathrm{D}}$ or MIS $210^{\mathrm{D}}$ or PE $202^{\mathrm{D}}$
${ }^{\mathrm{P}}$ Requires minimum grade of P .
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MIS 353 - Business Data Communications and Technologies

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

Prerequisites: CPSC $210^{\mathrm{D}}$ or MIS $210^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MIS 390 - Experimental

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

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1, Freshman 2 or Sophomore 1.

## MIS 398 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## MIS 401- Information Systems Security

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

Prerequisites: CPSC $301^{\text {D }}$ or MIS $301^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MIS 403-Introduction to Healthcare Information Systems

This course will give an introduction to computer-based information systems as they are applied to the health care industry. Topics will include characteristics of health care data, design and life cycle of HCIS, the information technology supporting HCIS and management issues.
Prerequisites: CPSC $210^{\mathrm{D}}$ or MIS $210^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MIS 413 - Systems Analysis

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

Prerequisites: CPSC $323^{\text {D }}$ or MIS $323^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MIS 423 - Advanced Business Database Systems

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

Prerequisite: MIS $323^{C}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.
Enrollment limited to students in a Bachelor of Science degree.
Enrollment limited to students with the QUIE attribute.
Enrollment limited to students in the College of Business college.
Enrollment limited to students with department of Healthcare Adm \& Info Systems.

## MIS 428 - Exploring Big Data for Business II

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

Prerequisites: MIS $210^{\mathrm{D}}$ and (ECON $219^{\mathrm{D}}$ or MGMT $219^{\mathrm{D}}$ ) and (MIS $323^{\mathrm{D}}$ or CPSC $323^{\text {D }}$ ) and MIS $328^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.
Enrollment limited to students in a Bachelor of Science degree.
Enrollment limited to students with the QUIE attribute.
Enrollment limited to students in the College of Business college.
Enrollment limited to students with department of Healthcare Adm \& Info Systems.

## MIS 443 - Project Management

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

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MIS 450 - Internship

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

Credits: 1-12
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

MIS 453 - Fundamentals of Enterprise Architecture
This course explores the design, selection, implementation and management of enterprise IT solutions. The focus is on applications and their fit with the hosting organization.

Prerequisites: MIS $323^{D}$ and MIS $413^{D}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MIS 490 - Independent Study

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MIS 498 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Business Undeclared Related Links

Business Undeclared Program Page (https://www.sru.edu/academics/ majors-and-minors/business-undeclared/)

Healthcare Administration and Information Systems Department Page (https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/healthcare-administration-and-information-systems/)

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

## Curriculum Guide

GPA Requirement
Overall: 2.0 or higher

Core GPA: GPA 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | $42-43$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 45 |
| Electives | 32 |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| Select one of the following: | $3-4$ |  |
| MATH 117 | Quantitative Reasoning |  |
| MATH 123 | Introduction to Applied Calculus |  |
| MATH 225 | Calculus I |  |
| Select one of the following: | 3 |  |



1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 Categories; no more than 6 credits from one department; 6 credits must be 300 -level or above

## Basic Math Requirement

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one | following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 Beginning Algebra |  |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal A |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |
| Major Requirements |  |  |
| - You are strongly encouraged to declare a major by the junior year. To assist you in keeping on-track for graduation in a timely manner, consult your My Rock Audit report and meet with your adviser. |  |  |


| Code | Title | Hours |
| :---: | :---: | :---: |
| Business Administration Core Requirements |  |  |
| ECON 201 | Principles of Macroeconomics | 3 |
| ECON 202 | Principles of Microeconomics | 3 |
| ECON 219 or MGMT 219 | Business Analytics I ${ }^{1}$ <br> Business Analytics I | 3 |
| $\text { ECON } 319$ <br> or MGMT 319 | Business Analytics II ${ }^{1}$ <br> Business Analytics II | 3 |
| ACCT 209 | Financial Accounting | 3 |
| ACCT 322 | Business Analysis and Decision Making | 3 |
| MGMT 320 | Operations Management I | 3 |
| MRKT 230 | Principles of Marketing | 3 |
| MGMT 351 | Organizational Behavior | 3 |
| BUSA 303 or MRKT 303 | Issues in Global Business ${ }^{1}$ Issues in Global Business | 3 |
| FIN 320 | Managerial Finance | 3 |
| BUSA 340 | Legal Environment of Business | 3 |
| MGMT 458 | Business Capstone ${ }^{1}$ | 3 |
| MIS 265 | Management Information Systems ${ }^{1}$ | 3 |
| Subtotal |  | 42 |

## Required Computer Science Course

| CPSC 210 | Productivity Software |  |
| :--- | :--- | :--- |
|  |  | 3 |

Total Hours ..... 45

Course counts for 50\% of Major and Major GPA

2 A grade of ' C ' or higher must be earned in these courses

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


## Co-Curricular and Experiential Learning

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

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

BUSINESS UNDECLARED - BSBA (2398)
This program is effective as of Fall 2019.
Revised 10.2019
UCC 4.9.2019

## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions

## Health Care Administration \& Management, Minor

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

## Related Links

Healthcare Administration and Management, Minor Program Page (https://www.sru.edu/academics/majors-and-minors/health-care-administration-and-management/)

Healthcare Administration and Information Systems Department Page (https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/healthcare-administration-and-information-systems/)

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

## Curriculum Guide

GPA Requirement
Minor GPA: 2.0 or higher

## Minor Requirements

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| HCAM 230 | US Healthcare Systems | 3 |
| HCAM 265 | Managed Care \& Insurance | 3 |
| HCAM 300 | Healthcare Systems: Global Perspectives and Analysis | 3 |
| HCAM 305 | Health Care Quality \& Process Improvement | 3 |
| HCAM 360 or MGMT 351 | Healthcare Organizational Dynamics Organizational Behavior | 3 |
| Subtotal |  | 15 |
| Additional Coursework |  |  |
| Select two of the following: |  | 6 |
| BIOL 216 | Anatomy and Physiology I with Lab |  |
| BUSA 340 | Legal Environment of Business |  |
| COMM 270 | Strategic Health Communication |  |
| ECON 312 | Critical Choices in Health Care Policy |  |
| ENGL 327 | Healthcare Writing |  |
| ERS 250 | Medical Terminology |  |
| HCAM 275 | Health Care Legal \& Ethical Foundations |  |
| HCAM 400 | Legal Environment of Healthcare |  |
| HCAM 410 | Strategic Leadership in Health Care Organizations |  |
| HCAM 415 | Marketing for Health Care Organizations |  |
| HCAM 425 | Long Term Care Management |  |
| HCAM 430 | Finance for Healthcare Organizations |  |
| HCAM 480 | Healthcare Value-Based Reimbursement Systems |  |
| HLTH 210 | Introduction to Public Health |  |
| MIS 403 | Introduction to Healthcare Information Systems |  |
| SPAN 121 | Spanish for Health Professionals |  |
| Subtotal |  | 6 |
| Total Hours |  | 21 |

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


## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN HEALTH CARE ADMINISTRATION \& MANAGEMENT (51L) Revised 10.28.21
UCC 03.02.21

## Health Care Administration and Management, Bachelor of Science (BS) - Concentration in Financial Management

## Program Learning Outcomes

- Business Technology and Analytics: Students will articulate an applied understanding of key quality improvement metrics and methods to support evidence-based practice guidelines including:
- Demonstrate knowledge, skills and abilities to plan for and ensure the security, integrity, and privacy of data and confidentiality of the end user.
- Demonstrate an ability to identify, aggregate, and summarize technical information for technical and non-technical personnel.
- Communication and Relationship Management: Students will demonstrate the ability to interact and communicate effectively by:
- Presenting information in oral and written formats.
- Collaborating effectively with others.
- Financial Management and Economic Reasoning: Students will demonstrate:
- An ability to analyze, quantify, evaluate and determine the sound allocation of financial resources.
- An ability to apply economic concepts for efficient allocation of scarce resources.
- Healthcare Legal Environment and Ethics: Students will be able to:
- Recognize will ethical dilemmas in healthcare.
- Recognize key healthcare legal and regulatory environment parameters.
- Demonstrate discern viable options for ethical guided decisionmaking processes.
- Demonstrate applied legal and regulatory reasoning.
- Knowledge of the Healthcare Environment: Students will demonstrate an accurate understanding of:
- Health care system structures.
- Reimbursement/payment models
- Factors associated with population health.
- Organizational Dynamics: Students will articulate an applied understanding of:
- Organizational mission, vision, and culture.
- Behaviors associated with organizational commitment and job performance.


## Academic Policies for Students in the Health Care Administration and Management (HCAM) Major

Effective for all Health Care Administration and Management (HCAM) Majors beginning Fall 2021

1. Policy for earning acceptable grades in the HCAM program:
a. A student must earn a grade of "C" or better in ALL Required Basic Courses (HCAM 230, HCAM 265, HCAM 275) and Required Upper-Level Courses (HCAM 305, HCAM 360, HCAM 400, HCAM 430, HCAM 450, HCAM 480, and HCAM 499).
b. A student must earn a grade of "C" or better in ALL non-HCAM major Requirements (ACCT 209, BUSA 340, ECON 312, HLTH 210, and MIS 210, STAT 152 or ECON 219/MGMT 219).
c. The HCAM curriculum is structured with pre-requisites. A student must earn a " $C$ " or better in the pre-requisite course to be able to take the next course. See course catalog for pre-requisites.
d. If a student does not earn a " C " or better, they will be required to:
i. Retake the course
ii. They will be dropped from any course(s) in the following semester that requires a "C" or better as a pre-requisite (see course catalog for pre-requisites)
iii. Students will need to meet with their Academic Advisor and change their schedule accordingly
2. SRU has a Repeat of Courses Policy as follows and it can be found in the course catalog: Repeat of Courses < Slippery Rock University (sru.edu)
a. Students may attempt to improve their grade point average by repeating courses. The most recent grade earned is used in calculating the GPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the grade points and credits previously earned. However, all grades will appear on the transcript. Courses in which a grade was earned at Slippery Rock University may not be repeated at any institution. A grade of W (withdraw) does not count as an earned grade. Students who repeat a course must do so using the same grading system under which they originally took the course. For example, a student who originally took a course graded A-F may not repeat the course on a P/NC, P/F, or audit basis. Students may not repeat a course by using any Credit by Examination program if they originally took the course on a graded A-F, P/NC, P/F, or audit basis. Undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career, excluding withdrawal grades. In addition, repeats of a single course will be limited to a maximum of two. This means, no single course may be taken more than three times (excluding withdrawal grades). The course repeat policy for postbaccalaureate students is the same as the undergraduate student policy.
3. Once the student has exceeded the SRU Repeat of Courses Policy, the student will have their major changed to Exploratory and HCAM Major courses will be removed from their schedule.
4. Additional costs associated with the HCAM major:
a. Lab fees will be collected for classes with a lab component. This fee enhances the University's ability to offer a high-quality program.
b. A student in the HCAM major may be required to purchase Student Professional Liability Insurance while enrolled in HCAM 450 at their own cost. More information will be provided to students in the upper level HCAM courses.
c. HCAM 450 Internship: Certain sites may require one or more of the following: physical examinations, record of immunizations, TB test, criminal background checks, drug testing, specific certifications for CPR/AED (e.g., American Heart Association), and HIPAA training. These may require additional costs for students. Fulfilling these requirements and obtaining appropriate documentation is the responsibility of the student.

## Related Links

Healthcare Administration and Management - Finance, BS Program Page (https://www.sru.edu/academics/majors-and-minors/health-care-administration-and-management/)

Healthcare Administration and Information Systems Department Page (https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/healthcare-administration-and-information-systems/)

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

## Curriculum Guide

GPA Requirement
2.0 GPA overall or higher to declare HCAM as major
2.0 GPA or higher in the major to graduate in HCAM
2.0 GPA or higher and instructor permission to apply for the internship

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | $42-43$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements/Concentration | 60 |
| Electives | 17 |

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

| Rock Studies Requirements <br> Code <br> The Rock | Title | Hours |
| :--- | :--- | ---: |
| The |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| Select one of the following: | $3-4$ |  |


| MATH 117 | Quantitative Reasoning |
| :--- | :--- |
| MATH 123 | Introduction to Applied Calculus |
| MATH 225 | Calculus I |

Select one of the following: 3
COMM 200 Civil Discourse: Theory \& Practice


## Basic Math Requirement

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

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | $\mathbf{0 - 3}$ |

## Computer Competency

Code Title Hours

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

## Major Requirements/Concentration

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

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Basic Courses |  |  |
| ACCT 209 | Financial Accounting ${ }^{1}$ | 3 |


| BUSA 340 | Legal Environment of Business ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| ECON 312 | Critical Choices in Health Care Policy ${ }^{1}$ | 3 |
| Select one of the following: ${ }^{1}$ |  | 3 |
| ECON 219 | Business Analytics I |  |
| MGMT 219 | Business Analytics I |  |
| STAT 152 | Elementary Statistics I |  |
| HCAM 230 | US Healthcare Systems ${ }^{1}$ | 3 |
| HCAM 265 | Managed Care \& Insurance | 3 |
| HCAM 275 | Health Care Legal \& Ethical Foundations ${ }^{1}$ | 3 |
| HCAM 305 | Health Care Quality \& Process Improvement ${ }^{1}$ | 3 |
| HCAM 360 | Healthcare Organizational Dynamics ${ }^{1}$ | 3 |
| HCAM 400 | Legal Environment of Healthcare ${ }^{1}$ | 3 |
| HCAM 430 | Finance for Healthcare Organizations ${ }^{1}$ | 3 |
| HCAM 450 | Internship-Health Care Administration \& Management ${ }^{1}$ | 3 |
| HCAM 480 | Healthcare Value-Based Reimbursement Systems ${ }^{1}$ | 3 |
| HCAM 499 | Health Care Theory and Research Capstone Seminar ${ }^{1}$ | 3 |
| HLTH 210 | Introduction to Public Health ${ }^{1}$ | 3 |
| MIS 210 | Productivity Software ${ }^{1}$ | 3 |
| Financial Management Core Courses |  |  |
| ACCT 230 | Accounting Information Systems | 3 |
| ACCT 310 | Cost Accounting | 3 |
| FIN 320 | Managerial Finance (R) ${ }^{1}$ | 3 |
| FIN 326 | Intermediate Corporate Finance ${ }^{1}$ | 3 |
| Total Hours |  | 60 |

1 Course counts for $50 \%$ of Major requirements and Major GPA

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


## Co-curricular and Experiential Learning

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

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

## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
HEALTH CARE ADMINISTRATION \& MANAGEMENT - BS (2346)
Concentration in Financial Management (FINM)
This program is effective as of Fall 2020
Revised 11.2.2021
UCC 03.02.2021

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| HCAM 230 | US Healthcare Systems | 3 |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar | 1 |
| SUBJ 139 | University Seminar RSP ${ }^{1}$ | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Select one of the following: |  | 3-4 |
| MATH 117 | Quantitative Reasoning (RSP) |  |
| MATH 123 | Introduction to Applied Calculus (RSP) |  |
| MATH 225 | Calculus I (RSP) |  |
|  | Hours | 16-17 |
| Spring |  |  |
| HCAM 265 | Managed Care \& Insurance | 3 |
| ENGL 104 | Critical Reading | 3 |
| HLTH 210 | Introduction to Public Health | 3 |
| SCI 101 | Science of Life | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
|  | Hours | 15 |

## Second Year

Fall
HCAM 275 Health Care Legal \& Ethical Foundations 3
ACCT 209 Financial Accounting 3
SCI 102 Understanding the Physical World 3
Humanities Inquiry (p. 1378) 3
Thematic Thread Requirement OR Free Elective (p. 1378) 3

Declare a Thematic Thread ${ }^{4}$

|  | Hours | $\mathbf{1 5}$ |
| :--- | :--- | :--- |
| Spring |  |  |
| HCAM 360 | Healthcare Organizational Dynamics | 3 |
| ACCT 322 | Business Analysis and Decision Making | 3 |
| MIS 210 | Productivity Software | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| or ECON 219 <br> or MGMT 219 | or Business Analytics I <br> or Business Analytics I |  |
|  |  |  |


| Thematic Thread Requirement (p. 1378) |  | 3 |
| :---: | :---: | :---: |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| HCAM 480 | Healthcare Value-Based Reimbursement Systems | 3 |
| HCAM 305 | Health Care Quality \& Process Improvement | 3 |
| BUSA 340 | Legal Environment of Business | 3 |
| FIN 320 | Managerial Finance | 3 |
| Thematic Thread Requirement (Upper Level) (p. 1378) |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| HCAM 400 | Legal Environment of Healthcare ${ }^{2}$ | 3 |
| HCAM 430 | Finance for Healthcare Organizations ${ }^{2}$ | 3 |
| ACCT 313 | Intermediate Accounting I | 3 |
| FIN 326 | Intermediate Corporate Finance | 3 |
| Thematic Thread Requirement (Upper Level) (p. 1378) |  | 3 |
|  | Hours | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| HCAM 450 or HCAM 499 | Internship-Health Care Administration \& Management ${ }^{3}$ <br> or Health Care Theory and Research Capstone Seminar | 3 |
| ECON 202 | Principles of Microeconomics | 3 |
| Free Elective (Recommend HCAM or in Minor) ${ }^{3}$ |  | 3 |
| Free Elective (Recommend HCAM or in Minor ${ }^{3}$ |  | 3 |
| Free Elective (Recommend HCAM or in Minor ${ }^{3}$ |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| HCAM 499 or HCAM 450 | Health Care Theory and Research Capstone Seminar ${ }^{3}$ <br> or Internship-Health Care Administration \& Management | 3 |
| ECON 312 | Critical Choices in Health Care Policy | 3 |
| Free Elective (Recommended HCAM or in Minor) ${ }^{3}$ |  | 3 |
| Free Elective (Recommended HCAM or in Minor) ${ }^{3}$ |  | 3 |
| Free Elective (Recommended HCAM or in Minor) ${ }^{3}$ |  | 3 |
|  | Hours | 15 |
|  | Total Hours** 12 |  |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 Must have "Sufficient Academic Performance" and earn " C " or better in the course. Please refer to the Academic Policies for Students in the HCAM major.
3 Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.
4 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread.

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

Major Code: 2346
Concentration Code: FINM
Revised: 06.30.21
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Health Care Administration and Management, Bachelor of Science (BS) - Concentration in Information Systems

## Program Learning Outcomes

- Business Technology and Analytics: Students will articulate an applied understanding of key quality improvement metrics and methods to support evidence-based practice guidelines including:
- Demonstrate knowledge, skills and abilities to plan for and ensure the security, integrity, and privacy of data and confidentiality of the end user.
- Demonstrate an ability to identify, aggregate, and summarize technical information for technical and non-technical personnel.
- Communication and Relationship Management: Students will demonstrate the ability to interact and communicate effectively by.
- Presenting information in oral and written formats.
- Collaborating effectively with others.
- Financial Management and Economic Reasoning: Students will demonstrate:
- An ability to analyze, quantify, evaluate and determine the sound allocation of financial resources.
- An ability to apply economic concepts for efficient allocation of scarce resources.
- Healthcare Legal Environment and Ethics: Students will be able to:
- Recognize will ethical dilemmas in healthcare.
- Recognize key healthcare legal and regulatory environment parameters.
- Demonstrate discern viable options for ethical guided decisionmaking processes.
- Demonstrate applied legal and regulatory reasoning.
- Knowledge of the Healthcare Environment: Students will demonstrate an accurate understanding of:
- Health care system structures.
- Reimbursement/payment models.
- Factors associated with population health.
- Organizational Dynamics: Students will articulate an applied understanding of:
- Organizational mission, vision, and culture.
- Behaviors associated with organizational commitment and job performance.


## Academic Policies for Students in the Health Care Administration and Management (HCAM) Major

## Effective for all Health Care Administration and Management (HCAM) Majors beginning Fall 2021

1. Policy for earning acceptable grades in the HCAM program:
a. A student must earn a grade of "C" or better in ALL Required Basic Courses (HCAM 230, HCAM 265, HCAM 275) and Required Upper-Level Courses (HCAM 305, HCAM 360, HCAM 400, HCAM 430, HCAM 450, HCAM 480, and HCAM 499).
b. A student must earn a grade of " C " or better in ALL non-HCAM major Requirements (ACCT 209, BUSA 340, ECON 312, HLTH 210, and MIS 210, STAT 152 or ECON 219/MGMT 219).
c. The HCAM curriculum is structured with pre-requisites. A student must earn a "C" or better in the pre-requisite course to be able to take the next course. See course catalog for pre-requisites.
d. If a student does not earn a " $C$ " or better, they will be required to:
i. Retake the course
ii. They will be dropped from any course(s) in the following semester that requires a "C" or better as a pre-requisite (see course catalog for pre-requisites)
iii. Students will need to meet with their Academic Advisor and change their schedule accordingly
2. SRU has a Repeat of Courses Policy as follows and it can be found in the course catalog: Repeat of Courses < Slippery Rock University (sru.edu)
a. Students may attempt to improve their grade point average by repeating courses. The most recent grade earned is used in calculating the GPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the grade points and credits previously earned. However, all grades will appear on the transcript. Courses in which a grade was earned at Slippery Rock University may not be repeated at any institution. A grade of W (withdraw) does not count as an earned grade. Students who repeat a course must do so using the same grading system under which they originally took the course. For example, a student who originally took a course graded A-F may not repeat the course on a P/NC, P/F, or audit basis. Students may not repeat a course by using any Credit by Examination program if they originally took the course on a graded A-F, P/NC, P/F, or audit basis. Undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career, excluding withdrawal grades. In addition, repeats of a single course will be limited to a maximum of two. This means, no single course may be taken more than three times (excluding withdrawal grades). The course repeat policy for postbaccalaureate students is the same as the undergraduate student policy.
3. Once the student has exceeded the SRU Repeat of Courses Policy, the student will have their major changed to Exploratory and HCAM Major courses will be removed from their schedule.
4. Additional costs associated with the HCAM major:
a. Lab fees will be collected for classes with a lab component. This fee enhances the University's ability to offer a high-quality program.
b. A student in the HCAM major may be required to purchase Student Professional Liability Insurance while enrolled in

HCAM 450 at their own cost. More information will be provided to students in the upper level HCAM courses.
c. HCAM 450 Internship: Certain sites may require one or more of the following: physical examinations, record of immunizations, TB test, criminal background checks, drug testing, specific certifications for CPR/AED (e.g., American Heart Association), and HIPAA training. These may require additional costs for students. Fulfilling these requirements and obtaining appropriate documentation is the responsibility of the student.

## Related Links

Healthcare Administration and Management - Information Systems, BS Program Page (https://www.sru.edu/academics/majors-and-minors/ health-care-administration-and-management/)

Healthcare Administration and Information Systems Department Page (https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/healthcare-administration-and-information-systems/)

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

## Curriculum Guide

## GPA Requirement

2.0 GPA overall or higher to declare HCAM as major
2.0 GPA or higher in the major to graduate in HCAM
2.0 GPA or higher and instructor permission to apply for the internship

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | $42-43$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements/Concentration | 60 |
| Electives | 17 |

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


## Rock Studies Requirements



| Select 3 Credits (p. 1378) | 3 |
| :---: | :---: |
| Humanities Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Social Science Inquiry |  |
| ECON 202 Principles of Microeconomics | 3 |
| Natural Sciences Inquiry |  |
| SCI 101 Science of Life | 3 |
| Physical Sciences Inquiry |  |
| SCI 102 Understanding the Physical World | 3 |
| Subtotal | 15 |
| Thematic Thread |  |
| Select 12 Credits (p.1378) ${ }^{2}$ | 12 |
| Total Hours |  |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

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

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required | minimum SAT or ACT math score OR |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | $\mathbf{0 - 3}$ |

## Computer Competency

| Code | Title | Hours |
| :--- | :--- | ---: |
| Demonstrate "computer competency" by one of the following: | $0-3$ |  |
| Pass Computer Competency Exam OR |  |  |$\quad$| Select one of the following at SRU or another post-secondary |  |
| :--- | :--- |
| institution: |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |
| CPSC 110 | Computer Concepts <br> CPSC 130 |
| Programming |  |

Total Hours

## Major Requirements/Concentration

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


## Required Basic Courses

| ACCT 209 | Financial Accounting ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| BUSA 340 | Legal Environment of Business ${ }^{1}$ | 3 |
| ECON 312 | Critical Choices in Health Care Policy ${ }^{1}$ | 3 |
| HCAM 230 | US Healthcare Systems ${ }^{1}$ | 3 |
| HCAM 265 | Managed Care \& Insurance | 3 |
| HCAM 275 | Health Care Legal \& Ethical Foundations ${ }^{1}$ | 3 |


| HCAM 305 | Health Care Quality \& Process Improvement ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| HCAM 360 | Healthcare Organizational Dynamics ${ }^{1}$ | 3 |
| HCAM 400 | Legal Environment of Healthcare ${ }^{1}$ | 3 |
| HCAM 430 | Finance for Healthcare Organizations ${ }^{1}$ | 3 |
| HCAM 450 | Internship-Health Care Administration \& Management ${ }^{1}$ | 3 |
| HCAM 480 | Healthcare Value-Based Reimbursement Systems ${ }^{1}$ | 3 |
| HCAM 499 | Health Care Theory and Research Capstone Seminar ${ }^{1}$ | 3 |
| HLTH 210 | Introduction to Public Health ${ }^{1}$ | 3 |
| MIS 210 | Productivity Software ${ }^{1}$ | 3 |
| Select one of the following: ${ }^{1}$ |  | 3 |
| ECON 219 | Business Analytics I |  |
| MGMT 219 | Business Analytics I |  |
| STAT 152 | Elementary Statistics I |  |
| Subtotal |  | 48 |
| Information Systems Core Courses |  |  |
| MIS 323 | Data Base Systems ${ }^{1}$ | 3 |
| MIS 403 | Introduction to Healthcare Information Systems ${ }^{1}$ | 3 |
| MIS 413 | Systems Analysis ${ }^{1}$ | 3 |
| MIS 443 | Project Management ${ }^{1}$ | 3 |
| Subtotal |  | 12 |
| Total Hours |  | 60 |

1 Course counts for 50\% of Major requirements and Major GPA

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


## Co-Curricular and Experiential Learning

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

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

## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
HEALTH CARE ADMINISTRATION \& MANAGEMENT - BS (2346)
Concentration in Information Systems (INSY)
This program is effective as of Fall 2019
Revised 06.30.21
UCC 03.02.2021

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| HCAM 230 | US Healthcare Systems | 3 |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar * | 1 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Select one of the following: |  | 3-4 |
| MATH 117 | Quantitative Reasoning |  |
| MATH 123 | Introduction to Applied Calculus |  |
| MATH 225 | Calculus I |  |
|  | Hours | 16-17 |
| Spring |  |  |
| HCAM 265 | Managed Care \& Insurance | 3 |
| ENGL 104 | Critical Reading | 3 |
| HLTH 210 | Introduction to Public Health | 3 |
| SCI 101 | Science of Life | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
|  | Hours | 15 |


| Second Year |  |
| :--- | :--- | :--- |
| Fall   <br> HCAM 275 Health Care Legal \& Ethical Foundations 3 <br> MIS 210 Productivity Software 3 <br> SCI 102 Understanding the Physical World 3 <br> Humanities Inquiry (p. 1378) 3  <br> Thematic Thread Requirement (p. 1378) 3  <br> Declare a Thematic Thread ${ }^{4}$   |  |


|  | Hours | $\mathbf{1 5}$ |
| :--- | :--- | :--- |
| Spring |  |  |
| HCAM 360 | Healthcare Organizational Dynamics | 3 |
| ACCT 209 | Financial Accounting | 3 |
| MIS 323 | Data Base Systems | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| or ECON 219 <br> or MGMT 219 | or Business Analytics I <br> or Business Analytics I |  |

Thematic Thread Requirement (p. 1378) 3

| Third Year |  |  |
| :---: | :---: | :---: |
| Fall |  |  |
| BUSA 340 | Legal Environment of Business | 3 |
| HCAM 305 | Health Care Quality \& Process Improvement | 3 |
| MIS 403 | Introduction to Healthcare Information Systems | 3 |
| MIS 413 | Systems Analysis | 3 |
| Thematic Thread Requirement (Upper Level) (p. 1378) |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| HCAM 400 | Legal Environment of Healthcare ${ }^{3}$ | 3 |
| HCAM 430 | Finance for Healthcare Organizations | 3 |
| HCAM 480 | Healthcare Value-Based Reimbursement Systems | 3 |
| MIS 443 | Project Management | 3 |
| Thematic Thread Requirement (Upper Level) (p. 1378) |  | 3 |
|  | Hours | 15 |

## Fourth Year

Fall

| HCAM 450 or HCAM 499 | Internship-Health Care Administration \& Management ${ }^{3}$ <br> or Health Care Theory and Research Capstone Seminar | 3 |
| :---: | :---: | :---: |
| ECON 202 | Principles of Microeconomics | 3 |
| Free Elective (Recommend HCAM or in Minor ${ }^{2}$ |  | 3 |
| Free Elective (Recommend HCAM or in Minor ${ }^{2}$ |  | 3 |
| Free Elective (Recommend HCAM or in Minor ${ }^{2}$ |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| HCAM 499 <br> or HCAM 450 | Health Care Theory and Research Capstone Seminar ${ }^{3}$ <br> or Internship-Health Care Administration \& Management | 3 |
| ECON 312 | Critical Choices in Health Care Policy | 3 |
| Free Elective (Recommend HCAM or in Minor ${ }^{2}$ |  | 3 |
| Free Elective (Recommended HCAM or in Minor) ${ }^{2}$ |  | 3 |
| Free Elective (Recommended HCAM or in Minor) ${ }^{2}$ |  | 3 |
|  | Hours | 15 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 Course may have a prerequisite
3 Must have "Sufficient Academic Performance" and earn "C" or better in the course. Please refer to the Academic Policies for Students in the HCAM major.
4 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please
consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 2346
Concentration Code: INFM
Revised: 06.30.21

## Health Care Administration and Management, Bachelor of Science (BS) - Concentration in Leadership

## Program Learning Outcomes

- Business Technology and Analytics: Students will articulate an applied understanding of key quality improvement metrics and methods to support evidence-based practice guidelines including:
- Demonstrate knowledge, skills and abilities to plan for and ensure the security, integrity, and privacy of data and confidentiality of the end user.
- Demonstrate an ability to identify, aggregate, and summarize technical information for technical and non-technical personnel.
- Communication and Relationship Management: Students will demonstrate the ability to interact and communicate effectively by:
- Presenting information in oral and written formats.
- Collaborating effectively with others.
- Financial Management and Economic Reasoning: Students wil demonstrate:
- An ability to analyze, quantify, evaluate and determine the sound allocation of financial resources.
- An ability to apply economic concepts for efficient allocation of scarce resources.
- Healthcare Legal Environment and Ethics: Students will be able to:
- Recognize will ethical dilemmas in healthcare.
- Recognize key healthcare legal and regulatory environment parameters
- Demonstrate discern viable options for ethical guided decisionmaking processes.
- Demonstrate applied legal and regulatory reasoning.

Knowledge of the Healthcare Environment: Students will demonstrate an accurate understanding of

- Health care system structures
- Reimbursement/payment models.
- Factors associated with population health.

Organizational Dynamics: Students will articulate an applied understanding of:

- Organizational mission, vision, and culture.
- Behaviors associated with organizational commitment and job performance.


## Academic Policies for Students in the Health Care Administration and Management (HCAM) Major

Effective for all Health Care Administration and Management (HCAM) Majors beginning Fall 2021

1. Policy for earning acceptable grades in the HCAM program:
a. A student must earn a grade of " C " or better in ALL Required Basic Courses (HCAM 230, HCAM 265, HCAM 275) and Required Upper-Level Courses (HCAM 305, HCAM 360, HCAM 400, HCAM 430, HCAM 450, HCAM 480, and HCAM 499).
b. A student must earn a grade of "C" or better in ALL non-HCAM major Requirements (ACCT 209, BUSA 340, ECON 312, HLTH 210, and MIS 210, STAT 152 or ECON 219/MGMT 219).
c. The HCAM curriculum is structured with pre-requisites. A student must earn a "C" or better in the pre-requisite course to be able to take the next course. See course catalog for pre-requisites
d. If a student does not earn a " C " or better, they will be required to:
i. Retake the course
ii. They will be dropped from any course(s) in the following semester that requires a " C " or better as a pre-requisite (see course catalog for pre-requisites)
iii. Students will need to meet with their Academic Advisor and change their schedule accordingly
2. SRU has a Repeat of Courses Policy as follows and it can be found in the course catalog: Repeat of Courses < Slippery Rock University (sru.edu)
a. Students may attempt to improve their grade point average by repeating courses. The most recent grade earned is used in calculating the GPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the grade points and credits previously earned. However, all grades will appear on the transcript. Courses in which a grade was earned at Slippery Rock University may not be repeated at any institution. A grade of W (withdraw) does not count as an earned grade. Students who repeat a course must do so using the same grading system under which they originally took the course. For example, a student who originally took a course graded A-F may not repeat the course on a P/NC, P/F, or audit basis. Students may not repeat a course by using any Credit by Examination program if they originally took the course on a graded A-F, P/NC, P/F, or audit basis. Undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career, excluding withdrawal grades. In addition, repeats of a single course will be limited to a maximum of two. This means, no single course may be taken more than three times (excluding withdrawal grades). The course repeat policy for postbaccalaureate students is the same as the undergraduate student policy
3. Once the student has exceeded the SRU Repeat of Courses Policy, the student will have their major changed to Exploratory and HCAM Major courses will be removed from their schedule.
4. Additional costs associated with the HCAM major:
a. Lab fees will be collected for classes with a lab component. This fee enhances the University's ability to offer a high-quality program.
b. A student in the HCAM major may be required to purchase Student Professional Liability Insurance while enrolled in

HCAM 450 at their own cost. More information will be provided to students in the upper level HCAM courses.
c. HCAM 450 Internship: Certain sites may require one or more of the following: physical examinations, record of immunizations, TB test, criminal background checks, drug testing, specific certifications for CPR/AED (e.g., American Heart Association), and HIPAA training. These may require additional costs for students. Fulfilling these requirements and obtaining appropriate documentation is the responsibility of the student.

## Related Links

Healthcare Administration and Management - Leadership, BS Program Page (https://www.sru.edu/academics/majors-and-minors/health-care-administration-and-management/)

Healthcare Administration and Information Systems Department Page (https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/healthcare-administration-and-information-systems/)

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

## Curriculum Guide

## GPA Requirement

2.0 GPA overall or higher to declare HCAM as major
2.0 GPA or higher in the major to graduate in HCAM
2.0 GPA or higher and instructor permission to apply for the internship

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | $42-43$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major/Concentration Requirements | 60 |
| Electives | 17 |

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


## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| Select one of the following: | $3-4$ |  |


| MATH 117 | Quantitative Reasoning |
| :---: | :--- |
| MATH 123 | Introduction to Applied Calculus |
| MATH 225 | Calculus I |
| Select one of the following: | 3 |


| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :--- | :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy | $15-16$ |
| Subtotal |  |  |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |



## Basic Math Requirement

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one | following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Ar |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major/Concentration Requirements

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

| Code | Title | Hours |
| :--- | :--- | :--- |
| Required Core Courses |  |  |
| ACCT 209 | Financial Accounting ${ }^{1}$ | 3 |
| BUSA 340 | Legal Environment of Business $^{1}$ | 3 |
| ECON 312 $^{1}$ | Critical Choices in Health Care Policy $^{1}$ | 3 |
| HCAM 230 $^{1}$ | US Healthcare Systems $^{1}$ | 3 |
| HCAM 265 | Managed Care \& Insurance $^{2}$ | 3 |
| HCAM 275 | Health Care Legal \& Ethical Foundations $^{1}$ | 3 |


| HCAM 305 | Health Care Quality \& Process Improvement ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| HCAM 360 | Healthcare Organizational Dynamics ${ }^{1}$ | 3 |
| HCAM 400 | Legal Environment of Healthcare ${ }^{1}$ | 3 |
| HCAM 430 | Finance for Healthcare Organizations ${ }^{1}$ | 3 |
| HCAM 450 | Internship-Health Care Administration \& Management ${ }^{1}$ | 3 |
| HCAM 480 | Healthcare Value-Based Reimbursement Systems ${ }^{1}$ | 3 |
| HCAM 499 | Health Care Theory and Research Capstone Seminar ${ }^{1}$ | 3 |
| HLTH 210 | Introduction to Public Health ${ }^{1}$ | 3 |
| MIS 210 | Productivity Software ${ }^{1}$ | 3 |
| Select one of the following: ${ }^{1}$ |  | 3 |
| ECON 219 | Business Analytics I |  |
| MGMT 219 | Business Analytics I |  |
| STAT 152 | Elementary Statistics I |  |
| Subtotal |  | 48 |
| Leadership Concentration Courses |  |  |
| HCAM 470 | Healthcare Practice Management | 3 |
| MGMT 320 | Operations Management ${ }^{1}$ | 3 |
| MGMT 354 | Human Resources Management ${ }^{1}$ | 3 |

Select one of the following: 3

| HCAM 300 | Healthcare Systems: Global Perspectives and Analysis ${ }^{1}$ |  |
| :---: | :---: | :---: |
| HCAM 425 | Long Term Care Management ${ }^{1}$ |  |
| HCAM 195 | Health Care Workshop ${ }^{1}$ |  |
| HCAM 295 | Health Care Workshop ${ }^{1}$ |  |
| HCAM 395 | Health Care Workshop ${ }^{1}$ |  |
| HCAM 495 | Health Care Workshop ${ }^{1}$ |  |
| HCAM 198 | Selected Topics ${ }^{1}$ |  |
| HCAM 298 | Selected Topics ${ }^{1}$ |  |
| HCAM 398 | Selected Topics ${ }^{1}$ |  |
| HCAM 498 | Selected Topics ${ }^{1}$ |  |
| MIS 403 | Introduction to Healthcare Information Systems |  |
| Subtotal |  | 12 |
| Total Hours |  | 60 |

1 Course counts for $50 \%$ of Major requirements and Major GPA

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


## Co-curricular and Experiential Learning

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

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

## Important Curriculum Guide Notes

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

## PASSHE - Pennsylvania State System of Higher Education Institutions

HEALTH CARE ADMINISTRATION \& MANAGEMENT - BS (2346)
Concentration in Leadership (LSHP)
This program is effective as of Fall 2020
Revised 05.28.2021
UCC 02.02.2021

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| HCAM 230 | US Healthcare Systems | 3 |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar * | 1 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Select one of the following: |  | 3-4 |
| MATH 117 | Quantitative Reasoning |  |
| MATH 123 | Introduction to Applied Calculus |  |
| MATH 125 | Precalculus |  |
|  | Hours | 16-17 |
| Spring |  |  |
| HCAM 265 | Managed Care \& Insurance | 3 |
| ENGL 104 | Critical Reading | 3 |
| HLTH 210 | Introduction to Public Health | 3 |
| SCI 101 | Science of Life | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
|  | Hours | 15 |

## Second Year

Fall

| ACCT 209 | Financial Accounting | 3 |
| :--- | :--- | :--- |
| STAT 152 | Elementary Statistics I |  |
| or ECON 219 <br> or MGMT 219 | or Business Analytics I <br> or Business Analytics I | 3 |
| SCI 102 | Understanding the Physical World | 3 |
| Thematic Thread Requirement (p. 1378) | 3 |  |


| Humanities Inquiry (p. 1378) | 3 |  |
| :--- | :--- | :--- |
| Declare a Thematic Thread ${ }^{4}$ |  |  |
|  | Hours | $\mathbf{1 5}$ |
| Spring |  |  |
| HCAM 275 | Health Care Legal \& Ethical Foundations | 3 |
| HCAM 360 | Healthcare Organizational Dynamics | 3 |
| ECON 202 | Principles of Microeconomics | 3 |
| MIS 210 | Productivity Software | 3 |
| Thematic Thread Requirement (p. 1378) |  |  |

## Hours

| Third Year |  |  |
| :--- | :--- | ---: |
| Fall |  |  |
| HCAM 305 |  |  |
|  | Health Care Quality \& Process <br> Improvement | 3 |
| HCAM 410 | Strategic Leadership in Health Care <br> Organizations | 3 |
| BUSA 340 | Legal Environment of Business |  |
| ECON 312 | Critical Choices in Health Care Policy |  |
| MGMT 320 | Operations Management I | 3 |
|  | Hours | 3 |
| Spring |   <br> HCAM 480 Healthcare Value-Based Reimbursement | 3 |
| HCAM 400 | Legal Environment of Healthcare |  |

## Fourth Year

Fall

| HCAM 450 or HCAM 499 | Internship-Health Care Administration \& Management ${ }^{3}$ or Health Care Theory and Research Capstone Seminar | 3 |
| :---: | :---: | :---: |
| Thematic Thread Requirement (Upper Level) (p. 1378) |  | 3 |
| Free Elective (Recommend HCAM or in Minor) ${ }^{2}$ |  | 3 |
| Free Elective (Recommend HCAM or in Minor ${ }^{2}$ |  | 3 |
| Free Elective (Recommend HCAM or in Minor ${ }^{2}$ |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| HCAM 499 or HCAM 450 | Health Care Theory and Research Capstone Seminar ${ }^{3}$ <br> or Internship-Health Care Administration <br> \& Management | 3 |
| Thematic Thread Requirement (Upper Level) (p. 1378) |  | 3 |
| Free Elective (Recommended HCAM or in Minor) ${ }^{2}$ |  | 3 |
| Free Elective (Recommended HCAM or in Minor) ${ }^{2}$ |  | 3 |
| Free Elective (Recommended HCAM or in Minor) ${ }^{2}$ |  | 3 |
| Hours |  | 15 |
|  | Total Hours** |  |

[^1]Must have "Sufficient Academic Performance" and earn "C" or better in the course. Please refer to the Academic Policies for Students in the HCAM major.
Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 2346
Concentration Code: LSHP
Revised: 08.03.2021

## Health Care Administration and Management, Bachelor of Science (BS) - Concentration in Leadership Online

## Program Learning Outcomes

- Business Technology and Analytics: Students will articulate an applied understanding of key quality improvement metrics and methods to support evidence-based practice guidelines including:
- Demonstrate knowledge, skills and abilities to plan for and ensure the security, integrity, and privacy of data and confidentiality of the end user.
- Demonstrate an ability to identify, aggregate, and summarize technical information for technical and non-technical personnel.
- Communication and Relationship Management: Students will demonstrate the ability to interact and communicate effectively by:
- Presenting information in oral and written formats.
- Collaborating effectively with others.
- Financial Management and Economic Reasoning: Students will demonstrate:
- An ability to analyze, quantify, evaluate and determine the sound allocation of financial resources.
- An ability to apply economic concepts for efficient allocation of scarce resources.
- Healthcare Legal Environment and Ethics: Students will be able to:
- Recognize will ethical dilemmas in healthcare.
- Recognize key healthcare legal and regulatory environment parameters.
- Demonstrate discern viable options for ethical guided decisionmaking processes.
- Demonstrate applied legal and regulatory reasoning.
- Knowledge of the Healthcare Environment: Students will demonstrate an accurate understanding of:
- Health care system structures.
- Reimbursement/payment models.
- Factors associated with population health.
- Organizational Dynamics: Students will articulate an applied understanding of:
- Organizational mission, vision, and culture.
- Behaviors associated with organizational commitment and job performance.


## Related Links

Online Degree Completion Undergraduate Programs Page (https:// www.sru.edu/academics/online-learning/online-degree-completion-ugprograms/)

Healthcare Administration and Information Systems Department Page (https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/healthcare-administration-and-information-systems/)

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

## Curriculum Guide

GPA Requirement
2.0 GPA overall or higher to declare HCAM as major
2.0 GPA or higher in the major to graduate in HCAM
2.0 GPA or higher and instructor permission to apply for the internship

Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major/Concentration Requirements | 60 |
| Electives | 18 |

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


## Rock Studies Requirements

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

## Basic Math Requirement

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

| Code Title | Hours |
| :---: | :---: |
| Complete one of the following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |
| ESAP $110 \quad$ Beginning Algebra |  |
| Total Hours | 0-3 |
| Computer Competency |  |
| Code Title | Hours |
| Demonstrate "computer competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |
| Select one of the following at SRU or another post-secondary institution: |  |


| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| :---: | :--- | :--- |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and <br>  <br> Programming |  |
| Total Hours 202 | Technology for Wellness |  |

## Major/Concentration Requirements ${ }^{1}$

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Core Courses |  |  |
| ACCT 209 | Financial Accounting | 3 |
| BUSA 340 | Legal Environment of Business | 3 |
| ECON 312 | Critical Choices in Health Care Policy ${ }^{2}$ | 3 |
| HCAM 230 | US Healthcare Systems | 3 |
| HCAM 265 | Managed Care \& Insurance | 3 |
| HCAM 275 | Health Care Legal \& Ethical Foundations | 3 |
| HCAM 305 | Health Care Quality \& Process Improvement | 3 |
| HCAM 360 | Healthcare Organizational Dynamics | 3 |
| HCAM 400 | Legal Environment of Healthcare | 3 |
| HCAM 430 | Finance for Healthcare Organizations | 3 |
| HCAM 480 | Healthcare Value-Based Reimbursement Systems | 3 |
| HCAM 499 | Health Care Theory and Research Capstone Seminar | 3 |
| HLTH 210 | Introduction to Public Health | 3 |
| MIS 210 | Productivity Software | 3 |
| Select one of the following: |  | 3 |
| ECON 219 | Business Analytics I |  |
| MGMT 219 | Business Analytics I |  |
| STAT 152 | Elementary Statistics I |  |
| Subtotal |  | 45 |


| Leadership Concentration Courses |  |  |
| :--- | :--- | :--- |
| HCAM 470 | Healthcare Practice Management | 3 |
| MGMT 320 | Operations Management I | 3 |
| MGMT 354 | Human Resources Management | 3 |
| MIS 403 | Introduction to Healthcare Information | 3 |
|  | Systems |  |

Select one of the following: 3

| HCAM 300 | Healthcare Systems: Global Perspectives <br> and Analysis |
| :--- | :--- |
| HCAM 425 | Long Term Care Management |
| HCAM 195 | Health Care Workshop |
| HCAM 295 | Health Care Workshop |
| HCAM 395 | Health Care Workshop |
| HCAM 495 | Health Care Workshop |
| HCAM 198 | Selected Topics |
| HCAM 298 | Selected Topics |
| HCAM 398 | Selected Topics |
| HCAM 498 | Selected Topics |

Total Hours

1 Courses count for $50 \%$ of Major requirements and Major GPA
2 Students must complete ECON 202 (or transfer in the equivalent) to meet the required prerequisite for ECON 312.

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


## Co-curricular and Experiential Learning

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

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

## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
HEALTH CARE ADMINISTRATION \& MANAGEMENT - BS (2340)
Concentration in Leadership (LDRO)
This program is effective as of Fall 2020
Revised 09.07.2021
UCC 03.02.2021

> Health Care Administration and Management, Bachelor of Science (BS) - Concentration in Leadership / Pre-Occupational Therapy (SRU)

## (3+3)

## HCAM Program Learning Outcomes

- Business Technology and Analytics: Students will articulate an applied understanding of key quality improvement metrics and methods to support evidence-based practice guidelines including:
- Demonstrate knowledge, skills and abilities to plan for and ensure the security, integrity, and privacy of data and confidentiality of the end user.
- Demonstrate an ability to identify, aggregate, and summarize technical information for technical and non-technical personnel.
- Communication and Relationship Management: Students will
demonstrate the ability to interact and communicate effectively by:
- Presenting information in oral and written formats.
- Collaborating effectively with others.
- Financial Management and Economic Reasoning: Students will demonstrate:
- An ability to analyze, quantify, evaluate and determine the sound allocation of financial resources.
- An ability to apply economic concepts for efficient allocation of scarce resources.
- Healthcare Legal Environment and Ethics: Students will be able to:
- Recognize will ethical dilemmas in healthcare.
- Recognize key healthcare legal and regulatory environment parameters.
- Demonstrate discern viable options for ethical guided decisionmaking processes.
- Demonstrate applied legal and regulatory reasoning.
- Knowledge of the Healthcare Environment: Students will demonstrate an accurate understanding of:
- Health care system structures.
- Reimbursement/payment models.
- Factors associated with population health.
- Organizational Dynamics: Students will articulate an applied understanding of:
- Organizational mission, vision, and culture.
- Behaviors associated with organizational commitment and job performance.


## What are your options?

Pre-Occupational Therapy SRU 3+3: Earn a Doctor of Occupational Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU OTD program. At the end of your second year, you apply for admission into the SRU OTD program. If accepted, your first year in the SRU OTD program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

Pre-Occupational Therapy (SRU Traditional): Complete the requirements for your major and the pre-requisites for the SRU OTD program and apply to the SRU OTD program in your senior year.

## Academic Policies for Students in the Health Care Administration and Management (HCAM) Major

## Effective for students entering the major Fall 2017 and after

1. Policy for achieving and maintaining "Sufficient Academic Performance" ${ }^{1}$
a. At the end of the semester in which a student has earned 40 credits (and every semester thereafter), the Major and Overall GPA will be reviewed:
i. A student must earn a 2.50 Major GPA to achieve "Sufficient Academic Performance" and continue in the HCAM major.
ii. A student earning below a 2.50 in the Major GPA at any time after earning 40 credits will be placed on a "one semester probation." ${ }^{2} \mathrm{He}$ /she must increase his/her GPA to 2.50 or higher by the end of the "one semester probation" or be permanently removed from the HCAM major. The student will be notified by email of his/her status following the "one semester probation." A student who has not achieved "Sufficient Academic Performance" will have his/her major changed to Exploratory.
iii. A student can be placed on a "one semester probation" a maximum of two times as an HCAM major. He/she will be permanently removed from the HCAM major if his/her Major GPA drops below a 2.50 a third time.
iv. A student on a "one semester probation" may not enroll in required 400 Level Courses unless he/she is repeating the course(s).
b. A transfer student who enters from another university or a Slippery Rock University student who changes his/her major to HCAM:
i. With 40 or more earned credits will have a one-semester extension before his/her Major GPA are reviewed to determine if he/she has achieved "Sufficient Academic Performance".
ii. With less than 40 earned credits will follow Policy I. A above.
c. An incoming FYRST student earning college credits prior to entering SRU may reach 40 credits before completing two semesters at SRU. In this case, the review to determine "Sufficient Academic Performance" will not begin until the student has completed two semesters as a student in the HCAM major.
2. Policy for earning acceptable grades in Required 400 Level Courses
a. A student must earn a grade of " $C$ " or better in Required 400 Level Courses.
b. A student will not be permitted to begin an internship unless he/she has "Sufficient Academic Performance" and he/she has earned a grade of " $C$ " or better in Required 400 Level Courses.
c. A student must also earn a grade of " C " or better in HCAM 305, HCAM 400, HCAM $410^{3}$, HCAM 430 and MIS 403 before he/she is allowed to take HCAM $499^{4}$ and HCAM $450^{4}$.
3. Policy for changing to the HCAM major
a. A Slippery Rock University student wishing to change his/her major to Health Care Administration and Management must have an overall GPA of 2.00.
4. Additional costs associated with the HCAM major
a. A student in the HCAM major is required to maintain a current Student Professional Liability Insurance and meet any immunization or physical requirements set forth by an internship employer while enrolled in HCAM 450 at his/her own cost.

1 "Sufficient Academic Performance" is defined as having a Major GPA of 2.50 or higher. The Major GPA is comprised of Required Basic Courses, Required 300 and 400 Level HCAM Courses. Please see My Rock Audit for specific courses.
2 "One semester probation" is defined as the initial semester after which "Sufficient Academic Performance" was not achieved and the first occurring summer.

3 If taken - HCAM 410 is an elective for non $3+2$ PA or $3+3$ PT majors 4

## Related Links

Healthcare Administration and Management - Pre-Occupational Therapy, BS Program Page (https://www.sru.edu/academics/majors-and-minors/ health-care-administration-and-management-pre-occupational-therapy/)

Healthcare Administration and Information Systems Department Page (https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/healthcare-administration-and-information-systems/)

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

## Curriculum Guide

## GPA Requirement

## 1st Major. HCAM

- Overall GPA: 2.0 or higher
- Major GPA (includes Major Requirements): 2.0 or higher


## 2nd Major: Pre-OT 3+3 HCAM

- Overall GPA: 3.00 or higher


## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 43 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 51 |
| Electives | 25 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the $1^{\text {st }}$ year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.


## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |



## Basic Math Requirement

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Ar |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |

Total Hours

## Major Requirements

- If you choose to pursue Pre-Occupational Therapy SRU 3+3 Health Care Administration and Management (HCAM) and are not accepted into the OTD program, then the following additional HCAM courses are required to complete a first major of HCAM: HCAM Internship (HCAM 450) - Plus - courses necessary to satisfy the Leadership specialty track. Please refer to the HCAM curriculum guide.

| Code | Title | Hours |
| :--- | :--- | :--- |
| Required Basic Courses |  |  |
| ACCT 209 | Financial Accounting $^{1}$ | 3 |
| ECON 202 | Principles of Microeconomics ${ }^{1,2}$ | 3 |
| HCAM 230 | US Healthcare Systems $^{1}$ | 3 |
| HCAM 275 | Health Care Legal \& Ethical Foundations $^{1,2}$ | 3 |
| HLTH 210 | Introduction to Public Health $^{1}$ | 3 |
| MIS 210 | Productivity Software $^{1}$ | 3 |


| STAT 152 Elementary Statistics I ${ }^{1}$ | 3 |
| :--- | ---: | ---: |
| Subtotal | 21 |

Required Upper Level Courses ( 30 credits if accepted to SRU DOT Program) ${ }^{2}$

Must have achieved "Sufficient Academic Performance" to take these courses. Must earn a "C" or better in all of the following courses:

| BUSA 340 | Legal Environment of Business ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| ECON 312 | Critical Choices in Health Care Policy ${ }^{1,2}$ | 3 |
| HCAM 265 | Managed Care \& Insurance | 3 |
| HCAM 305 | Health Care Quality \& Process Improvement ${ }^{1}$ | 3 |
| HCAM 360 | Healthcare Organizational Dynamics ${ }^{1}$ | 3 |
| HCAM 400 | Legal Environment of Healthcare ${ }^{1}$ | 3 |
| HCAM 430 | Finance for Healthcare Organizations ${ }^{1}$ | 3 |
| HCAM 470 | Healthcare Practice Management | 3 |
| HCAM 480 | Healthcare Value-Based Reimbursement Systems ${ }^{1}$ | 3 |
| HCAM 499 | Health Care Theory and Research Capstone Seminar ${ }^{1}$ | 3 |

Additional Occupational Therapy Prerequisite Courses

| (see below for all Admission Requirements) |  |  |
| :--- | :--- | :--- |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| ERS 250 | Medical Terminology | 3 |
| PHYS 201 | Elements of Physics I with Lab | 4 |
| PSYC 105 | Introduction to Psychology | 3 |
| Select three credits of the following: | 3 |  |


| INDP 202 | Introduction to Anthropology |
| :--- | :--- |
| INDP 106 | Race and Ethnic Diversity in the USA |
| INDP 310 | Cultural Area Studies |
| INDP 321 | Minority Groups |
| SOWK 105 | Human Diversity |

Select three credits of the following: ..... 3

| PSYC 240 | Human Sexual Behavior |  |
| :--- | :--- | :--- |
| PSYC 244 | Developmental Psychology |  |
| PSYC 276 | Introduction to Abnormal Psychology |  |
| Subtotal |  | 19 |
| otal Hours |  | $\mathbf{7 0}$ |

1 Course counts for $50 \%$ of Major and Major GPA
2 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.

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


## Co-curricular and Experiential Learning

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

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

## Doctor of Occupational Therapy (OTD) <br> Prerequisite Admission Requirements - PreOccupational Therapy SRU

## For Application Requirements

Please refer to Slippery Rock University's Occupational Therapy Studies (Master of Science in Occupational Therapy Studies) website for requirements: http://www.sru.edu/OT (http://www.sru.edu/OT/)

## Rock Studies

| Code | Title | Hours |
| :---: | :---: | :---: |
| Prerequisite Courses - SRU Occupational Therapy |  |  |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| $\begin{aligned} & \text { ERS } 250 \\ & \quad \text { or HCAM } 250 \end{aligned}$ | Medical Terminology <br> Medical Terminology for Healthcare <br> Administrators | 3 |
| $\begin{aligned} & \text { PHYS } 201 \\ & \text { or PE } 364 \end{aligned}$ | Elements of Physics I with Lab <br> Biomechanics of Individuals with Disabilities | 4 |
| STAT 152 | Elementary Statistics I | 3 |
| Research Methods ${ }^{1}$ |  | 3 |
| PSYC 105 | Introduction to Psychology | 3 |
| PSYC 244 | Developmental Psychology | 3 |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |
| Anthropology or Sociology ${ }^{1}$ |  | 3 |
| Total Hours |  | 31 |

1 Select one course. See My Rock Audit for specific courses.

## Pre-Occupational Therapy SRU 3+3

If any of these requirements are not met, the $3+3$ designation will be removed from the student's record:

1. A 3.0 or higher overall GPA must be maintained by the student.
2. The student can only be enrolled in the Pre-Occupational Therapy SRU $3+3$ program for a maximum of three (3) years, full-time continuous enrollment (fall/spring).

## Provision

Should a Pre-Occupational Therapy SRU 3+3 student be unsuccessful in completing the $1^{\text {st }}$ two semesters (summer or fall) of the Occupational Therapy Program and wants to complete the original undergraduate degree, it is solely up to the discretion of the undergraduate program Department Chair to determine which, if any, Occupational Therapy courses will count toward the completion of his/her undergraduate degree. In addition, students must complete any unfulfilled requirements of their undergraduate major. Students may still apply to the Doctor of Occupational Therapy Program with an earned Bachelor's degree.

## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
HEALTH CARE ADMINISTRATION \& MANAGEMENT - BS (2346)
Concentration in Leadership 3+3 Pre-OT (LSHP) (230T)
Revised 06.30.21
UCC 03.02.2021

## Recommended Three-Year Plan



| INDP 202 | Introduction to Anthropology | 3 |
| :---: | :---: | :---: |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| HCAM 470 | Healthcare Practice Management | 3 |
| HCAM 480 | Healthcare Value-Based Reimbursement Systems | 3 |
| ACCT 209 | Financial Accounting | 3 |
| BUSA 340 | Legal Environment of Business | 3 |
| ECON 202 | Principles of Microeconomics | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 18 |
| Spring |  |  |
| HCAM 400 | Legal Environment of Healthcare | 3 |
| HCAM 430 | Finance for Healthcare Organizations | 3 |
| HCAM 499 | Health Care Theory and Research Capstone Seminar | 3 |
| ECON 312 | Critical Choices in Health Care Policy | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
|  | Hours | 18 |
| Fourth Year |  |  |
| Fall |  |  |
| If not accepted in SRU OT Program ${ }^{3}$ |  |  |
| HCAM 450 | Internship-Health Care Administration \& Management | 3-12 |
| MGMT 320 | Operations Management I | 3 |
| Free Elective |  | 3 |
|  | Hours | 9-18 |
| Spring |  |  |
| HCAM Leadership Concentration Elective |  | 3 |
| MGMT 354 | Human Resources Management | 3 |
|  | Hours | 6 |
|  | Total Hours** 11 | -122 |

1

Senior Year- If not accepted into SRU OT Program: If you choose to pursue Health Care Administration and Management 3+3 PreOccupational Therapy program and are not accepted into the graduate SRU Occupational Therapy program, then additional coursework is required, please refer to the Health Care Administration and Management, Leadership Concentration Curriculum Guide.

* Course offered in multiple subjects; cannot take course in first major subject.


## Major Code: 2346

Concentration Code: LSHP
2ND Major: 230T
Revised: 06.30.21
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing
courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Health Care Administration and Management, Bachelor of Science (BS) - Concentration in Leadership / Pre-Occupational Therapy (SRU) (Traditional)

## HCAM Program Learning Outcomes

- Business Technology and Analytics: Students will articulate an applied understanding of key quality improvement metrics and methods to support evidence-based practice guidelines including:
- Demonstrate knowledge, skills and abilities to plan for and ensure the security, integrity, and privacy of data and confidentiality of the end user.
- Demonstrate an ability to identify, aggregate, and summarize technical information for technical and non-technical personnel.
- Communication and Relationship Management: Students will demonstrate the ability to interact and communicate effectively by:
- Presenting information in oral and written formats.
- Collaborating effectively with others.
- Financial Management and Economic Reasoning: Students will demonstrate:
- An ability to analyze, quantify, evaluate and determine the sound allocation of financial resources.
- An ability to apply economic concepts for efficient allocation of scarce resources.
- Healthcare Legal Environment and Ethics: Students will be able to:
- Recognize will ethical dilemmas in healthcare.
- Recognize key healthcare legal and regulatory environment parameters.
- Demonstrate discern viable options for ethical guided decisionmaking processes.
- Demonstrate applied legal and regulatory reasoning.
- Knowledge of the Healthcare Environment: Students will demonstrate an accurate understanding of:
- Health care system structures.
- Reimbursement/payment models.
- Factors associated with population health.
- Organizational Dynamics: Students will articulate an applied understanding of:
- Organizational mission, vision, and culture.
- Behaviors associated with organizational commitment and job performance.


## What are your options?

Pre-Occupational Therapy SRU 3+3: Earn a Doctor of Occupational Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU OTD program. At the end of your second year, you apply for admission into the

SRU OTD program. If accepted, your first year in the SRU OTD program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

Pre-Occupational Therapy (SRU Traditional): Complete the requirements for your major and the pre-requisites for the SRU OTD program and apply to the SRU OTD program in your senior year.

## Academic Policies for Students in the Health Care Administration and Management (HCAM) Major

Effective for all Health Care Administration and Management (HCAM) Majors beginning Fall 2021

1. Policy for earning acceptable grades in the HCAM program:
a. A student must earn a grade of " C " or better in ALL Required Basic Courses (HCAM 230, HCAM 265, HCAM 275) and Required Upper-Level Courses (HCAM 305, HCAM 360, HCAM 400, HCAM 430, HCAM 450, HCAM 480, and HCAM 499).
b. A student must earn a grade of " C " or better in ALL non-HCAM major Requirements (ACCT 209, BUSA 340, ECON 312, HLTH 210, and MIS 210, STAT 152 or ECON 219/MGMT 219).
c. The HCAM curriculum is structured with pre-requisites. A student must earn a " $C$ " or better in the pre-requisite course to be able to take the next course. See course catalog for pre-requisites.
d. If a student does not earn a " $C$ " or better, they will be required to: i. Retake the course
ii. They will be dropped from any course(s) in the following semester that requires a "C" or better as a pre-requisite (see course catalog for pre-requisites)
iii. Students will need to meet with their Academic Advisor and change their schedule accordingly
2. SRU has a Repeat of Courses Policy as follows and it can be found in the course catalog: Repeat of Courses < Slippery Rock University (sru.edu)
a. Students may attempt to improve their grade point average by repeating courses. The most recent grade earned is used in calculating the GPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the grade points and credits previously earned. However, all grades will appear on the transcript. Courses in which a grade was earned at Slippery Rock University may not be repeated at any institution. A grade of W (withdraw) does not count as an earned grade. Students who repeat a course must do so using the same grading system under which they originally took the course. For example, a student who originally took a course graded A-F may not repeat the course on a P/NC, P/F, or audit basis. Students may not repeat a course by using any Credit by Examination program if they originally took the course on a graded A-F, P/NC, P/F, or audit basis. Undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career, excluding withdrawal grades. In addition, repeats of a single course will be limited to a maximum of two. This means, no single course may be taken more than three times (excluding withdrawal grades). The course repeat policy for postbaccalaureate students is the same as the undergraduate student policy.
3. Once the student has exceeded the SRU Repeat of Courses Policy, the student will have their major changed to Exploratory and HCAM Major courses will be removed from their schedule.
4. Additional costs associated with the HCAM major.
a. Lab fees will be collected for classes with a lab component. This fee enhances the University's ability to offer a high-quality program.
b. A student in the HCAM major may be required to purchase Student Professional Liability Insurance while enrolled in HCAM 450 at their own cost. More information will be provided to students in the upper level HCAM courses.
c. HCAM 450 Internship: Certain sites may require one or more of the following: physical examinations, record of immunizations, TB test, criminal background checks, drug testing, specific certifications for CPR/AED (e.g., American Heart Association), and HIPAA training. These may require additional costs for students. Fulfilling these requirements and obtaining appropriate documentation is the responsibility of the student.

## Related Links

Healthcare Administration and Management - Pre-Occupational Therapy, BS Program Page (https://www.sru.edu/academics/majors-and-minors/ health-care-administration-and-management-pre-occupational-therapy/)

Healthcare Administration and Information Systems Department Page (https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/healthcare-administration-and-information-systems/)

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

## Curriculum Guide

## GPA Requirement

1st Major: HCAM

- Overall GPA: 2.0 or higher
- Major GPA (includes Major Requirements): 2.0 or higher


## 2nd Major: Pre-OT 3+3 HCAM

- Overall GPA: 3.00 or higher


## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 43 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major/Concentration Requirements | 60 |
| Electives | 17 |

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


## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |


| ENGL 104 Critical Reading | 3 |
| :---: | :---: |
| STAT 152 Elementary Statistics I | 3 |
| Select one of the following: | 3 |
| COMM 200 Civil Discourse: Theory \& Practice |  |
| PHIL 110 Ethics and Civil Discourse |  |
| POLS 235 Civil Discourse and Democracy |  |
| Subtotal | 15 |
| Integrated Inquiry |  |
| Creative and Aesthetic Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Humanities Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Social Science Inquiry |  |
| PSYC 105 Introduction to Psychology | 3 |
| Physical and Natural Sciences Inquiry |  |
| BIOL 216 Anatomy and Physiology I with Lab | 3 |
| PHYS 201 Elements of Physics I with Lab | 4 |
| Subtotal | 16 |
| Thematic Thread |  |
| Select 12 Credits (p. 1378) ${ }^{2}$ | 12 |
| Total Hours | 43 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one | following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Ar |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |

## Total Hours

0-3

## Major/Concentration Requirements

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Core Courses |  |  |
| ACCT 209 | Financial Accounting ${ }^{1}$ | 3 |
| BUSA 340 | Legal Environment of Business ${ }^{1}$ | 3 |
| ECON 312 | Critical Choices in Health Care Policy ${ }^{1}$ | 3 |
| HCAM 230 | US Healthcare Systems ${ }^{1}$ | 3 |
| HCAM 265 | Managed Care \& Insurance | 3 |
| HCAM 275 | Health Care Legal \& Ethical Foundations ${ }^{1}$ | 3 |
| HCAM 305 | Health Care Quality \& Process Improvement ${ }^{1}$ | 3 |
| HCAM 360 | Healthcare Organizational Dynamics ${ }^{1}$ | 3 |
| HCAM 400 | Legal Environment of Healthcare ${ }^{1}$ | 3 |
| HCAM 430 | Finance for Healthcare Organizations ${ }^{1}$ | 3 |
| HCAM 450 | Internship-Health Care Administration \& Management ${ }^{1}$ | 3 |
| HCAM 480 | Healthcare Value-Based Reimbursement Systems ${ }^{1}$ | 3 |
| HCAM 499 | Health Care Theory and Research Capstone Seminar ${ }^{1}$ | 3 |
| HLTH 210 | Introduction to Public Health ${ }^{1}$ | 3 |
| MIS 210 | Productivity Software ${ }^{1}$ | 3 |
| Select one of the following: ${ }^{1}$ |  | 3 |
| ECON 219 | Business Analytics I |  |
| MGMT 219 | Business Analytics I |  |
| STAT 152 | Elementary Statistics I |  |
| Subtotal |  | 48 |
| Leadership Concentration Courses |  |  |
| HCAM 470 | Healthcare Practice Management | 3 |
| MGMT 320 | Operations Management I ${ }^{1}$ | 3 |
| MGMT 354 | Human Resources Management ${ }^{1}$ | 3 |
| Select one of the following: |  | 3 |


| HCAM 300 | Healthcare Systems: Global Perspectives and Analysis ${ }^{1}$ |  |
| :---: | :---: | :---: |
| HCAM 425 | Long Term Care Management ${ }^{1}$ |  |
| HCAM 195 | Health Care Workshop ${ }^{1}$ |  |
| HCAM 295 | Health Care Workshop ${ }^{1}$ |  |
| HCAM 395 | Health Care Workshop ${ }^{1}$ |  |
| HCAM 495 | Health Care Workshop ${ }^{1}$ |  |
| HCAM 198 | Selected Topics ${ }^{1}$ |  |
| HCAM 298 | Selected Topics ${ }^{1}$ |  |
| HCAM 398 | Selected Topics ${ }^{1}$ |  |
| HCAM 498 | Selected Topics ${ }^{1}$ |  |
| Subtotal |  | 12 |
| Total Hours |  | 60 |

1 Course counts for 50\% of Major requirements and Major GPA

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


## Additional Occupational Therapy Prerequisite Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| ERS 250 | Medical Terminology | 3 |


| INDP 202 | Introduction to Anthropology | 3 |
| :--- | :--- | :--- |
| or INDP 106 | Race and Ethnic Diversity in the USA |  |
| or INDP 310 | Cultural Area Studies |  |
| or INDP 321 | Minority Groups |  |
| or SOWK 105 | Human Diversity |  |
| PHYS 201 | Elements of Physics I with Lab | 4 |
| PSYC 105 | Introduction to Psychology | 3 |
| PSYC 240 | Human Sexual Behavior | 3 |
| or PSYC 244 <br> or PSYC 276 | Developmental Psychology <br> Introduction to Abnormal Psychology |  |

## Co-Curricular and Experiential Learning

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

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

## Doctor of Occupational Therapy (OTD)

Prerequisite Admission Requirements

## For Application Requirements

Please refer to Slippery Rock University's Occupational Therapy Studies (Master of Science in Occupational Therapy Studies) website for requirements: http://www.sru.edu/OT (http://www.sru.edu/OT/)

## Rock Studies

| Code | Title | Hours |
| :---: | :---: | :---: |
| Prerequisite Courses - SRU Occupational Therapy |  |  |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| $\begin{aligned} & \text { ERS } 250 \\ & \quad \text { or HCAM } 250 \end{aligned}$ | Medical Terminology <br> Medical Terminology for Healthcare <br> Administrators | 3 |
| PHYS 201 or PE 364 | Elements of Physics I with Lab <br> Biomechanics of Individuals with Disabilities | 4 |
| STAT 152 | Elementary Statistics I | 3 |
| Research Methods ${ }^{1}$ |  | 3 |
| PSYC 105 | Introduction to Psychology | 3 |
| PSYC 244 | Developmental Psychology | 3 |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |
| Anthropology or Sociology ${ }^{1}$ |  | 3 |
| Total Hours |  | 31 |

[^2]3 Important Curriculum Guide Notes
This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
HEALTH CARE ADMINISTRATION \& MANAGEMENT - BS (2346)
Concentration in Leadership Traditional Pre-OT (LSHP)
Revised 05.28.2021
UCC 02.02.2021

## Health Care Administration and Management, Bachelor of Science (BS) - Concentration in Leadership / Pre-Physical Therapy (SRU) (3+3) HCAM Program Learning Outcomes

- Business Technology and Analytics: Students will articulate an applied understanding of key quality improvement metrics and methods to support evidence-based practice guidelines including:
- Demonstrate knowledge, skills and abilities to plan for and ensure the security, integrity, and privacy of data and confidentiality of the end user.
- Demonstrate an ability to identify, aggregate, and summarize technical information for technical and non-technical personnel.
- Communication and Relationship Management: Students will demonstrate the ability to interact and communicate effectively by:
- Presenting information in oral and written formats.
- Collaborating effectively with others.
- Financial Management and Economic Reasoning: Students will demonstrate:
- An ability to analyze, quantify, evaluate and determine the sound allocation of financial resources.
- An ability to apply economic concepts for efficient allocation of scarce resources.
- Healthcare Legal Environment and Ethics: Students will be able to:
- Recognize will ethical dilemmas in healthcare.
- Recognize key healthcare legal and regulatory environment parameters.
- Demonstrate discern viable options for ethical guided decisionmaking processes.
- Demonstrate applied legal and regulatory reasoning.
- Knowledge of the Healthcare Environment: Students will demonstrate an accurate understanding of:
- Health care system structures.
- Reimbursement/payment models.
- Factors associated with population health.
- Organizational Dynamics: Students will articulate an applied understanding of:
- Organizational mission, vision, and culture.
- Behaviors associated with organizational commitment and job performance.


## What are your options?

Pre-Physical Therapy SRU 3+3: Earn a Doctor of Physical Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU DPT program. During your third undergraduate year, you apply for admission into the SRU DPT program. If accepted, your first year in the SRU DPT program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

Pre-Physical Therapy (SRU Traditional): Complete the requirements for your major and the pre-requisites for the SRU DPT program and apply to the SRU DPT program in your senior year.

## Academic Policies for Students in the Health Care Administration and Management (HCAM) Major

## Effective for students entering the major Fall 2017 and after

1. Policy for achieving and maintaining "Sufficient Academic Performance" ${ }^{1}$
a. At the end of the semester in which a student has earned 40 credits (and every semester thereafter), the Major and Overall GPA will be reviewed:
i. A student must earn a 2.50 Major GPA to achieve "Sufficient Academic Performance" and continue in the HCAM major.
ii. A student earning below a 2.50 in the Major GPA at any time after earning 40 credits will be placed on a "one semester probation." ${ }^{2} \mathrm{He} /$ she must increase his/her GPA to 2.50 or higher by the end of the "one semester probation" or be permanently removed from the HCAM major. The student will be notified by email of his/her status following the "one semester probation." A student who has not achieved "Sufficient Academic Performance" will have his/her major changed to Exploratory.
iii. A student can be placed on a "one semester probation" a maximum of two times as an HCAM major. He/she will be permanently removed from the HCAM major if his/her Major GPA drops below a 2.50 a third time.
iv. A student on a "one semester probation" may not enroll in required 400 Level Courses unless he/she is repeating the course(s).
b. A transfer student who enters from another university or a Slippery Rock University student who changes his/her major to HCAM:
i. With 40 or more earned credits will have a one-semester extension before his/her Major GPA are reviewed to determine if he/she has achieved "Sufficient Academic Performance".
ii. With less than 40 earned credits will follow Policy I. A above.
c. An incoming FYRST student earning college credits prior to entering SRU may reach 40 credits before completing two semesters at SRU. In this case, the review to determine
"Sufficient Academic Performance" will not begin until the student has completed two semesters as a student in the HCAM major.
2. Policy for earning acceptable grades in Required 400 Level Courses
a. A student must earn a grade of "C" or better in Required 400 Level Courses.
b. A student will not be permitted to begin an internship unless he/she has "Sufficient Academic Performance" and he/she has earned a grade of " C " or better in Required 400 Level Courses.
c. A student must also earn a grade of "C" or better in HCAM 305 , HCAM 400, HCAM $410^{3}$, HCAM 430 and MIS 403 before he/she is allowed to take HCAM $499^{4}$ and HCAM $450^{4}$.
3. Policy for changing to the HCAM major
a. A Slippery Rock University student wishing to change his/her major to Health Care Administration and Management must have an overall GPA of 2.00.
4. Additional costs associated with the HCAM major
a. A student in the HCAM major is required to maintain a current Student Professional Liability Insurance and meet any immunization or physical requirements set forth by an internship employer while enrolled in HCAM 450 at his/her own cost.
"Sufficient Academic Performance" is defined as having a Major GPA of 2.50 or higher. The Major GPA is comprised of Required Basic Courses, Required 300 and 400 Level HCAM Courses. Please see My Rock Audit for specific courses.
2 "One semester probation" is defined as the initial semester after which "Sufficient Academic Performance" was not achieved and the first occurring summer.
If taken - HCAM 410 is an elective for non 3+2 PA or 3+3 PT majors
4 If required - not required for $3+2$ PA or $3+3$ PT majors

## Related Links

Healthcare Administration and Management - Pre-Physical Therapy, BS Program Page (https://www.sru.edu/academics/majors-and-minors/ health-care-administration-and-management-pre-physical-therapy/)

Healthcare Administration and Information Systems Department Page (https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/healthcare-administration-and-information-systems/)

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

## Curriculum Guide

## GPA Requirement

$1^{\text {st }}$ Major. HCAM

- Have a 2.0 GPA overall or higher to declare HCAM as major
- Have a 2.0 GPA or higher in the major and overall to graduate in HCAM
$2^{\text {nd }}$ Major. PT 3+3 HCAM
- Have a 3.0 GPA overall or higher

Summary*

| Code | Hours |
| :--- | ---: |
| Rock Studies Requirements | 43 |
| Other Basic Requirements | $0-3$ |


| Computer Competency | $0-3$ |
| :--- | ---: |
| Major Requirements | 48 |
| Electives | 28 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the $1^{\text {st }}$ year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.

Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |

Subtotal 15
Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p.1378)

| Select 3 Credits (p. 1378) | 3 |
| :--- | :--- |
| Humanities Inquiry | 3 |


| Social Science Inquiry |  |
| :--- | :--- |
| PSYC 105 | Introduction to Psychology |

Physical \& Natural Sciences Inquiry

| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| :--- | :--- | :--- |
| PHYS 201 | Elements of Physics I with Lab | 4 |

Subtotal16

Thematic Thread
Select 12 Credits (p. 1378) ${ }^{2} 12$

Total Hours

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

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

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra | $\mathbf{0 - 3}$ |
| Total Hours |  |  |

## Computer Competency

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

## Major Requirements

- If you choose to pursue Pre-Physical Therapy SRU 3+3 Health Care Administration and Management (HCAM) and are not accepted into the PT program, then the following additional HCAM courses are required to complete a first major of HCAM: HCAM Internship (HCAM 450) - Plus - courses necessary to satisfy the Leadership specialty track. Please refer to the HCAM curriculum guide.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Basic Courses |  |  |
| ACCT 209 | Financial Accounting ${ }^{1}$ | 3 |
| ECON 202 | Principles of Microeconomics ${ }^{1,2}$ | 3 |
| HCAM 230 | US Healthcare Systems ${ }^{1}$ | 3 |
| HCAM 275 | Health Care Legal \& Ethical Foundations 1,2 | 3 |
| HLTH 210 | Introduction to Public Health ${ }^{1}$ | 3 |
| MIS 210 | Productivity Software ${ }^{1}$ | 3 |
| STAT 152 | Elementary Statistics ${ }^{1}$ | 3 |
| Subtotal |  | 21 |

Required Upper Level Courses (27 credits if accepted to SRU DPT Program)
Must have achieved "Sufficient Academic Performance" to take these courses. Must earn a "C" or better in all of the following ACCT, HCAM, MIS and PHIL courses:

| BUSA 340 | Legal Environment of Business ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| ECON 312 | Critical Choices in Health Care Policy ${ }^{1,2}$ | 3 |
| HCAM 265 | Managed Care \& Insurance | 3 |
| HCAM 305 | Health Care Quality \& Process Improvement | 3 |
| HCAM 360 | Healthcare Organizational Dynamics 1,3 | 3 |
| HCAM 400 | Legal Environment of Healthcare ${ }^{1,3}$ | 3 |
| HCAM 430 | Finance for Healthcare Organizations 1,3 | 3 |
| HCAM 470 | Healthcare Practice Management | 3 |
| HCAM 480 | Healthcare Value-Based Reimbursement Systems | 3 |


| Subtotal | 27 |
| :--- | :--- |
| Otal Hours | 48 |

## Total Hours

Course counts for $50 \%$ of Major requirements and Major GPA.
2 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.
3

See adviser for 600 level course options.

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


## Additional Physical Therapy Prerequisite Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| BIOL 217 | Anatomy and Physiology II with Lab (Stem) | 3 |
| CHEM 107 | General Chemistry I | 4 |
| \& CHEM 111 | and General Chemistry I Lab (Stem) |  |
| CHEM 108 | General Chemistry II | 4 |
| \& CHEM 112 | and General Chemistry II Lab (Stem) |  |
| PHYS 202 | Elements of Physics II/ Lab | 4 |
| PSYC 240 | Human Sexual Behavior | 3 |
| or PSYC 244 | Developmental Psychology |  |
| Total Hours |  | $\mathbf{1 8}$ |

## Co-curricular and Experiential Learning

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

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

## Doctor of Physical Therapy (DPT) <br> Prerequisite Admission Requirements - Pre-Physical Therapy SRU 3+3

## For Application Requirements

Please refer to Slippery Rock University's Physical Therapy (Doctor of
Physical Therapy) website for requirements: www.sru.edu/PT (http:// www.sru.edu/PT/)

## Liberal Studies and Rock Studies

 Code Title HoursPrerequisite Courses - SRU Physical Therapy
Select one of the following:
$\left.\begin{array}{lll}\text { BIOL 216 } & \text { Anatomy and Physiology I with Lab } \\ \text { \& BIOL 217 } & \text { and Anatomy and Physiology II with Lab }\end{array}\right]$

| STAT 152 | Elementary Statistics I |  |
| :--- | :--- | :--- |
| or BIOL 325 | Biometry with Lab | 3 |
| PSYC 105 | Introduction to Psychology | 3 |
| Additional Psychology Course ${ }^{1}$ | 3 |  |

$\begin{array}{ll}\text { Total Hours } & 31\end{array}$
1 See My Rock Audit for specific courses.

## Requirements for Pre-Physical Therapy SRU 3+3

If any of these requirements are not met, the $3+3$ designation will be removed from the student's record:

1. A 3.0 or higher overall GPA must be maintained by the student.
2. The student can only be enrolled in the Pre-Physical Therapy SRU $3+3$ program for a maximum of three (3) years, full-time continuous enrollment (fall/spring).

## Provision

Should a Pre-Physical Therapy SRU 3+3 student be unsuccessful in completing the 1 st two semesters (fall or spring) of the Doctor of Physical Therapy Program and wants to complete the original undergraduate degree, it is solely up to the discretion of the undergraduate program Department Chair to determine which, if any, Physical Therapy courses will count toward the completion of his/ her undergraduate degree. In addition, students must complete any unfulfilled requirements of their undergraduate major. Students may still apply to the Doctor of Physical Therapy Program with an earned Bachelor's degree.

## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
HEALTH CARE ADMINISTRATION \& MANAGEMENT - BS (2346)
Concentration in Leadership 3+3 Pre-PT (LSHP) (23PT)
Revised 07.30.21
UCC 03.02.2021

## Recommended Three-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall |  |  |
| HCAM 230 | US Healthcare Systems | 3 |
| CHEM 107 | General Chemistry I |  |
| \& CHEM 111 | and General Chemistry I Lab | 4 |
| ENGL 102 | Critical Writing |  |
| INDS 101 | FYRST Seminar |  |$\quad 3$

COMM $200 \quad$ Civil Discourse: Theory \& Practice

| PHIL 110 | Ethics and Civil Discourse |  | HCAM 499 | Health Care Theory and Researc |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| POLS 235 | Civil Discourse and Democracy |  |  | Seminar |  |
|  | Hours | 17 | MGMT 320 | Operations Management I | 3 |
| Spring |  |  |  | Hours |  |
| HCAM 275 | Health Care Legal \& Ethical Foundations | 3 | Spring |  |  |
| CHEM 108 <br> \& CHEM 112 | General Chemistry II and General Chemistry II Lab | 4 | If not accepted in SRU PT Program |  |  |
|  |  |  | Free Elective (Recommended HCAM or in Minor) |  | 3 |
| ERS 250 | Medical Terminology | 3 | HCAM Leadership Concentration Elective |  | 3 |
| ENGL 104 | Critical Reading | 3 | MGMT 354 | Human Resources Management | 3 |
| MIS 210 | Productivity Software | 3 | Hours |  | 9 |
|  | Hours | 16 |  | Total Hours** |  |
| Second Year |  |  |  |  |  |
| Fall |  |  | Students are encouraged to take INDS 101 as a Free Elective. |  |  |
| HCAM 265 | Managed Care \& Insurance | 3 | Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread. |  |  |
| HCAM 305 | Health Care Quality \& Process Improvement |  |  |  |  |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 | 3 Senior Year- If not accepted into SRU PT Program: If you choose to pursue Health Care Administration and Management 3+3 Pre- |  |  |
| PSYC 105 | Introduction to Psychology | 3 | Physical Therapy program and are not accepted into the graduate |  |  |
| Humanities Inquiry (p. 1378) |  | 3 | SRU Physical Therapy program, then additional coursework is required, please refer to the Health Care Administration and Management, Leadership Concentration Curriculum Guide. |  |  |
| Declare a Thematic Thread ${ }^{2}$ |  |  |  |  |  |
|  | Hours | 15 |  |  |  |
| Spring |  |  | * Course offered in multiple subjects; cannot take course in first major subject. |  |  |
| HCAM 360 | Healthcare Organizational Dynamics | 3 |  |  |  |
| HLTH 210 | Introduction to Public Health | 3 | Major Code: 2346 |  |  |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 | Concentration Code: LSHP |  |  |
| ACCT 209 | Financial Accounting | 3 | 2ND Major. 23PT |  |  |
| STAT 152 | Elementary Statistics I | 3 | Revised: 06.30.21 |  |  |
|  | Hours | 15 | ** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing |  |  |
| Third Year |  |  |  |  |  |
| Fall |  |  | courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year. |  |  |
| HCAM 470 | Healthcare Practice Management | 3 |  |  |  |
| HCAM 480 | Healthcare Value-Based Reimbursement Systems | 3 |  |  |  |
| BUSA 340 | Legal Environment of Business | 3 | Health Care Administration and |  |  |
| PHYS 201 | Elements of Physics I with Lab | 4 | Management, Bachelor of Science |  |  |
| ECON 202 | Principles of Microeconomics | 3 |  |  |  |
| Creative \& Aesthetic Inquiry (p. 1378) 3 |  |  | (BS) - Concentration in Leadership / |  |  |
|  | Hours | 19 | Pre-P | al Therapy (SRU) |  |
| Spring Pre-Physicainherapy (S) |  |  |  |  |  |
| HCAM 400 | Legal Environment of Healthcare | 3 | (Traditional) |  |  |
| HCAM 430 | Finance for Healthcare Organizations | 3 |  |  |  |
| ECON 312 | Critical Choices in Health Care Policy | 3 | HCAM Program Learning Outcomes |  |  |
| PHYS 202 | Elements of Physics II/ Lab | 4 | Business Technology and Analytics: Students will articulate an applied understanding of key quality improvement metrics and methods to support evidence-based practice guidelines including: |  |  |
| $\begin{aligned} & \text { PSYC } 240 \\ & \text { or PSYC } 244 \end{aligned}$ | Human Sexual Behavior or Developmental Psychology | 3 |  |  |  |
| Thematic Thread Requirement (p. 1378) |  | 3 | - Demonstrate knowledge, skills and abilities to plan for and ensure the security, integrity, and privacy of data and confidentiality of the end user. |  |  |
|  | Hours | 19 |  |  |  |
| Fourth Year |  |  | - Demonstrate an ability to identify, aggregate, and summarize technical information for technical and non-technical personnel. |  |  |
| Fall |  |  |  |  |  |
| If not accepted in SRU PT Program |  |  | - Communication and Relationship Management: Students will demonstrate the ability to interact and communicate effectively by: |  |  |
| HCAM 450 | Internship-Health Care Administration \& | 3-12 |  |  |  |

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- Presenting information in oral and written formats.
- Collaborating effectively with others.
- Financial Management and Economic Reasoning: Students will demonstrate:
- An ability to analyze, quantify, evaluate and determine the sound allocation of financial resources.
- An ability to apply economic concepts for efficient allocation of scarce resources.
- Healthcare Legal Environment and Ethics: Students will be able to:
- Recognize will ethical dilemmas in healthcare.
- Recognize key healthcare legal and regulatory environment parameters.
- Demonstrate discern viable options for ethical guided decisionmaking processes.
- Demonstrate applied legal and regulatory reasoning.
- Knowledge of the Healthcare Environment: Students will demonstrate an accurate understanding of:
- Health care system structures.
- Reimbursement/payment models.
- Factors associated with population health.
- Organizational Dynamics: Students will articulate an applied understanding of:
- Organizational mission, vision, and culture.
- Behaviors associated with organizational commitment and job performance.


## What are your options?

Pre-Physical Therapy SRU 3+3: Earn a Doctor of Physical Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU DPT program. During your third undergraduate year, you apply for admission into the SRU DPT program. If accepted, your first year in the SRU DPT program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

Pre-Physical Therapy (SRU Traditional): Complete the requirements for your major and the pre-requisites for the SRU DPT program and apply to the SRU DPT program in your senior year.

## Academic Policies for Students in the Health Care Administration and Management (HCAM) Major

Effective for all Health Care Administration and Management (HCAM) Majors beginning Fall 2021

1. Policy for earning acceptable grades in the HCAM program:
a. A student must earn a grade of "C" or better in ALL Required Basic Courses (HCAM 230, HCAM 265, HCAM 275) and Required Upper-Level Courses (HCAM 305, HCAM 360, HCAM 400, HCAM 430, HCAM 450, HCAM 480, and HCAM 499).
b. A student must earn a grade of "C" or better in ALL non-HCAM major Requirements (ACCT 209, BUSA 340, ECON 312, HLTH 210, and MIS 210, STAT 152 or ECON 219/MGMT 219).
c. The HCAM curriculum is structured with pre-requisites. A student must earn a " $C$ " or better in the pre-requisite course to be able to take the next course. See course catalog for pre-requisites.
d. If a student does not earn a " $C$ " or better, they will be required to:
i. Retake the course
ii. They will be dropped from any course(s) in the following semester that requires a " C " or better as a pre-requisite (see course catalog for pre-requisites)
iii. Students will need to meet with their Academic Advisor and change their schedule accordingly
2. SRU has a Repeat of Courses Policy as follows and it can be found in the course catalog: Repeat of Courses < Slippery Rock University (sru.edu)
a. Students may attempt to improve their grade point average by repeating courses. The most recent grade earned is used in calculating the GPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the grade points and credits previously earned. However, all grades will appear on the transcript. Courses in which a grade was earned at Slippery Rock University may not be repeated at any institution. A grade of W (withdraw) does not count as an earned grade. Students who repeat a course must do so using the same grading system under which they originally took the course. For example, a student who originally took a course graded A-F may not repeat the course on a P/NC, P/F, or audit basis. Students may not repeat a course by using any Credit by Examination program if they originally took the course on a graded A-F, P/NC, P/F, or audit basis. Undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career, excluding withdrawal grades. In addition, repeats of a single course will be limited to a maximum of two. This means, no single course may be taken more than three times (excluding withdrawal grades). The course repeat policy for postbaccalaureate students is the same as the undergraduate student policy.
3. Once the student has exceeded the SRU Repeat of Courses Policy, the student will have their major changed to Exploratory and HCAM Major courses will be removed from their schedule.
4. Additional costs associated with the HCAM major:
a. Lab fees will be collected for classes with a lab component. This fee enhances the University's ability to offer a high-quality program.
b. A student in the HCAM major may be required to purchase Student Professional Liability Insurance while enrolled in HCAM 450 at their own cost. More information will be provided to students in the upper level HCAM courses.
c. HCAM 450 Internship: Certain sites may require one or more of the following: physical examinations, record of immunizations, TB test, criminal background checks, drug testing, specific certifications for CPR/AED (e.g., American Heart Association), and HIPAA training. These may require additional costs for students. Fulfilling these requirements and obtaining appropriate documentation is the responsibility of the student.

## Related Links

Healthcare Administration and Management - Pre-Physical Therapy, BS Program Page (https://www.sru.edu/academics/majors-and-minors/ health-care-administration-and-management-pre-physical-therapy/)

Healthcare Administration and Information Systems Department Page (https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/healthcare-administration-and-information-systems/)

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

## Curriculum Guide

## GPA Requirement

1st Major: HCAM

- Overall GPA: 2.0 or higher
- Major GPA (includes Major Requirements): 2.0 or higher


## 2nd Major: Pre-PT 3+3 HCAM

- Overall GPA: 3.00 or higher


## Summary*

| Title | Hours |
| :--- | ---: |
| Code | 43 |
| Rock Studies Requirements | $0-3$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | 60 |
| Major/Concentration Requirements | 17 |
| Electives |  |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics | 3 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |
| :---: | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |
| Subtotal |  |

Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378)

Humanities Inquiry
Select 3 Credits (p. 1378) 3

| Social Science Inquiry |  |
| :--- | :--- |
| PSYC 105 | Introduction to Psychology |

Physical and Natural Sciences Inquiry
BIOL $216 \quad$ Anatomy and Physiology I with Lab
PHYS 201 Elements of Physics I with Lab 4
Subtotal 16

Thematic Thread

Select 12 Credits (p. 1378) ${ }^{2}$
Total Hours
Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major/Concentration Requirements

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Core Courses |  |  |
| ACCT 209 | Financial Accounting ${ }^{1}$ | 3 |
| BUSA 340 | Legal Environment of Business ${ }^{1}$ | 3 |
| ECON 312 | Critical Choices in Health Care Policy ${ }^{1}$ | 3 |
| HCAM 230 | US Healthcare Systems ${ }^{1}$ | 3 |
| HCAM 265 | Managed Care \& Insurance | 3 |
| HCAM 275 | Health Care Legal \& Ethical Foundations ${ }^{1}$ | 3 |
| HCAM 305 | Health Care Quality \& Process Improvement ${ }^{1}$ | 3 |
| HCAM 360 | Healthcare Organizational Dynamics ${ }^{1}$ | 3 |
| HCAM 400 | Legal Environment of Healthcare ${ }^{1}$ | 3 |
| HCAM 430 | Finance for Healthcare Organizations ${ }^{1}$ | 3 |
| HCAM 450 | Internship-Health Care Administration \& Management ${ }^{1}$ | 3 |
| HCAM 480 | Healthcare Value-Based Reimbursement Systems ${ }^{1}$ | 3 |
| HCAM 499 | Health Care Theory and Research Capstone Seminar ${ }^{1}$ | 3 |

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| HLTH 210 | Introduction to Public Health ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| MIS 210 | Productivity Software ${ }^{1}$ | 3 |
| Select one of the following: ${ }^{1}$ |  | 3 |
| ECON 219 | Business Analytics I |  |
| MGMT 219 | Business Analytics I |  |
| STAT 152 | Elementary Statistics I |  |
| Subtotal |  | 48 |
| Leadership Concentration Courses |  |  |
| HCAM 410 | Strategic Leadership in Health Care Organizations ${ }^{1}$ | 3 |
| MGMT 320 | Operations Management ${ }^{1}$ | 3 |
| MGMT 354 | Human Resources Management ${ }^{1}$ | 3 |
| Select one of the following: |  | 3 |
| HCAM 300 | Healthcare Systems: Global Perspectives and Analysis ${ }^{1}$ |  |
| HCAM 425 | Long Term Care Management ${ }^{1}$ |  |
| HCAM 195 | Health Care Workshop ${ }^{1}$ |  |
| HCAM 295 | Health Care Workshop ${ }^{1}$ |  |
| HCAM 395 | Health Care Workshop ${ }^{1}$ |  |
| HCAM 495 | Health Care Workshop ${ }^{1}$ |  |
| HCAM 198 | Selected Topics ${ }^{1}$ |  |
| HCAM 298 | Selected Topics ${ }^{1}$ |  |
| HCAM 398 | Selected Topics ${ }^{1}$ |  |
| HCAM 498 | Selected Topics ${ }^{1}$ |  |
| Subtotal |  | 12 |
| Total Hours |  | 60 |

1 Course counts for $50 \%$ of Major requirements and Major GPA

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


## Additional Physical Therapy Prerequisite Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| CHEM 108 | General Chemistry II | 4 |
| \& CHEM 112 | and General Chemistry II Lab |  |
| ERS 250 | Medical Terminology | 3 |
| PHYS 202 | Elements of Physics II/ Lab | 4 |
| PSYC 240 | Human Sexual Behavior | 3 |
| or PSYC 244 | Developmental Psychology |  |

## Co-Curricular and Experiential Learning

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

1. International study programs (short-term, semester, and year-long)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership development

Service-learning classes
Career education and development
Internships
8. Volunteering in healthcare industry related settings
9. Job Shadowing

Doctor of Physical Therapy (DPT) Prerequisite Admission Requirements

## For Application Requirements

Please refer to Slippery Rock University's Physical Therapy (Doctor of Physical Therapy) website for requirements: www.sru.edu/PT (http:// www.sru.edu/PT/)


## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
HEALTH CARE ADMINISTRATION \& MANAGEMENT - BS (2346)
Concentration in Leadership Traditional Pre-PT SRU
Revised 05.28.2021
UCC 02.02.2021

# Health Care Administration and Management, Bachelor of Science (BS) - Concentration in Leadership / Pre-Physician Assistant (SRU) (3+2) HCAM Program Learning Outcomes 

- Business Technology and Analytics: Students will articulate an applied understanding of key quality improvement metrics and methods to support evidence-based practice guidelines including:
- Demonstrate knowledge, skills and abilities to plan for and ensure the security, integrity, and privacy of data and confidentiality of the end user.
- Demonstrate an ability to identify, aggregate, and summarize technical information for technical and non-technical personnel.
- Communication and Relationship Management: Students will demonstrate the ability to interact and communicate effectively by:
- Presenting information in oral and written formats.
- Collaborating effectively with others.
- Financial Management and Economic Reasoning: Students will demonstrate:
- An ability to analyze, quantify, evaluate and determine the sound allocation of financial resources.
- An ability to apply economic concepts for efficient allocation of scarce resources.
- Healthcare Legal Environment and Ethics: Students will be able to:
- Recognize will ethical dilemmas in healthcare.
- Recognize key healthcare legal and regulatory environment parameters.
- Demonstrate discern viable options for ethical guided decisionmaking processes.
- Demonstrate applied legal and regulatory reasoning.
- Knowledge of the Healthcare Environment: Students will demonstrate an accurate understanding of:
- Health care system structures.
- Reimbursement/payment models.
- Factors associated with population health.
- Organizational Dynamics: Students will articulate an applied understanding of:
- Organizational mission, vision, and culture.
- Behaviors associated with organizational commitment and job performance.


## What are your options?

Pre-Physician Assistant SRU 3+2: Earn a Master of Science degree in Physician Assistant Studies in five years rather than six. In the first three years, you complete your major courses and pre-requisites for the SRU PA program. At the end of your second year, you apply for admission into the SRU PA program. If accepted, your first year in the SRU PA program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

Pre-Physician Assistant (SRU Traditional): Complete the requirements for your major and the pre-requisites for the SRU PA program and apply to the SRU PA program in your senior year.

## Academic Policies for Students in the Health Care Administration and Management (HCAM) Major

## Effective for students entering the major Fall 2017 and after

1. Policy for achieving and maintaining "Sufficient Academic Performance" ${ }^{1}$
a. At the end of the semester in which a student has earned 40 credits (and every semester thereafter), the Major and Overall GPA will be reviewed:
i. A student must earn a 2.50 Major GPA to achieve "Sufficient Academic Performance" and continue in the HCAM major.
ii. A student earning below a 2.50 in the Major GPA at any time after earning 40 credits will be placed on a "one semester probation." ${ }^{2} \mathrm{He}$ /she must increase his/her GPA to 2.50 or higher by the end of the "one semester probation" or be permanently removed from the HCAM major. The student will be notified by email of his/her status following the "one semester probation." A student who has not achieved "Sufficient Academic Performance" will have his/her major changed to Exploratory.
iii. A student can be placed on a "one semester probation" a maximum of two times as an HCAM major. He/she will be permanently removed from the HCAM major if his/her Major GPA drops below a 2.50 a third time.
iv. A student on a "one semester probation" may not enroll in required 400 Level Courses unless he/she is repeating the course(s).
b. A transfer student who enters from another university or a Slippery Rock University student who changes his/her major to HCAM:
i. With 40 or more earned credits will have a one-semester extension before his/her Major GPA are reviewed to determine if he/she has achieved "Sufficient Academic Performance".
ii. With less than 40 earned credits will follow Policy I. A above.
c. An incoming FYRST student earning college credits prior to entering SRU may reach 40 credits before completing two semesters at SRU. In this case, the review to determine "Sufficient Academic Performance" will not begin until the student has completed two semesters as a student in the HCAM major.
2. Policy for earning acceptable grades in Required 400 Level Courses
a. A student must earn a grade of " $C$ " or better in Required 400 Level Courses.
b. A student will not be permitted to begin an internship unless he/she has "Sufficient Academic Performance" and he/she has earned a grade of " $C$ " or better in Required 400 Level Courses.
c. A student must also earn a grade of " C " or better in HCAM 305, HCAM 400, HCAM $410^{3}$, HCAM 430 and MIS 403 before he/she is allowed to take HCAM $499^{4}$ and HCAM $450^{4}$.
3. Policy for changing to the HCAM major
a. A Slippery Rock University student wishing to change his/her major to Health Care Administration and Management must have an overall GPA of 2.00.
4. Additional costs associated with the HCAM major
a. A student in the HCAM major is required to maintain a current Student Professional Liability Insurance and meet any immunization or physical requirements set forth by an internship employer while enrolled in HCAM 450 at his/her own cost.

1 "Sufficient Academic Performance" is defined as having a Major GPA of 2.50 or higher. The Major GPA is comprised of Required Basic Courses, Required 300 and 400 Level HCAM Courses. Please see My Rock Audit for specific courses.
"One semester probation" is defined as the initial semester after which "Sufficient Academic Performance" was not achieved and the first occurring summer.
3 If taken - HCAM 410 is an elective for non 3+2 PA or 3+3 PT majors
If required - not required for $3+2$ PA or $3+3$ PT majors

## Related Links

Healthcare Administration and Management - Pre-Physician Assistant, BS Program Page (https://www.sru.edu/academics/majors-and-minors/ health-care-administration-and-management-pre-physician-assistant/)

Healthcare Administration and Information Systems Department Page (https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/healthcare-administration-and-information-systems/)

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

## Curriculum Guide

## GPA Requirement

$1^{\text {st }}$ Major. HCAM

- Overall GPA: 2.0 or higher
- Major GPA (includes Major Requirements): 2.0 or higher
$2^{\text {nd }}$ Major: Pre-PA SRU 3+2 HCAM
- Overall GPA: 3.25 or higher

| Summary* |  |
| :--- | ---: |
| Code $\quad$ Title | Hours |
| Rock Studies Requirements | 43 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 48 |
| Electives | 28 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the $1^{\text {st }}$ year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.


## Rock Studies Requirements

Code Title Hours

| The Rock |  |  |
| :--- | :--- | :--- |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |


| ENGL 104 | Critical Reading | 3 |
| :---: | :---: | :---: |
| STAT 152 | Elementary Statistics I | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| PSYC 105 | Introduction to Psychology | 3 |
| Physical \& Natural Sciences Inquiry |  |  |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| CHEM 108 \& CHEM 112 | General Chemistry II and General Chemistry II Lab | 4 |
| Subtotal |  | 16 |
| Thematic Thread |  |  |
| Select 12 Credits (p. 1378) ${ }^{2}$ |  | 12 |
| Total Hours |  | 43 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

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

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra | $\mathbf{0 - 3}$ |
| Total Hours |  |  |

## Computer Competency

Code Title Hours

Demonstrate "computer competency" by one of the following: 0-3
Pass Computer Competency Exam OR
Select one of the following at SRU or another post-secondary institution:

| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| :--- | :--- | :--- |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and |  |
|  | Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | $\mathbf{0 - 3}$ |

## Major Requirements

- If you choose to pursue Pre-Physician Assistant (PA) SRU 3+2 Health Care Administration and Management and are not accepted into
the PA program, then the following additional HCAM courses are required to complete a first major of Health Care Administration and Management (HCAM). You will be required to successfully complete the HCAM capstone course (HCAM 499), HCAM internship (HCAM 450) - Plus - courses necessary to satisfy the Leadership specialty track. Please see the HCAM curriculum guide.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Basic Courses |  |  |
| ACCT 209 | Financial Accounting ${ }^{1}$ | 3 |
| ECON 202 | Principles of Microeconomics 1,2 | 3 |
| HCAM 230 | US Healthcare Systems ${ }^{1}$ | 3 |
| HCAM 275 | Health Care Legal \& Ethical Foundations ${ }^{1,2}$ | 3 |
| HLTH 210 | Introduction to Public Health ${ }^{1}$ | 3 |
| MIS 210 | Productivity Software ${ }^{1}$ | 3 |
| STAT 152 | Elementary Statistics I ${ }^{1}$ | 3 |
| Subtotal |  | 21 |
| Required Upper Level Courses ( 27 credits if accepted to SRU PA Program) |  |  |
| Must have achieved "Sufficient Academic Performance" to take these courses. Mustearn a "C" or better in all of the following ACCT, HCAM, MIS and PHIL courses: |  |  |
| BUSA 340 | Legal Environment of Business ${ }^{1}$ | 3 |
| ECON 312 | Critical Choices in Health Care Policy 1,2 | 3 |
| HCAM 265 | Managed Care \& Insurance | 3 |
| HCAM 305 | Health Care Quality \& Process Improvement ${ }^{1,3}$ | 3 |
| HCAM 360 | Healthcare Organizational Dynamics 1,3 | 3 |
| HCAM 400 | Legal Environment of Healthcare 1,3 | 3 |
| HCAM 430 | Finance for Healthcare Organizations 1,3 | 3 |
| HCAM 470 | Healthcare Practice Management | 3 |
| HCAM 480 | Healthcare Value-Based Reimbursement Systems ${ }^{1}$ | 3 |
| Subtotal |  | 27 |
| Total Hours |  | 48 |
| Course counts for $50 \%$ of Major requirements and Major GPA. Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total. |  |  |
| 3 See |  |  |
| * Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course. |  |  |

## Additional Physician Assistant Prerequisite Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| BIOL 104 | Principles of Biology with Lab | 4 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| BIOL 210 | Medical Microbiology with Lab | 3 |
| or BIOL 330 | Microbiology/Lab |  |
| BIOL 250 | Genetics with Lab | 4 |
| CHEM 107 | General Chemistry I |  |
| \& CHEM 111 | and General Chemistry I Lab | 4 |
| CHEM 201 | Organic Chemistry I | 3 |
| Total Hours |  | $\mathbf{2 1}$ |

## Co-curricular and Experiential Learning

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

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

## Physician Assistant Studies (Master of Science in

 Physician Assistant Studies) Prerequisite Admission Requirements - Pre- Physician Assistant 3+2
## For Application Requirements

Please refer to Slippery Rock University's Physician Assistant Studies (Master of Science in Physician Assistant Studies) website for requirements:http://www.sru.edu/pa (http://www.sru.edu/pa/)

| Liberal Studies and Rock Studies |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| Prerequisite Courses - SRU Physician Assistant |  |  |
| BIOL 104 | Principles of Biology with Lab | 4 |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| BIOL 250 | Genetics with Lab | 4 |
| $\begin{aligned} & \text { BIOL } 210 \\ & \quad \text { or BIOL } 330 \end{aligned}$ | Medical Microbiology with Lab Microbiology/Lab | 3 |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
| CHEM 108 \& CHEM 112 | General Chemistry II and General Chemistry II Lab | 4 |
| CHEM 201 | Organic Chemistry I | 3 |
| Inferential Statistics Course ${ }^{1}$ |  | 3 |
| PSYC 105 | Introduction to Psychology | 3 |
| ERS 250 or HCAM 250 | Medical Terminology <br> Medical Terminology for Healthcare <br> Administrators | 3 |

Total Hours
1 Any statistics course with inferential statistics embedded. See My Rock Audit for specific courses.

Pre-Physician Assistant SRU 3+2 Requirements
If any of these requirements are not met, the $3+2$ designation will be removed from the student's record:

1. A 3.25 or higher overall GPA must be maintained by the student.
2. The student can only be enrolled in the Pre-Physician Assistant SRU $3+2$ program for a maximum of three (3) years, full-time continuous enrollment (fall/spring).

## Provision

Should a Pre-Physician Assistant SRU 3+2 student be unsuccessful in completing the $1^{\text {st }}$ two semesters (summer or fall) of the Physician Assistant Program and wants to complete the original undergraduate degree, it is solely up to the discretion of the undergraduate program Department Chair to determine which, if any, Physician Assistant courses will count toward the completion of his/her undergraduate degree. In addition, students must complete any unfulfilled requirements of their undergraduate major. Students may still apply to the Physician Assistant Studies Program with an earned Bachelor's degree.

## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
HEALTH CARE ADMINISTRATION \& MANAGEMENT - BS (2346)
Concentration in Leadership 3+2 Pre-PA (LHSP) (23PA)
Revised 07.30.21
UCC 03.02.2021
Recommended Three-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| HCAM 230 | US Healthcare Systems | 3 |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar* | 1 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
|  | Hours | 17 |
| Spring |  |  |
| HCAM 275 | Health Care Legal \& Ethical Foundations | 3 |
| CHEM 108 <br> \& CHEM 112 | General Chemistry II and General Chemistry II Lab | 4 |
| ERS 250 | Medical Terminology | 3 |
| ENGL 104 | Critical Reading | 3 |
| MIS 210 | Productivity Software | 3 |
|  | Hours | 16 |


| Second Year |  |  |
| :---: | :---: | :---: |
| Fall |  |  |
| HCAM 265 | Managed Care \& Insurance | 3 |
| HCAM 305 | Health Care Quality \& Process Improvement | 3 |
| BIOL 104 | Principles of Biology with Lab | 4 |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| PSYC 105 | Introduction to Psychology | 3 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 16 |
| Spring |  |  |
| HCAM 360 | Healthcare Organizational Dynamics | 3 |
| ACCT 209 | Financial Accounting | 3 |
| HLTH 210 | Introduction to Public Health | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| BIOL 250 | Genetics with Lab | 4 |
| STAT 152 | Elementary Statistics I | 3 |
|  | Hours | 19 |
| Third Year |  |  |
| Fall |  |  |
| HCAM 470 | Healthcare Practice Management | 3 |
| HCAM 480 | Healthcare Value-Based Reimbursement Systems | 3 |
| BUSA 340 | Legal Environment of Business | 3 |
| CHEM 201 | Organic Chemistry I | 3 |
| ECON 202 | Principles of Microeconomics | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
|  | Hours | 18 |
| Spring |  |  |
| HCAM 400 | Legal Environment of Healthcare | 3 |
| HCAM 430 | Finance for Healthcare Organizations | 3 |
| BIOL 210/330 | Medical Microbiology with Lab | 3 |
| ECON 312 | Critical Choices in Health Care Policy | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 18 |
| Fourth Year |  |  |
| Fall |  |  |
| Senior Year. If not accepted into SRU PA ${ }^{3}$ |  |  |
| HCAM 450 or HCAM 499 | Internship-Health Care Administration \& Management or Health Care Theory and Research Capstone Seminar | 3-12 |
| HCAM 499 | Health Care Theory and Research Capstone Seminar | 3 |
| MGMT 320 | Operations Management I | 3 |
|  | Hours | 9-18 |
| Spring |  |  |
| Senior Year. If not accepted into SRU PA ${ }^{3}$ |  |  |
| Free Elective (Recommended HCAM or in Minor) |  | 3 |
| MGMT 354 | Human Resources Management | 3 |

Hours 9

## Total Hours**

122-131

* Course offered in multiple subjects; cannot take course in first major subject.
Students are encouraged to take INDS 101 as a Free Elective.
2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread.
Senior Year- If not accepted into SRU PA Program: If you choose to pursue Health Care Administration and Management 3+2 PrePhysician Assistant program and are not accepted into the graduate SRU Physician Assistant program, then additional coursework is required, please refer to the Health Care Administration and Management, Leadership Concentration Curriculum Guide.


## MAJOR CODE: 2346 (LSHP/23PA)

Revised 06.30.2021
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Health Care Administration and Management, Bachelor of Science (BS) - Concentration in Leadership / Pre-Physician Assistant (SRU) (Traditional)

## HCAM Program Learning Outcomes

- Business Technology and Analytics: Students will articulate an applied understanding of key quality improvement metrics and methods to support evidence-based practice guidelines including:
- Demonstrate knowledge, skills and abilities to plan for and ensure the security, integrity, and privacy of data and confidentiality of the end user.
- Demonstrate an ability to identify, aggregate, and summarize technical information for technical and non-technical personnel.
- Communication and Relationship Management: Students will demonstrate the ability to interact and communicate effectively by:
- Presenting information in oral and written formats.
- Collaborating effectively with others.
- Financial Management and Economic Reasoning: Students will demonstrate:
- An ability to analyze, quantify, evaluate and determine the sound allocation of financial resources.
- An ability to apply economic concepts for efficient allocation of scarce resources.
- Healthcare Legal Environment and Ethics: Students will be able to:
- Recognize will ethical dilemmas in healthcare.
- Recognize key healthcare legal and regulatory environment parameters.
- Demonstrate discern viable options for ethical guided decisionmaking processes.
- Demonstrate applied legal and regulatory reasoning.
- Knowledge of the Healthcare Environment: Students will demonstrate an accurate understanding of:
- Health care system structures.
- Reimbursement/payment models.
- Factors associated with population health.
- Organizational Dynamics: Students will articulate an applied understanding of:
- Organizational mission, vision, and culture.
- Behaviors associated with organizational commitment and job performance.


## What are your options?

Pre-Physician Assistant SRU 3+2: Earn a Master of Science degree in Physician Assistant Studies in five years rather than six. In the first three years, you complete your major courses and pre-requisites for the SRU PA program. At the end of your second year, you apply for admission into the SRU PA program. If accepted, your first year in the SRU PA program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

Pre-Physician Assistant (SRU Traditional): Complete the requirements for your major and the pre-requisites for the SRU PA program and apply to the SRU PA program in your senior year.

## Academic Policies for Students in the Health Care Administration and Management (HCAM) Major

Effective for all Health Care Administration and Management (HCAM) Majors beginning Fall 2021

1. Policy for earning acceptable grades in the HCAM program:
a. A student must earn a grade of " C " or better in ALL Required Basic Courses (HCAM 230, HCAM 265, HCAM 275) and Required Upper-Level Courses (HCAM 305, HCAM 360, HCAM 400, HCAM 430, HCAM 450, HCAM 480, and HCAM 499).
b. A student must earn a grade of "C" or better in ALL non-HCAM major Requirements (ACCT 209, BUSA 340, ECON 312, HLTH 210, and MIS 210, STAT 152 or ECON 219/MGMT 219).
c. The HCAM curriculum is structured with pre-requisites. A student must earn a " $C$ " or better in the pre-requisite course to be able to take the next course. See course catalog for pre-requisites.
d. If a student does not earn a " C " or better, they will be required to:
i. Retake the course
ii. They will be dropped from any course(s) in the following semester that requires a " $C$ " or better as a pre-requisite (see course catalog for pre-requisites)
iii. Students will need to meet with their Academic Advisor and change their schedule accordingly
2. SRU has a Repeat of Courses Policy as follows and it can be found in the course catalog: Repeat of Courses < Slippery Rock University (sru.edu)
a. Students may attempt to improve their grade point average by repeating courses. The most recent grade earned is used in calculating the GPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the grade points and credits previously earned. However, all grades will appear on the transcript. Courses in which a grade was earned at Slippery Rock University may not be repeated at any institution. A grade of W (withdraw) does not count as an earned grade. Students who repeat a course must do so using the same grading system under which they originally took the course. For example, a student who originally took a course graded A-F may not repeat the course on a P/NC, P/F, or audit basis. Students may not repeat a course by using any Credit by Examination program if they originally took the course on a graded A-F, P/NC, P/F, or audit basis. Undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career, excluding withdrawal grades. In addition, repeats of a single course will be limited to a maximum of two. This means, no single course may be taken more than three times (excluding withdrawal grades). The course repeat policy for postbaccalaureate students is the same as the undergraduate student policy.
3. Once the student has exceeded the SRU Repeat of Courses Policy, the student will have their major changed to Exploratory and HCAM Major courses will be removed from their schedule.
4. Additional costs associated with the HCAM major:
a. Lab fees will be collected for classes with a lab component. This fee enhances the University's ability to offer a high-quality program.
b. A student in the HCAM major may be required to purchase Student Professional Liability Insurance while enrolled in HCAM 450 at their own cost. More information will be provided to students in the upper level HCAM courses.
c. HCAM 450 Internship: Certain sites may require one or more of the following: physical examinations, record of immunizations, TB test, criminal background checks, drug testing, specific certifications for CPR/AED (e.g., American Heart Association), and HIPAA training. These may require additional costs for students. Fulfilling these requirements and obtaining appropriate documentation is the responsibility of the student.

## Related Links

Healthcare Administration and Management - Pre-Physician Assistant, BS Program Page (https://www.sru.edu/academics/majors-and-minors/ health-care-administration-and-management-pre-physician-assistant/)

Healthcare Administration and Information Systems Department Page (https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/healthcare-administration-and-information-systems/)

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

## Curriculum Guide

## GPA Requirement

## 1st Major. HCAM

- Overall GPA: 2.0 or higher
- Major GPA (includes Major Requirements): 2.0 or higher


## 2nd Major. Pre-PA 3+3 HCAM

- Overall GPA: 3.00 or higher


## Summary*

Code Title Hours
Rock Studies Requirements 43
Other Basic Requirements 0-3
Computer Competency 0-3
Major/Concentration Requirements 51
Electives 26

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


## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| PSYC 105 | Introduction to Psychology | 3 |
| Physical and Natural Sciences Inquiry |  |  |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| CHEM 108 <br> \& CHEM 112 | General Chemistry II and General Chemistry II Lab | 4 |
| Subtotal |  | 16 |
| Thematic Thread |  |  |
| Select 12 Credits (p.1378) ${ }^{2}$ |  | 12 |
| Total Hours |  | 43 |
| Course offered in multiple subjects; cannot take course in first major subject. |  |  |
| 2 From at le departme | ategories; no more than 6 credits from dits must be 300-level or above. |  |

## Basic Math Requirement

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Ar |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major/Concentration Requirements

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Core Courses |  |  |
| ACCT 209 | Financial Accounting ${ }^{1}$ | 3 |
| BUSA 340 | Legal Environment of Business ${ }^{1}$ | 3 |
| ECON 312 | Critical Choices in Health Care Policy ${ }^{1}$ | 3 |
| HCAM 230 | US Healthcare Systems ${ }^{1}$ | 3 |
| HCAM 265 | Managed Care \& Insurance | 3 |
| HCAM 275 | Health Care Legal \& Ethical Foundations ${ }^{1}$ | 3 |
| HCAM 305 | Health Care Quality \& Process Improvement ${ }^{1}$ | 3 |
| HCAM 360 | Healthcare Organizational Dynamics ${ }^{1}$ | 3 |
| HCAM 400 | Legal Environment of Healthcare ${ }^{1}$ | 3 |
| HCAM 430 | Finance for Healthcare Organizations ${ }^{1}$ | 3 |
| HCAM 450 | Internship-Health Care Administration \& Management ${ }^{1}$ | 3 |
| HCAM 480 | Healthcare Value-Based Reimbursement Systems ${ }^{1}$ | 3 |
| HCAM 499 | Health Care Theory and Research Capstone Seminar ${ }^{1}$ | 3 |
| HLTH 210 | Introduction to Public Health ${ }^{1}$ | 3 |
| MIS 210 | Productivity Software ${ }^{1}$ | 3 |
| Select one of the following: ${ }^{1}$ |  | 3 |


| ECON 219 | Business Analytics I |
| :--- | :--- |
| MGMT 219 | Business Analytics I |
| STAT 152 | Elementary Statistics I |
| Subtotal |  |

Leadership Concentration Courses

| HCAM 410 | Strategic Leadership in Health Care <br> Organizations ${ }^{1}$ | 3 |
| :--- | :--- | :--- |
| MGMT 320 | Operations Management I ${ }^{1}$ | 3 |
| MGMT 354 | Human Resources Management ${ }^{1}$ | 3 |
| Select one of the following: $^{\text {M }}$. | 3 |  |


| HCAM 300 | Healthcare Systems: Global Perspectives and Analysis ${ }^{1}$ |
| :---: | :---: |
| HCAM 425 | Long Term Care Management ${ }^{1}$ |
| HCAM 195 | Health Care Workshop ${ }^{1}$ |
| HCAM 295 | Health Care Workshop ${ }^{1}$ |
| HCAM 395 | Health Care Workshop ${ }^{1}$ |
| HCAM 495 | Health Care Workshop ${ }^{1}$ |
| HCAM 198 | Selected Topics ${ }^{1}$ |
| HCAM 298 | Selected Topics ${ }^{1}$ |
| HCAM 398 | Selected Topics ${ }^{1}$ |
| HCAM 498 | Selected Topics ${ }^{1}$ |
| Subtotal |  |
| Total Hours |  |

1 Course counts for 50\% of Major requirements and Major GPA

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


## Additional Physician Assistant Prerequisite Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| BIOL 104 | Principles of Biology with Lab | 4 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| BIOL 210 | Medical Microbiology with Lab | 3 |
| or BIOL 330 | Microbiology/Lab |  |
| BIOL 250 | Genetics with Lab | 4 |
| CHEM 107 | General Chemistry I | 4 |
| \& CHEM 111 | and General Chemistry I Lab |  |
| CHEM 201 | Organic Chemistry I | 3 |
| ERS 250 | Medical Terminology | 3 |
| PSYC 105 | Introduction to Psychology | 3 |

## Co-Curricular and Experiential Learning

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

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

## Physician Assistant Studies (Master of Science in Physician Assistant Studies) Prerequisite Admission Requirements <br> For Application Requirements

Please refer to Slippery Rock University's Physician Assistant Studies (Master of Science in Physician Assistant Studies) website for requirements: http://www.sru.edu/pa (http://www.sru.edu/pa/)

| Liberal Studies and Rock Studies |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| Prerequisite Courses - SRU Physician Assistant |  |  |
| BIOL 104 | Principles of Biology with Lab | 4 |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| BIOL 250 | Genetics with Lab | 4 |
| $\begin{aligned} & \text { BIOL } 210 \\ & \text { or BIOL } 330 \end{aligned}$ | Medical Microbiology with Lab Microbiology/Lab | 3 |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
| CHEM 108 <br> \& CHEM 112 | General Chemistry II and General Chemistry II Lab | 4 |
| CHEM 201 | Organic Chemistry I | 3 |
| Inferential Statistics Course ${ }^{1}$ |  | 3 |
| PSYC 105 | Introduction to Psychology | 3 |
| ERS 250 | Medical Terminology | 3 |
| or HCAM 250 | Medical Terminology for Healthcare Administrators |  |

Total Hours
1 Any statistics course with inferential statistics embedded. See My Rock Audit for specific courses.

## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
HEALTH CARE ADMINISTRATION \& MANAGEMENT - BS (2346)
Concentration in Leadership Traditional PRE-PA
Effective Fall 2020
Revised 05.28.2021
UCC 02.02.2021

## Health Care Administration and Management, Bachelor of Science (BS) - Concentration in Long-Term Care

## Program Learning Outcomes

- Business Technology and Analytics: Students will articulate an applied understanding of key quality improvement metrics and methods to support evidence-based practice guidelines including:
- Demonstrate knowledge, skills and abilities to plan for and ensure the security, integrity, and privacy of data and confidentiality of the end user.
- Demonstrate an ability to identify, aggregate, and summarize technical information for technical and non-technical personnel.
- Communication and Relationship Management: Students will demonstrate the ability to interact and communicate effectively by:
- Presenting information in oral and written formats.
- Collaborating effectively with others.
- Financial Management and Economic Reasoning: Students will demonstrate:
- An ability to analyze, quantify, evaluate and determine the sound allocation of financial resources.
- An ability to apply economic concepts for efficient allocation of scarce resources.
- Healthcare Legal Environment and Ethics: Students will be able to:
- Recognize will ethical dilemmas in healthcare.
- Recognize key healthcare legal and regulatory environment parameters.
- Demonstrate discern viable options for ethical guided decisionmaking processes.
- Demonstrate applied legal and regulatory reasoning.
- Knowledge of the Healthcare Environment: Students will demonstrate an accurate understanding of:
- Health care system structures.
- Reimbursement/payment models.
- Factors associated with population health.
- Organizational Dynamics: Students will articulate an applied understanding of:
- Organizational mission, vision, and culture.
- Behaviors associated with organizational commitment and job performance.


## Academic Policies for Students in the Health Care Administration and Management (HCAM) Major

Effective for all Health Care Administration and Management (HCAM) Majors beginning Fall 2021

1. Policy for earning acceptable grades in the HCAM program:
a. A student must earn a grade of "C" or better in ALL Required Basic Courses (HCAM 230, HCAM 265, HCAM 275) and Required

Upper-Level Courses (HCAM 305, HCAM 360, HCAM 400, HCAM 430, HCAM 450, HCAM 480, and HCAM 499).
b. A student must earn a grade of "C" or better in ALL non-HCAM major Requirements (ACCT 209, BUSA 340, ECON 312, HLTH 210, and MIS 210, STAT 152 or ECON 219/MGMT 219).
c. The HCAM curriculum is structured with pre-requisites. A student must earn a " C " or better in the pre-requisite course to be able to take the next course. See course catalog for pre-requisites.
d. If a student does not earn a " C " or better, they will be required to:
i. Retake the course
ii. They will be dropped from any course(s) in the following semester that requires a " C " or better as a pre-requisite (see course catalog for pre-requisites)
iii. Students will need to meet with their Academic Advisor and change their schedule accordingly
2. SRU has a Repeat of Courses Policy as follows and it can be found in the course catalog: Repeat of Courses < Slippery Rock University (sru.edu)
a. Students may attempt to improve their grade point average by repeating courses. The most recent grade earned is used in calculating the GPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the grade points and credits previously earned. However, all grades will appear on the transcript. Courses in which a grade was earned at Slippery Rock University may not be repeated at any institution. A grade of W (withdraw) does not count as an earned grade. Students who repeat a course must do so using the same grading system under which they originally took the course. For example, a student who originally took a course graded A-F may not repeat the course on a P/NC, P/F, or audit basis. Students may not repeat a course by using any Credit by Examination program if they originally took the course on a graded A-F, P/NC, P/F, or audit basis. Undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career, excluding withdrawal grades. In addition, repeats of a single course will be limited to a maximum of two. This means, no single course may be taken more than three times (excluding withdrawal grades). The course repeat policy for postbaccalaureate students is the same as the undergraduate student policy.
3. Once the student has exceeded the SRU Repeat of Courses Policy, the student will have their major changed to Exploratory and HCAM Major courses will be removed from their schedule.
4. Additional costs associated with the HCAM major.
a. Lab fees will be collected for classes with a lab component. This fee enhances the University's ability to offer a high-quality program.
b. A student in the HCAM major may be required to purchase Student Professional Liability Insurance while enrolled in HCAM 450 at their own cost. More information will be provided to students in the upper level HCAM courses.
c. HCAM 450 Internship: Certain sites may require one or more of the following: physical examinations, record of immunizations, TB test, criminal background checks, drug testing, specific certifications for CPR/AED (e.g., American Heart Association), and HIPAA training. These may require additional costs for students. Fulfilling these requirements and obtaining appropriate documentation is the responsibility of the student.

## Related Links

Healthcare Administration and Management - Long-Term Care, BS Program Page (https://www.sru.edu/academics/majors-and-minors/ health-care-administration-and-management/)

Healthcare Administration and Information Systems Department Page (https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/healthcare-administration-and-information-systems/)

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

## Curriculum Guide

## GPA Requirement

2.0 GPA overall or higher to declare HCAM as major 2.0 GPA or higher in the major to graduate in HCAM 2.0 GPA or higher and instructor permission to apply for the internship

## Summary*

| Title | Hours |
| :--- | ---: |
| Code | $42-43$ |
| Rock Studies Requirements | $0-3$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | 60 |
| Major/Concentration Requirements | 17 |
| Electives |  |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| Select one of the following: |  | 3-4 |
| MATH 117 | Quantitative Reasoning |  |
| MATH 123 | Introduction to Applied Calculus |  |
| MATH 225 | Calculus I |  |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15-16 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| ECON 202 | Principles of Microeconomics | 3 |
| Natural Sciences Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Scienc |  |  |



## Basic Math Requirement

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Ar |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major/Concentration Requirements

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Core Courses |  |  |
| ACCT 209 | Financial Accounting ${ }^{1}$ | 3 |
| BUSA 340 | Legal Environment of Business ${ }^{1}$ | 3 |
| ECON 312 | Critical Choices in Health Care Policy ${ }^{1}$ | 3 |
| HCAM 230 | US Healthcare Systems ${ }^{1}$ | 3 |
| HCAM 265 | Managed Care \& Insurance | 3 |
| HCAM 275 | Health Care Legal \& Ethical Foundations ${ }^{1}$ | 3 |
| HCAM 305 | Health Care Quality \& Process Improvement ${ }^{1}$ | 3 |
| HCAM 360 | Healthcare Organizational Dynamics ${ }^{1}$ | 3 |
| HCAM 400 | Legal Environment of Healthcare ${ }^{1}$ | 3 |
| HCAM 430 | Finance for Healthcare Organizations ${ }^{1}$ | 3 |
| HCAM 450 | Internship-Health Care Administration \& Management ${ }^{1}$ | 3 |


| HCAM 480 | Healthcare Value-Based Reimbursement Systems ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| HCAM 499 | Health Care Theory and Research Capstone Seminar ${ }^{1}$ | 3 |
| HLTH 210 | Introduction to Public Health ${ }^{1}$ | 3 |
| MIS 210 | Productivity Software ${ }^{1}$ | 3 |
| Select one of the following: ${ }^{1}$ |  | 3 |
| ECON 219 | Business Analytics I |  |
| MGMT 219 | Business Analytics I |  |
| STAT 152 | Elementary Statistics I |  |
| Subtotal |  | 48 |

Long-Term Care Management Core Courses
GERO 265 Aging and the Older Person (Required) ${ }^{1} 3$
HCAM 425 Long Term Care Management (Required) ${ }^{1} 3$
Select two of the following: 6

| GERO 414 | Death and Dying ${ }^{1}$ |
| :---: | :---: |
| GERO 465 | Seminar in Gerontology ${ }^{1}$ |
| HCAM 470 | Healthcare Practice Management |
| INDP 342 | Sociology of Aging ${ }^{1}$ |
| RCTH 420 | Recreational Therapy for Older Adults ${ }^{1}$ |
| HCAM 195 | Health Care Workshop ${ }^{1}$ |
| HCAM 295 | Health Care Workshop ${ }^{1}$ |
| HCAM 395 | Health Care Workshop ${ }^{1}$ |
| HCAM 495 | Health Care Workshop ${ }^{1}$ |
| HCAM 198 | Selected Topics ${ }^{1}$ |
| HCAM 298 | Selected Topics ${ }^{1}$ |
| HCAM 398 | Selected Topics ${ }^{1}$ |
| HCAM 498 | Selected Topics ${ }^{1}$ |

## 1 Course counts for 50\% of Major requirements and Major GPA

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


## Co-curricular and Experiential Learning

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

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

## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
HEALTH CARE ADMINISTRATION \& MANAGEMENT - BS (2346)
Concentration in Long-Term Care (LTCA)
This program is effective as of Fall 2020
Revised 06.30.21
UCC 03.02.2021

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| HCAM 230 | US Healthcare Systems | 3 |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar * | 1 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Select one of the following: |  | 3-4 |
| MATH 117 | Quantitative Reasoning (RSP) |  |
| MATH 123 | Introduction to Applied Calculus (RSP) |  |
| MATH 225 | Calculus I (RSP) |  |
|  | Hours | 16-17 |
| Spring |  |  |
| HCAM 265 | Managed Care \& Insurance | 3 |
| ENGL 104 | Critical Reading | 3 |
| HLTH 210 | Introduction to Public Health | 3 |
| SCI 101 | Science of Life | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
|  | Hours | 15 |


| Second Year |  |  |
| :--- | :--- | :--- |
| Fall |  | 3 |
| HCAM 275 | Health Care Legal \& Ethical Foundations | 3 |
| GERO 265 | Aging and the Older Person (LTC track) | 3 |
| SCI 102 | Understanding the Physical World | 3 |
| Humanities Inquiry (p. 1378) | 3 |  |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| Declare a Thematic Thread ${ }^{4}$ |  |  |


|  | Hours | $\mathbf{1 5}$ |
| :--- | :--- | :--- |
| Spring |  |  |
| HCAM 360 | Healthcare Organizational Dynamics | 3 |
| MIS 210 | Productivity Software | 3 |
| STAT 152 | Elementary Statistics I |  |
| or ECON 219 <br> or MGMT 219 | or Business Analytics I <br> or Business Analytics I | 3 |
| T |  |  |


| Free Elective (Recommend HCAM or in Minor) |  | 3 |
| :---: | :---: | :---: |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| HCAM 305 | Health Care Quality \& Process Improvement | 3 |
| ACCT 209 | Financial Accounting | 3 |
| BUSA 340 | Legal Environment of Business | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Long-term Care Elective: (Free of Select from Choose Two LongTerm Care Track Electives) ${ }^{3}$ |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| HCAM 400 | Legal Environment of Healthcare ${ }^{3}$ | 3 |
| HCAM 425 | Long Term Care Management (LTC track) $(S)^{3}$ | 3 |
| HCAM 430 | Finance for Healthcare Organizations | 3 |
| HCAM 480 | Healthcare Value-Based Reimbursement Systems | 3 |
| Long-term Care Elective: (Select from Choose Two Long-term Care Track Electives) ${ }^{4}$ |  | 3 |
|  | Hours | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| HCAM 450 or HCAM 499 | Internship-Health Care Administration \& Management ${ }^{2}$ <br> or Health Care Theory and Research Capstone Seminar | 3 |
| ECON 202 | Principles of Microeconomics | 3 |
| Thematic Thread Requirement (Upper Level) (p. 1378) |  | 3 |
| Free Elective (Recommend HCAM or in Minor) ${ }^{3}$ |  | 3 |
| Free Elective (Recommend HCAM or in Minor ${ }^{3}$ |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| HCAM 499 or HCAM 450 | Health Care Theory and Research Capstone Seminar ${ }^{2}$ <br> or Internship-Health Care Administration \& Management | 3 |
| ECON 312 | Critical Choices in Health Care Policy | 3 |
| Free Elective (Recommended HCAM or in Minor) ${ }^{3}$ |  | 3 |
| Free Elective (Recommended HCAM or in Minor) ${ }^{4}$ |  | 3 |
| Free Elective (Recommended HCAM or in Minor) ${ }^{3}$ |  | 3 |
|  | Hours | 15 |
|  | Total Hours** 121 |  |

1 Course offered in multiple subjects; cannot take course in first major subject.
Must have "Sufficient Academic Performance" and earn " C " or better in the course. Please refer to the Academic Policies for Students in the HCAM major.
Course may have a prerequisite

4 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 2346
Concentration Code: LTCM
Revised: 06.30.21

## Health Care Administration and Management, Bachelor of Science (BS) - Concentration in Marketing and Sales

## Program Learning Outcomes

- Business Technology and Analytics: Students will articulate an applied understanding of key quality improvement metrics and methods to support evidence-based practice guidelines including:
- Demonstrate knowledge, skills and abilities to plan for and ensure the security, integrity, and privacy of data and confidentiality of the end user.
- Demonstrate an ability to identify, aggregate, and summarize technical information for technical and non-technical personnel.
- Communication and Relationship Management: Students will demonstrate the ability to interact and communicate effectively by:
- Presenting information in oral and written formats.
- Collaborating effectively with others.
- Financial Management and Economic Reasoning: Students will demonstrate:
- An ability to analyze, quantify, evaluate and determine the sound allocation of financial resources.
- An ability to apply economic concepts for efficient allocation of scarce resources.
- Healthcare Legal Environment and Ethics: Students will be able to:
- Recognize will ethical dilemmas in healthcare.
- Recognize key healthcare legal and regulatory environment parameters.
- Demonstrate discern viable options for ethical guided decisionmaking processes.
- Demonstrate applied legal and regulatory reasoning.
- Knowledge of the Healthcare Environment: Students will demonstrate an accurate understanding of:
- Health care system structures.
- Reimbursement/payment models.
- Factors associated with population health.
- Organizational Dynamics: Students will articulate an applied understanding of:
- Organizational mission, vision, and culture.
- Behaviors associated with organizational commitment and job performance.


# Academic Policies for Students in the Health Care Administration and Management (HCAM) Major 

Effective for all Health Care Administration and Management (HCAM) Majors beginning Fall 2021

1. Policy for earning acceptable grades in the HCAM program:
a. A student must earn a grade of " $C$ " or better in ALL Required Basic Courses (HCAM 230, HCAM 265, HCAM 275) and Required Upper-Level Courses (HCAM 305, HCAM 360, HCAM 400, HCAM 430, HCAM 450, HCAM 480, and HCAM 499).
b. A student must earn a grade of " C " or better in ALL non-HCAM major Requirements (ACCT 209, BUSA 340, ECON 312, HLTH 210, and MIS 210, STAT 152 or ECON 219/MGMT 219).
c. The HCAM curriculum is structured with pre-requisites. A student must earn a " $C$ " or better in the pre-requisite course to be able to take the next course. See course catalog for pre-requisites.
d. If a student does not earn a " $C$ " or better, they will be required to:
i. Retake the course
ii. They will be dropped from any course(s) in the following semester that requires a " C " or better as a pre-requisite (see course catalog for pre-requisites)
iii. Students will need to meet with their Academic Advisor and change their schedule accordingly
2. SRU has a Repeat of Courses Policy as follows and it can be found in the course catalog: Repeat of Courses < Slippery Rock University (sru.edu)
a. Students may attempt to improve their grade point average by repeating courses. The most recent grade earned is used in calculating the GPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the grade points and credits previously earned. However, all grades will appear on the transcript. Courses in which a grade was earned at Slippery Rock University may not be repeated at any institution. A grade of W (withdraw) does not count as an earned grade. Students who repeat a course must do so using the same grading system under which they originally took the course. For example, a student who originally took a course graded A-F may not repeat the course on a P/NC, P/F, or audit basis. Students may not repeat a course by using any Credit by Examination program if they originally took the course on a graded A-F, P/NC, P/F, or audit basis. Undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career, excluding withdrawal grades. In addition, repeats of a single course will be limited to a maximum of two. This means, no single course may be taken more than three times (excluding withdrawal grades). The course repeat policy for postbaccalaureate students is the same as the undergraduate student policy.
3. Once the student has exceeded the SRU Repeat of Courses Policy, the student will have their major changed to Exploratory and HCAM Major courses will be removed from their schedule.
4. Additional costs associated with the HCAM major.
a. Lab fees will be collected for classes with a lab component. This fee enhances the University's ability to offer a high-quality program.
b. A student in the HCAM major may be required to purchase Student Professional Liability Insurance while enrolled in HCAM 450 at their own cost. More information will be provided to students in the upper level HCAM courses.
c. HCAM 450 Internship: Certain sites may require one or more of the following: physical examinations, record of immunizations, TB test, criminal background checks, drug testing, specific certifications for CPR/AED (e.g., American Heart Association), and HIPAA training. These may require additional costs for students. Fulfilling these requirements and obtaining appropriate documentation is the responsibility of the student.

## Related Links

Healthcare Administration and Management - Marketing and Sales, BS Program Page (https://www.sru.edu/academics/majors-and-minors/ health-care-administration-and-management/)

Healthcare Administration and Information Systems Department Page (https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/healthcare-administration-and-information-systems/)

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

## Curriculum Guide

GPA Requirement
2.0 GPA overall or higher to declare HCAM as major
2.0 GPA or higher in the major to graduate in HCAM
2.0 GPA or higher and instructor permission to apply for the internship

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | $42-43$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major/Concentration Requirements | 60 |
| Electives | 17 |

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

| Rock Studies Requirements |  |  |
| :--- | :--- | ---: |
| Code <br> Title | Hours |  |
| The Rock |  |  |
| SUBJ 139 | University Seminar |  |


| MATH 117 | Quantitative Reasoning |
| :--- | :--- |
| MATH 123 | Introduction to Applied Calculus |
| MATH 225 | Calculus I |

Select one of the following: 3
COMM 200 Civil Discourse: Theory \& Practice


## Basic Math Requirement

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

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | $\mathbf{0 - 3}$ |

## Computer Competency

Code Title Hours

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

## Major/Concentration Requirements

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

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Core Courses |  |  |
| ACCT 209 | Financial Accounting ${ }^{1}$ | 3 |


| BUSA 340 | Legal Environment of Business ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| ECON 312 | Critical Choices in Health Care Policy ${ }^{1}$ | 3 |
| HCAM 230 | US Healthcare Systems ${ }^{1}$ | 3 |
| HCAM 265 | Managed Care \& Insurance | 3 |
| HCAM 275 | Health Care Legal \& Ethical Foundations ${ }^{1}$ | 3 |
| HCAM 305 | Health Care Quality \& Process Improvement ${ }^{1}$ | 3 |
| HCAM 360 | Healthcare Organizational Dynamics ${ }^{1}$ | 3 |
| HCAM 400 | Legal Environment of Healthcare ${ }^{1}$ | 3 |
| HCAM 430 | Finance for Healthcare Organizations ${ }^{1}$ | 3 |
| HCAM 450 | Internship-Health Care Administration \& Management ${ }^{1}$ | 3 |
| HCAM 480 | Healthcare Value-Based Reimbursement Systems ${ }^{1}$ | 3 |
| HCAM 499 | Health Care Theory and Research Capstone Seminar ${ }^{1}$ | 3 |
| HLTH 210 | Introduction to Public Health ${ }^{1}$ | 3 |
| MIS 210 | Productivity Software ${ }^{1}$ | 3 |
| Select one of the following: ${ }^{1}$ |  | 3 |
| ECON 219 | Business Analytics I |  |
| MGMT 219 | Business Analytics I |  |
| STAT 152 | Elementary Statistics I |  |
| Subtotal |  | 48 |
| Marketing \& Sales Management Core Courses |  |  |
| COMM 270 | Strategic Health Communication | 3 |
| MRKT 230 | Principles of Marketing | 3 |
| Select one of the following pairs of courses: ${ }^{1}$ |  | 6 |
| MRKT 333 <br> \& MRKT 336 | Consumer Behavior and Professional Selling |  |
| MRKT 333 <br> \& MRKT 430 | Consumer Behavior and Marketing Research |  |
| HCAM 300 <br> \& MRKT 437 | Healthcare Systems: Global Perspectives and Analysis and International Marketing |  |
| Subtotal |  | 12 |
| Total Hours |  | 60 |

1 Course counts for $50 \%$ of Major requirements and Major GPA

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


## Co-curricular and Experiential Learning

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

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

Internships
8. Volunteering in healthcare industry related settings
9. Job Shadowing

## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
HEALTH CARE ADMINISTRATION \& MANAGEMENT - BS (2346)
Concentration in Marketing \& Sale (MKSA)
This program is effective as of Fall 2020
Revised 06.30.21
UCC 03.02.2021

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| HCAM 230 | US Healthcare Systems | 3 |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar* | 1 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Select one of the following: |  | 3-4 |
| MATH 117 | Quantitative Reasoning |  |
| MATH 123 | Introduction to Applied Calculus |  |
| MATH 225 | Calculus I |  |
|  | Hours | 16-17 |
| Spring |  |  |
| HCAM 265 | Managed Care \& Insurance | 3 |
| ENGL 104 | Critical Reading | 3 |
| HLTH 210 | Introduction to Public Health | 3 |
| SCI 101 | Science of Life | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
|  | Hours | 15 |
| Second Year |  |  |
| Fall |  |  |
| HCAM 275 | Health Care Legal \& Ethical Foundations | 3 |
| HCAM 415 | Marketing for Health Care Organizations | 3 |
| SCI 102 | Understanding the Physical World | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
| Thematic Thread Requirement OR Free Elective (p. 1378) |  | 3 |
| Declare a Thematic Thread ${ }^{4}$ |  |  |


| Spring |  |  |
| :---: | :---: | :---: |
| HCAM 360 | Healthcare Organizational Dynamics | 3 |
| ACCT 209 | Financial Accounting | 3 |
| MIS 210 | Productivity Software | 3 |
| STAT 152 or ECON 219 or MGMT 219 | Elementary Statistics I or Business Analytics I or Business Analytics I | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| HCAM 305 | Health Care Quality \& Process Improvement ${ }^{2}$ | 3 |
| HCAM 410 | Strategic Leadership in Health Care Organizations | 3 |
| BUSA 340 | Legal Environment of Business | 3 |
| Thematic Thread Requirement (Upper Level) (p. 1378) |  | 3 |
| MRKT 230 | Principles of Marketing | 3 |
|  | Hours | 15 |
| Spring |  |  |
| HCAM 480 | Healthcare Value-Based Reimbursement Systems | 3 |
| HCAM 400 | Legal Environment of Healthcare ${ }^{2}$ | 3 |
| HCAM 430 | Finance for Healthcare Organizations | 3 |
| Marketing Elective: (Select from Choose Two MRKT \& Sales Mgmt. Track Electives) ${ }^{3}$ |  | 3 |
| Marketing Elective: (Select from Choose Two MRKT \& Sales Mgmt. Track Electives) ${ }^{3}$ |  | 3 |
|  | Hours | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| HCAM 450 <br> or HCAM 499 | Internship-Health Care Administration \& Management ${ }^{2}$ or Health Care Theory and Research Capstone Seminar | 3 |
| ECON 202 | Principles of Microeconomics | 3 |
| Thematic Thread Requirement (Upper Level) (p. 1378) |  | 3 |
| Free Elective (Recommend HCAM or in Minor) ${ }^{3}$ |  | 3 |
| Free Elective (Recommend HCAM or in Minor ${ }^{3}$ |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| HCAM 499 <br> or HCAM 450 | Health Care Theory and Research Capstone Seminar ${ }^{2}$ <br> or Internship-Health Care Administration \& Management | 3 |
| ECON 312 | Critical Choices in Health Care Policy | 3 |
| Free Elective (Recommended HCAM or in Minor) ${ }^{3}$ |  | 3 |
| Free Elective (Recommended HCAM or in Minor) ${ }^{3}$ |  | 3 |
| Free Elective (Recommended HCAM or in Minor) ${ }^{3}$ |  | 3 |
|  | Hours | 15 |
|  | Total Hours** 12 |  |

[^3]2 Must have "Sufficient Academic Performance" and earn "C" or better in the course. Please refer to the Academic Policies for Students in the HCAM major.

4 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 2346
Concentration Code: MKSM
Revised: 08.03.2021

## Information Systems, Bachelor of Science (BS)

## Program Learning Outcomes

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


## Related Links

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

Healthcare Administration and Information Systems Department Page (https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/healthcare-administration-and-information-systems/)

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

## Curriculum Guide

## GPA Requirement

Overall GPA: 2.0 or higher
Core GPA: 2.0 or higher

## Summary*

| Code | Title |
| :--- | ---: |
| Rock Studies Requirements | Hours |
| Other Basic Requirements | $42-43$ |
| Computer Competency | $0-3$ |
| Major Requirements | $0-3$ |
| Electives | $54-56$ |

[^4]
## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| Select one of the following: |  | 3-4 |
| MATH 117 | Quantitative Reasoning |  |
| MATH 123 | Introduction to Applied Calculus |  |
| MATH 225 | Calculus I |  |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15-16 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| ECON 202 | Principles of Microeconomics | 3 |
| Natural Sciences Inquiry |  |  |
|  | Science of Life | 3 |
| Physical Sciences Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |
| Thematic Thread |  |  |
| Select 12 Credits (p. 1378) ${ }^{2}$ |  | 12 |
| Total Hours |  | 42-43 |
| Course offered in multiple subjects; cannot take course in first major subject. |  |  |
| 2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above. |  |  |

## Basic Math Requirement

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

| Code Title | Hours |
| :---: | :---: |
| Complete one of the following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |
| ESAP 110 Beginning Algebra |  |
| Total Hours | 0-3 |
| Computer Competency |  |
| Code Title | Hours |
| Demonstrate "computer competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |
| Select one of the following at SRU or another post-secondary institution: |  |
| CPSC 100 Introduction to Computing for Liberal Arts |  |


| CPSC 110 | Computer Concepts |
| :--- | :--- |
| CPSC 130 | Introduction to Computing and <br> Programming |
| PE 202 | Technology for Wellness |

## Total Hours

## Major Requirements

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


| Digital Media (p. 98) |  |
| :--- | ---: |
| $\quad$ Big Data (p. 98) |  |
| Subtotal | $9-10$ |
| Total Hours | $\mathbf{5 4 - 5 5}$ |

1 Course counts for $50 \%$ of Major and Major GPA
2 Course counts for 50\% of Major and not for Major GPA

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


## Business

| Code | Title | Hours |
| :---: | :---: | :---: |
| Select one of the following: |  | 3 |
| MRKT 338 | E-Commerce ${ }^{1}$ |  |
| or MGMT 352 | Operations Management II |  |
| Upper division ${ }^{2}$ |  | 3 |
| Select one of the following: |  | 3 |
| Upper division ${ }^{2}$ |  |  |
| MIS 450 | Internship ${ }^{1}$ |  |
| Total Hours |  | 9 |
| Course counts for 50\% of Major and Major GPAAny upper division course from BSBA discipline. |  |  |
|  |  |  |
| Geographic Information Systems (GIS) |  |  |
| Code | Title | Hours |
| GES 115 | Introduction to Geospatial Technologies ${ }^{1}$ | 3 |
| GES 325 | Introduction to Geographic Information Science ${ }^{1}$ | 3 |
| GES 315 | Cartography ${ }^{1}$ | 3 |
| Select one of the follo | owing: | 3 |


| GES 410 | Remote Sensing $^{1}$ |  |
| ---: | :--- | :--- |
| GES 425 | Advanced Geographic Information Systems |  |
|  | Internship $^{1}$ | $\mathbf{1 2}$ |
| GES 450 |  |  |
| Total Hours |  |  |

1 Course counts for 50\% of Major and Major GPA
Health Care Administration Management

| Code | Title | Hours |
| :--- | :--- | ---: |
| HCAM 230 | US Healthcare Systems ${ }^{1}$ | 3 |
| MIS 403 | Introduction to Healthcare Information | 3 |
|  | Systems 1 |  |
|  |  |  |

Select one of the following: 3

| HCAM 300/400 <br> level | Any upper division HCAM course ${ }^{1,2}$ |
| :--- | :--- |
| MIS 450 Internship $^{1}$ <br> or HCAM 450  <br> Management |  |

## Total Hours

## Course counts for $50 \%$ of Major and Major GPA

2 Except HCAM 360



## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.
- A student cannot major or minor in the same discipline/academic area, but my minor in a specialization offered by his/her major department.
- The Information Systems minor must submit this self-maintained progress sheet to the Computer Science Department for verification.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| Select one of the | wing: | 3 |
| CPSC 130 | Introduction to Computing and Programming |  |
| CPSC 146 | Programming Principles |  |
| MIS 211 | Information Systems Application Development |  |
| MIS 210 or CPSC 210 | Productivity Software Productivity Software | 3 |
| MIS 323 or CPSC 323 | Data Base Systems <br> Fundamentals of Database Systems | 3 |


| Select one ofthe following: |  |
| :--- | :--- |
| MIS 300 | Challenges of Computer Technology |
| or CPSC 300 | Challenges of Computer Technology |
| MIS 333 | Introduction to Computer Forensics |
| COMM 480 | The Communication Age |
| MIS 353 | Business Data Communications and <br>  <br> Technologies |

## Electives

Select one of the following groups (A-E): 9

Group A - Business Specialization

| ACCT 230 | Accounting Information Systems |
| :---: | :--- |
| or MIS 265 | Management Information Systems |
| ECON 201 | Principles of Macroeconomics |
| ACCT 209 | Financial Accounting |


| Group $B$ - Health Specialization | Chair |  |
| :---: | :---: | :---: |
| HCAM 230 | US Healthcare Systems | Dr. James |
| MIS 265 | Management Information Systems |  |

or MIS 403 Introduction to Healthcare Information Systems

HCAM 300/400 Any upper division HCAM course

| Group C - Safety Specialization |  |
| :---: | :--- |
| SAFE 118 | Introduction to Safety |
| SAFE 418 | Security in the Workplace |
| MIS 265 | Management Information Systems |
| or MGMT 354 | Human Resources Management |

Group D - Geographic Information Technology Specialization
GES 315 Cartography I

GES 325 Introduction to Geographic Information Science
MIS 265 Management Information Systems
or GES 425 Advanced Geographic Information Systems

Group E - Information Security Specialization

| MIS 301 or CPSC 301 | Practical Computer Security Practical Computer Security |
| :---: | :---: |
| MIS 333 | Introduction to Computer Forensics |
| MIS 401 | Information Systems Security |
| Group F - Communication Specialization |  |
| COMM 110 or COMM 115 | Communication Concepts Visual Literacy |
| COMM 248 or COMM 263 | Interactive Multimedia 1 <br> Mass Media and Society |
| Select one of the following: |  |
| COMM 307 | Social Media |
| MRKT 338 | E-Commerce |
| COMM 490 or MIS 490 | Independent Study Independent Study |

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


## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
Minor in Information Systems (14B)
This program is effective as of Fall 2018.
Revised 06-2019

## Hospitality and Tourism Management

| Chair | Secretary | Location | Department <br> Phone |
| :--- | :--- | :--- | :--- |
| Dr. James | Diane Robbins | 101 Eisenberg <br> Classroom <br> Dombrosky |  |
|  |  | Building |  |
|  |  |  |  |

Department Web Site URL (https://www.sru.edu/academics/colleges-and-departments/cob/departments/hospitality-event-management-andtourism/)
Department Fact Sheet URL (https://www.sru.edu/documents/programs/ factsheets/undergraduate/hemt-fs.pdf)

## Faculty

James Dombrosky
Assistant Professor
Hospitality \& Tourism Manage
Ph.D., Iowa State University
M.B.A., University of Pittsburgh

## B.S., Slippery Rock University

## Maryjo Ross

Associate Professor
Hospitality \& Tourism Manage
Ph.D., University of Central Florida
M.A., Indiana University of Pennsylvania
B.S., Geneva College

## Chao-Jen Tsai

Assistant Professor
Hospitality \& Tourism Manage
Ph.D., Texas Tech University
M.S., Florida International University
B.S., Chinese Culture University

## Programs

All first-year students who enter SRU in the Summer and Fall terms of 2019 and after will follow Rock Studies. Students who entered SRU before Spring 2019 will follow Liberal Studies. All new transfer students beginning Summer 2019 and after will follow Liberal Studies. We anticipate that transfer students will begin to enter under Rock Studies during the Summer/Fall term of 2021.

## Majors

- Resort, Recreation and Hospitality Management, Bachelor of Science (BS) (p. 105)


## minors

- Esports, Minor (p. 104)


## Certificates

- Hospitality Management, Certificate (p. 104)


## Courses

## HEMT 112 - Introduction to HEMT

The purpose of this course is to assist individuals with matching their aspirations with the opportunities within the hospitality and tourism profession. Primary areas related to tourism, recreation and event and hospitality management will be discussed providing a roadmap for students to chart their careers in the profession.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## HEMT 114 - Sustainability in Food and Hospitality

An exploration of the economic, environmental and social sustainability challenges and advancements in the hospitality and food industry. A comprehensive investigation of today's U.S. food system with particular focus on the food system's interrelationships with public health, the environment, equity, and society.

Credits: 3
Thematic Thread(s): Sustainability, Transfer Thread Completion Course

## HEMT 139 - University Seminar

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

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## HEMT 190 - Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## HEMT 195 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## HEMT 198 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## HEMT 210 - Contemporary Travel and Tourism

This course provides students with a diverse and contemporary knowledge of the tourism industry, ecotourism, tourist behavior, tourism management, and issues in medical tourism, crisis management, sustainable travel and environmental friendly practice within the overall global tourism sector. Students will have opportunities to investigate real life cases and current events, and to explore the various elements of the travel and tourism industry and how they interrelate. This will enable students to develop an overall knowledge in the field and appreciation of the global travel and tourism experience.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Sustainability, Transfer Thread Completion Course

## HEMT 215 - Public Relations for Hospitality, Event Management \&

 TourismThe theory, principles and practices of public relations of value to hospitality and tourism personnel including oral, written and graphic presentations useful in public relations and interpretive efforts.

Prerequisite: HEMT $112^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms

## HEMT 222-Programming and Leadership for HEMT

This course is designed to provide a sound basis of learning and practical methods in the realm of recreation programming and leadership. It includes practical approaches to program design, sequencing program experiences, processing experiences, assessment and evaluation and examines the needs of leaders as well as participants in terms of communication skills and preferred learning styles. Participant behaviors and the iimprotant traits of a positive leader will also be examined.
Prerequisite: HEMT $112^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms

## HEMT 290 - Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## HEMT 295 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## HEMT 298 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
HEMT 311 - Principles of Commercial Recreation/Tourism
A study of the various forms of commercial recreation, business and facilities providing recreational opportunities.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HEMT 312-Commercial Recreational Feasibility Studies

This course is a study of financial, marketing, and operations management concepts that go into a feasibility study of a commercial recreation business.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HEMT 314 - Sustainable Planning for Tourism

This course is designed to develop an understanding of how sustainable planning can reduce the negative impacts and maximize the benefits of the tourism industry. Students will research and evaluate the social, environmental and economic impacts of a variety of tourist destinations. Anaylses of the sites will be followed by formulating proposals to address key issues.

Prerequisite: HEMT $210^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HEMT 316 - Management of Hospitality \& Tourism Facilities

A study of the design, operation and maintenance of selected hospitality, event management and tourism facilities.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HEMT 318 - Administration for Hospitality, Event Management \& Tourism

The organization and administration of hospitality, event management and tourism services, including organizational management, personnel practices and labor relations, financial and business procedures and legal aspects.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HEMT 320 - Hospitality and Tourism Marketing

Course will examine service marketing concepts and practices as they relate to all areas of hospitality, tourism, and event management, and apply those principles to formulating marketing strategy.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students in a Bachelor of Science degree.

## HEMT 322 - Food and Beverage Operations

Food and Beverage Operations is a survey of the food service industry to include: History and global economic impact, Menu engineering, Food sourcing with sustainable emphasis, Food Safety, Food Handling, Beverage Management, and exploration of commercial applications.

Prerequisite: HEMT $112^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

HEMT 324-Legal Issues in Hospitality and Tourism Management Course will examine legal issues affecting the contemporary Hospitality Industry, with an emphasis on a preventative approach to management. Extensive use of case studies will provide students with an awareness and understanding of the legal considerations necessary for sound policy and decision making.

Credits: 3
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2 or Sophomore 2.
HEMT 326 - Introduction to Meetings and Event Management
An introductory course for Event Management focusing on meetings, conferences, convention and trade shows with an emphasis on industry standards, language, and professional associations.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HEMT 351 - Practicum in HEMT

Observation and participation in hospitality, event management and tourism activities. Cross listed as HEMT352.

Credits: 3
Term(s) Typically Offered: Offered Summer Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HEMT 352 - Practicum in HEMT

Observation and participation in hospitality, event management and tourism activities. Cross listed as HEMT351.

Credits: 3
Term(s) Typically Offered: Offered Summer Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HEMT 390-Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HEMT 395-Workshop

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

## Credits: 1-6

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HEMT 398 - Selected Topics

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

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HEMT 415 - Challenges and Trends in Hospitality, Event Management \&

 TourismAn integrative course for detailed study of current issues in hospitality, event management and tourism with emphasis on unique and imaginative solutions to the challenges facing the hospitality and tourism profession. Must be a senior to enroll.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2, Junior 1, Junior 2, Sophomore 1 or Sophomore 2 may not enroll.

## HEMT 416 - Resort Recreation Programming

This course examines the planning, organization, pricing, and evaluation of recreation programs, activities, and special events at various four season resorts, municipal recreation departments and residential camps and camping facilities. This course will also analyze the planning, developing, marketing, administration, and implementation of group recreation and special events.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HEMT 417-Hotel/Lodging \& Hospitality Management

This course is a study of the management and operation of a variety of departments/divisions of a hotel/resort.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HEMT 420-Event Production and Coordination

This course will explore the many aspects of event management, as well as identify and develop the skills necessary to design and develop a special event. Emphasis on the understanding of the genre, developmental steps in processing, and practical applications of execution in special event management. A HIP course, If feasible students will coordinate a live community event.

Prerequisite: HEMT $326^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HEMT 450 - Internship in HEMT

A supervised off-campus work experience in an appropriate aspect of hospitality, event management, resort or municipal recreation or tourism work. Open only to HEMT majors with advanced standing.

Credits: 1-12
Term(s) Typically Offered: Offered Summer Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Hospitality \& Tourism Manage.

HEMT 490- Independent Study
A special study opportunity for students to investigate in-depth, approved topics in hospitality, event management and tourism. Topic and credit established by student and supervising instructor. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HEMT 495-Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HEMT 498 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Esports, Minor

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

## RELATED LINKS

Esports, Minor Program Page (https://www.sru.edu/academics/majors-and-minors/esports-(minor)/)

Hospitality, Event Management and Tourism Page (https://www.sru.edu/ academics/colleges-and-departments/cob/departments/hospitality-and-tourism-management/)

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

## CURRICULUM GUIDE

GPA REQUIREMENT
Major GPA: 2.0 or higher

## MINOR REQUIREMENTS

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Core Courses |  |  |
| ERS 204 | Introduction to Esports | 3 |
| ERS 304 | Current Issues in Esports Health and Society | 3 |
| HEMT 326 | Introduction to Meetings and Event Management | 3 |
| Subtotal |  |  |
| Electives |  |  |
| Select four from at least 2 different departments: |  |  |
| HEMT 215 | Public Relations for Hospitality, Event Management \& Tourism |  |
| HEMT 420 | Event Production and Coordination |  |
| COMM 254 | Video Production |  |
| COMM 350 | Editing for Video |  |
| COMM 354 | TV Studio Production |  |
| SPMT 301 | The Fan Experience |  |
| SPMT 394 | Sport Marketing |  |
| Subtotal |  | 12 |
| Total Hours |  | 21 |

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


## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN ESPORTS - (71E)
This program is effective as Of Fall 2021
Revised 08.02.2021
UCC 04.13.2021

## Hospitality Management, Certificate

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

## Related Links

Hospitality Management, Certificate Program Page (https://www.sru.edu/ academics/certificates/hospitality-management-certificate/)

Hospitality and Tourism Management Department Page (https:// www.sru.edu/academics/colleges-and-departments/cob/departments/ hospitality-and-tourism-management/)

## Curriculum Guide

GPA Requirement
Overall GPA: 2.0 or higher

## Certificate Requirements

- Students must complete at least 6 credit hours in their Concentration from SRU.
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A Certificate shall be no fewer than 12 credits.

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


## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
Certificate in Hospitality Management (237C)
Effective Fall 2021
Revised 07.26.2
UCC 03.02.21

## Resort, Recreation and Hospitality Management, Bachelor of Science (BS)

## Program Learning Outcomes

- Communication Skills: RRHM graduates demonstrate quality written and verbal communication skills as applied to hospitality/tourism and guest relations.
- Business Skills: RRHM graduates demonstrate competency in business skills needed to manage related departments within the hospitality/tourism industry.
- Competency in Historical Perspectives: RRHM graduates demonstrate competency in the historical perspective of the hospitality and tourism industry to ongoing social, cultural, and political policies or constraints.
- Competency in Administration, Programming, and Event Planning: RRHM graduates demonstrate competency in administration, programming, event and meeting planning skills related to the hospitality and tourism industry.
- Demonstrate Professional Values and Behavior. RRHM graduates demonstrate professional values and behavior within the field of hospitality and tourism.
- Competency in Sustainable Hospitality and Tourism: RRHM graduates demonstrate competency in sustainable hospitality and tourism practices.
- Competency in Planning and Evaluation: RRHM graduates demonstrate competency in planning and evaluating hospitality and tourism facilities.


## Related Links

Resort, Recreation and Hospitality Management, BS Program Page (https://www.sru.edu/academics/majors-and-minors/resort-recreation-and-hospitality-management/)

Hospitality, Event Management and Tourism Department Page (https:// www.sru.edu/academics/colleges-and-departments/cob/departments/ hospitality-event-management-and-tourism/)

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

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 60 |
| Electives | 18 |

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


## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | :--- |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: |  | 3 |


| COMM 200 Civil Discourse: Theory \& Practice |  |
| :---: | :---: |
| PHIL 110 Ethics and Civil Discourse |  |
| POLS 235 Civil Discourse and Democracy |  |
| Subtotal | 15 |
| Integrated Inquiry |  |
| Creative and Aesthetic Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Humanities Inquiry |  |
| Select 3 Credits (p.1378) | 3 |
| Social Science Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Natural Sciences Inquiry |  |
| SCI 101 Science of Life | 3 |
| Physical Sciences Inquiry |  |
| SCI 102 Understanding the Physical World | 3 |
| Subtotal | 15 |
| Thematic Thread |  |
| Select 12 Credits (p. 1378) ${ }^{2}$ | 12 |
| Total Hours | 42 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 Categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

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

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

Total Hours ..... 0-3
Computer Competency
Code TitleDemonstrate "computer competency" by one of the following: 0-3Pass Computer Competency Exam OR

Select one of the following at SRU or another post-secondary institution:

| CPSC 100 | Introduction to Computing for Liberal Arts |
| :--- | :--- |
| CPSC 110 | Computer Concepts |
| CPSC 130 | Introduction to Computing and |
|  | Programming |
| PE 202 | Technology for Wellness |
| Total Hours | $\mathbf{0 - 3}$ |

## Major Requirements

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Resort, Recreation \& Hospitality Management Core |  |  |
| HEMT 112 | Introduction to HEMT ${ }^{1}$ | 3 |
| HEMT 114 | Sustainability in Food and Hospitality ${ }^{1}$ | 3 |
| HEMT 210 | Contemporary Travel and Tourism ${ }^{1}$ | 3 |
| HEMT 215 | Public Relations for Hospitality, Event Management \& Tourism ${ }^{1}$ | 3 |
| HEMT 222 | Programming and Leadership for HEMT ${ }^{1}$ | 3 |
| HEMT 316 | Management of Hospitality \& Tourism Facilities ${ }^{1}$ | 3 |
| HEMT 322 | Food and Beverage Operations ${ }^{1}$ | 3 |
| HEMT 326 | Introduction to Meetings and Event Management | 3 |
| HEMT 351 | Practicum in HEMT ${ }^{1}$ | 3 |
| HEMT 415 | Challenges and Trends in Hospitality, Event Management \& Tourism ${ }^{1}$ | 3 |
| Subtotal |  | 30 |

Required Internship
HEMT $450 \quad$ Internship in HEMT ${ }^{1} \quad 12$
Subtotal 12

Resort, Recreation \& Hospitality Management Track
HEMT 311 Principles of Commercial Recreation/ 3 Tourism ${ }^{1}$

| HEMT 312 | Commercial Recreational Feasibility Studies ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| HEMT 320 | Hospitality and Tourism Marketing | 3 |
| HEMT 416 | Resort Recreation Programming ${ }^{1}$ | 3 |
| HEMT 417 | Hotel/Lodging \& Hospitality Management ${ }^{1}$ | 3 |
| HEMT 420 | Event Production and Coordination | 3 |


| Subtotal | 18 |
| :--- | :--- |

Total Hours 60
1 Course counts for 50\% of Major requirements and Major GPA.

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


## Co-curricular and Experiential Learning

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

1. 120-hour Practicum and 480 -hour Internship experience (required)
2. Career education and development through interaction with industry professionals
3. Networking skills including opportunity to attend national industry conference
4. Membership opportunities in career-related professional organizations
5. Volunteering opportunities with community and campus organizations
6. High-Impact Practice (HIP) designated classes

## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
Bachelor of Science in Resort, Recreation \& Hospitality Management (2373)

This program is effective as of Summer 2020.
Revised: 10.28.2021
UCC 03.02.21
Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall |  |  |
| HEMT 112 | Introduction to HEMT | 3 |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar | 1 |
| SUBJ 139 | University Seminar | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) | 3 |  |
| Rock Studies Course | Hours | 3 |
|  |  | $\mathbf{1 6}$ |
| Spring | Sustainability in Food and Hospitality |  |
| HEMT 114 | Critical Reading ${ }^{1}$ | 3 |
| ENGL 104 | 3 |  |
| Rock Studies Course |  | 3 |
| Rock Studies Course |  | 3 |
| Rock Studies Course |  | 3 |
|  | Hours | $\mathbf{1 5}$ |

## Second Year

Fall
HEMT 222 Programming and Leadership for HEMT 3

Civil Discourse - Select one of the following: 3

| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |

Rock Studies Course 3
Rock Studies Course 3
Rock Studies Course 3

| Declare a Thematic Thread $^{2}$ |  |
| ---: | ---: |
| Hours | $\mathbf{1 5}$ |


| Spring |  |  |
| :--- | :--- | :--- |
| HEMT 210 | Contemporary Travel and Tourism | 3 |
| HEMT 215 | Public Relations for Hospitality, Event <br> Management \& Tourism | 3 |
| HEMT 320 | Hospitality and Tourism Marketing | 3 |
| Rock Studies Course | 3 |  |


| Rock Studies Course |  | 3 |
| :---: | :---: | :---: |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| HEMT 311 | Principles of Commercial Recreation/ Tourism | 3 |
| HEMT 322 | Food and Beverage Operations | 3 |
| HEMT 326 | Introduction to Meetings and Event Management | 3 |
| Minor Cour |  | 3 |
| Minor Cour |  | 0 |
|  | Hours | 12 |
| Spring |  |  |
| HEMT 312 | Commercial Recreational Feasibility Studies | 3 |
| HEMT 316 | Management of Hospitality \& Tourism Facilities | 3 |
| Free Elective/Minor Course |  | 3 |
| Free Elective/Minor Course |  | 3 |
| Minor Course |  | 0 |
|  | Hours | 12 |
| Summer |  |  |
| (Taken after Third Year Spring) |  |  |
| HEMT 351 | Practicum in HEMT | 3 |
|  | Hours | 3 |
| Fourth Year |  |  |
| Fall |  |  |
| HEMT 417 | Hotel/Lodging \& Hospitality Management | 3 |
| HEMT 420 | Event Production and Coordination | 3 |
| Free Elective/Minor Course |  | 3 |
| Free Elective/Minor Course |  | 3 |
| Minor Course |  | 0 |
|  | Hours | 12 |
| Spring |  |  |
| HEMT 415 | Challenges and Trends in Hospitality, Event Management \& Tourism | 3 |
| HEMT 416 | Resort Recreation Programming | 3 |
| Free Elective/Minor Course |  | 3 |
| Minor Course |  | 0 |
| Minor Course |  | 0 |
|  | Hours | 9 |
| Summer <br> (Taken after Fourth Year Spring) |  |  |
| HEMT 450 | Internship in HEMT | 12 |
|  | Hours | 12 |
|  | Total Hours** | 121 |
| 1 <br> Course has a prerequisite. See undergraduate online catalog. <br> 2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread. |  |  |
|  | uraged to take INDS 101 as a Free Elective. |  |

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

Major Code: 2373
Revised date: 10.18.2021

## Management and Marketing

| Chair | Secretary | Location | Department <br> Phone |
| :--- | :--- | :--- | :--- |
| Dr. Roger Solano | Tammie Cramer | 105 Eisenberg | $724-738-4865$ <br>  |
|  | Classroom |  |  |
| Building |  |  |  |
|  |  |  |  |

Department Web Site URL (https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/management-and-marketing/)

Management Fact Sheet URL (https://www.sru.edu/documents/ programs/factsheets/undergraduate/FS-Management.pdf) Marketing Fact Sheet URL (https://www.sru.edu/documents/programs/ factsheets/undergraduate/FS-Marketing.pdf)

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M.M.S., Birla Institute of Technology and Science (India)

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## Liang Xu

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M.B.A., University of Missouri
E.E., Nanjing Institute of Technology

Baek Joo

## Programs

All first-year students who enter SRU in the Summer and Fall terms of 2019 and after will follow Rock Studies. Students who entered SRU before Spring 2019 will follow Liberal Studies. All new transfer students beginning Summer 2019 and after will follow Liberal Studies. We anticipate that transfer students will begin to enter under Rock Studies during the Summer/Fall term of 2021.

## Majors

- Management, Bachelor of Science in Business Administration (BSBA)
- Concentration in General Management (p. 117)
- Management, Bachelor of Science in Business Administration (BSBA)
- Concentration in Human Resources (p. 121)
- Management, Bachelor of Science in Business Administration (BSBA)
- Concentration in Supply Chain Management (p. 124)
- Management, Bachelor of Science in Business Administration (BSBA)
- Online Degree Completion Program (p. 126)
- Marketing, Bachelor of Science in Business Administration (BSBA) (p. 128)


## Minors

- Business Administration, Minor (Non-BSBA Majors) (p. 115)
- Business: Management Pre-MBA, Minor (Non-Business Majors Only) (p. 116)
- Human Resource Management, Minor (BSBA and HCAM Majors) (p. 116)
- Human Resource Management, Minor (Non-BSBA Majors) (p. 117)
- Management, Minor (BSBA majors) (p. 127)
- Marketing, Minor (for BSBA and HCAM students only) (p. 131)
- Sustainable Management, Minor (BSBA majors only) (p. 132)


## Courses <br> MGMT Courses

## MGMT 130 - Dynamics of Global Commerce

Exploration of the challenges of business operations in the global marketplace. Topics discussed include the business, economic, social, and political aspects of the global marketplace. This may include, but not be limited to, topics such as e-commerce, entrepreneurship, sustainability, and business ethics.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): International Business, Transfer Thread Completion Course

## MGMT 139- University Seminar

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

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## MGMT 190-Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MGMT 195 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## MGMT 198-Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MGMT 219-Business Analytics I

Probability and statistics in a business environment, encompassing descriptive statistics, probability theory, hypothesis testing, linear regression and correlation. Cross-listed as ECON 219.

## Credits: 3

Term(s) Typically Offered: Offered as Needed

## MGMT 290 - Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MGMT 295 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## MGMT 298 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MGMT 319- Business Analytics II

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

Prerequisites: (ECON $219^{\mathrm{D}}$ or MGMT $219^{\mathrm{D}}$ or STAT $152^{\mathrm{D}}$ or BUSA $219^{\mathrm{D}}$ ) and (MATH $113^{\mathrm{D}}$ or MATH $115^{\mathrm{D}}$ or MATH $117^{\mathrm{D}}$ or MATH $118^{\mathrm{D}}$ or MATH $122^{\text {D }}$ or MATH $123^{\mathrm{D}}$ or MATH $125^{\mathrm{D}}$ or MATH $131^{\mathrm{D}}$ or MATH $210^{\mathrm{D}}$ or MATH $225^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$
Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.

## MGMT 320 - Operations Management I

Operations strategy and competition, production systems and processes, decision analysis and graphical linear programming, quality management and process control, facility location and layout, work methods and measurement, inventory management and project evaluation review technique (PERT).

Prerequisites: (MGMT $219^{\mathrm{D}}$ or BUSA $219^{\mathrm{D}}$ or ECON $219^{\mathrm{D}}$ ) or (MATH $152^{\mathrm{D}}$ or STAT $152^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Every Term
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 341-Organizational Leadership

This course will include a combination of leadership theory, practice, and application to contemporary organizations. Major challenges will be discussed including the strengths and weaknesses of these firms and ways in which organizational effectiveness can be improved. We will discuss the inextricable relationship between leadership and diversity and the essential nature of a diverse workforce for maximum success through the empowerment of people. Concepts such as strategic thinking, self-leadership, change and globalization are included.

Prerequisite: MGMT $351^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$
Credits: 3
Term(s) Typically Offered: Offered Summer \& Winter Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## MGMT 351 - Organizational Behavior

Study of the satisfaction, motivation, learning, problem solving and growth of persons in organizational settings. Conceptual learning is combined with self-analysis in each area.

Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): Leadership Development, Transfer Thread
Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 352 - Operations Management II

Management science analysis and optimization techniques including linear programming, transportation algorithm, waiting line models, simulation processes, network models, materials requirement planning, and forecasting methods applied to a variety of business operations situations.

Prerequisite: MGMT $320^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall, Winter, \& Summer
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 353 - Development of Management Thought

Contemporary management as the result of an evolutionary process involving the thoughts and writings of many famous management theoreticians and practitioners.

Prerequisite: MGMT $351^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## MGMT 354 - Human Resources Management

A survey course emphasizing aspects of the basic processes of HRM including principles, policies, tools and techniques utilized in the human resource function in any organization. Managing human capital encompasses recruiting, hiring, training, development, compensation, and performance management. Managing individuals and groups that include a diversity of backgrounds throughout each function, are core human resource activities and are incorporated in this class through a variety of techniques.

Prerequisites: MGMT $351^{\text {D }}$ or HCAM $360^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Every Term
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 357- International Operations Management

Issues critical to globalization of manufacturing operations including global planning and organization, comparison of operations, international operations strategy, managerial issues in global operations.

Prerequisites: MGMT $351^{\text {D }}$ and MGMT $320^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 360-Total Quality Management

Managerial and technological issues that are necessary to understand and implement quality assurance programs including human resource development, strategic planning, management information systems, cost effectiveness, implementation procedures and statistical quality control.

Prerequisites: (MGMT $219^{\mathrm{D}}$ or BUSA $219^{\mathrm{D}}$ or ECON $219^{\mathrm{D}}$ or MATH $152^{\mathrm{D}}$ or STAT $152^{\mathrm{D}}$ ) and MGMT $351^{\mathrm{D}}$ and (MRKT $230^{\mathrm{D}}$ or MRKT $330^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 364 - Recruitment and Selection

Components of an effective selection program including job analysis, employment testing, and selection interviews with emphasis on the legal issues and relevant federal regulations.

Prerequisite: MGMT $354^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 370-Sustainable Entrepreneurship and Innovation

This integrative course introduces students to issues related to sustainable new venture creation. It includes topics such as the importance of innovation and creativity in opportunity recognition and the design of sustainable business models, industry/market analysis, resource acquisition and disposition, assessing a venture's financial strength, and ethical legal issues. Students will learn the entrepreneurial process while acknowledging multiple stakeholders and addressing social, economic and environmental concerns.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): Innovation, Entrepreneurship, and Positive Change, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 390 - Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 395-Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 398-Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 449 - Sustainable Management Internship

Supervised placement, work, and research in selected public and private organizations.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment is limited to students with a program in Sustainable
Management or Sustainable Management.

## MGMT 450 - Internship

Supervised placement, work, and research in selected public and private organizations.

Credits: 1-12
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 452 - Management-Labor Relations

Modern industrial relations from the perspective of both management and labor, including the historical development of large-scale business and organized labor.

Prerequisite: MGMT $351{ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 453-Collective Bargaining

The major issues in the negotiation process: bargaining, public policy implications, impasse resolution, strikes, and legislation affecting collective bargaining.

Prerequisite: MGMT $351^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 454 - Management Seminar

Contemporary methods and theories of management are discussed in terms of current organizational practice.

Prerequisites: MGMT $320^{\text {D }}$ and MGMT $354^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 455 - Compensation Management

Rationale, composition and administration of employee reward systems considering both the internal organizational factors and external environmental factors. Contemporary issues such as comparable worth, CEO salaries, and the rising cost of benefits are included.

Prerequisite: MGMT 354 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 456 - Management and Society

This course will engage students in exploring the social, ethical, environmental, economic, and political/legal restraints on organizational decision-making that managers face today. Students will develop critical thinking, communication and managerial skills necessary to be effective in a business world, where multiple stakeholder interests must be addressed

Prerequisite: MGMT $351{ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 457 - International Management

Examination of environments, resources, strategies and models of managerial functions in international organizations.

Prerequisite: MGMT 351 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 458 - Business Capstone

Business Capstone uses a web-based business simulation as a learning tool to enhance student understanding of the interaction and influence of an organization's competitive strategy and policy on the functional area of business. Course material includes the sources of competitive advantage, cross-functional integration and management's commitment to ethics and diversity.

Prerequisites: ACCT $209^{\mathrm{D}}$ and (ACCT $210^{\mathrm{D}}$ or ACCT $310^{\mathrm{D}}$ or ACCT $322^{\mathrm{D}}$ ) and ECON $201^{\text {D }}$ and ECON $202^{\mathrm{D}}$ and FIN $320^{\mathrm{D}}$ and (ECON $219^{\mathrm{D}}$ or BUSA $219^{\mathrm{D}}$ ) and MGMT $320^{\mathrm{D}}$ and MGMT $351^{\mathrm{D}}$ and (MRKT $330^{\mathrm{D}}$ or MRKT $230^{\mathrm{D}}$ ) and (ECON 319 (may be taken concurrently) ${ }^{\text {D }}$ or MGMT 319 (may be taken concurrently) ${ }^{\text {D }}$ or MATH 123 (may be taken concurrently) ${ }^{\text {D }}$ or MATH 125*D or MATH $225^{* D}$ ) and (ACCT 340 (may be taken concurrently) ${ }^{\text {D }}$ or BUSA 340 (may be taken concurrently) ${ }^{\text {D }}$ ) and (FIN 303 (may be taken concurrently) ${ }^{\text {D }}$ or MRKT 303 (may be taken concurrently) ${ }^{D}$ or BUSA 303 (may be taken concurrently) ${ }^{\text {D }}$ ) and (CPSC 365 (may be taken concurrently) ${ }^{\text {D }}$ or MIS 365 (may be taken concurrently) ${ }^{\text {D }}$ or MIS $265^{* D}$ ) (may be taken concurrently).
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Every Term
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

## MGMT 459 - Sustainable Business Consulting

In this course student teams engage in field-based consulting to analyze actual problem situations involving sustainability for regional businesses.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): Innovation, Entrepreneurship, and Positive Change, Transfer Thread Completion Course

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

MGMT 460- Training and Development
Training and development as a human resource management function supporting organizational strategic planning including: training needs analysis, training program objectives, training methods, management and organization development methods, program evaluation and costbenefit analysis, and training budgeting. Current trends in training and development will be covered including computer based training, competency based training and cross cultural training.

Prerequisite: MGMT $354^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 465 - Management of Information Technology

Management and specific technical concepts and techniques applied to the function of providing information technology services to the organization.

Prerequisite: MGMT $351{ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 490 - Independent Study

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 495-Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 498 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MRKT Courses

MRKT 139 - University Seminar
University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute

## MRKT 190 - Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MRKT 195 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## MRKT 198 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MRKT 230 - Principles of Marketing

An analytical overview of market decision-making including product, pricing, place, and promotional strategies considering the heterogeneity and diversity of customers and markets with respect to their demographic, geographic, psychographic, cultural, and behavioral characteristics.

Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): Leadership Development, Transfer Thread Completion Course
Students with a semester level of Freshman 1 may not enroll.

## MRKT 290 - Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MRKT 295-Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## MRKT 298 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
MRKT 303 - Issues in Global Business
This course will focus on fundamental issues in the modern globalization of business. The topics covered will include the cultural environments in which business work, politics and law in global business, economic integration, global trade and investment, global finance, global operations and managing global businesses. A special emphasis will be placed on the challenges and opportunities presented to global businesses by the social, political and economic diversity encountered in the global marketplace.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): Global Citizenship, International Business, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MRKT 331 - Distribution Management

Principles, methods and problems relating to wholesaling, retailing and physical distribution management.

Prerequisites: MRKT $230^{\mathrm{D}}$ or MRKT $330^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MRKT 332 - Business Marketing

A management perspective of the internal and external environments affecting the demand for industrial goods; marketing intelligence and control; and marketing strategy for product, service, channel, price, and promotional components.

Prerequisites: MRKT $330^{\mathrm{D}}$ or MRKT $230^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MRKT 333 - Consumer Behavior

The buying process with emphasis on economic, social, cultural and psychological determinants of consumer choice.

Prerequisites: MRKT $330^{\text {D }}$ or MRKT $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall, Spring, \& Summer
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MRKT 334 - Advertising Management

Management of advertising, including background, roles, planning, media strategy, message, testing, research, evaluation, and administration of advertising.

Prerequisites: MRKT $330^{\text {D }}$ or MRKT $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MRKT 335 - Retail Management

Store location and layout, retail personnel management, merchandising policies and control, and marketing strategy.

Prerequisites: MRKT $330^{\text {D }}$ or MRKT $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## MRKT 336 - Professional Selling

Provides foundations of sales processes and management to prepare students for careers in selling or sales management.

Prerequisites: MRKT $330^{\mathrm{D}}$ or MRKT $230^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MRKT 338 - E-Commerce

The role, structure, organization, and use of the Internet as a channel of distribution to conduct electronic commerce.

Prerequisites: (MRKT $230^{\text {D }}$ or MRKT $330^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MRKT 390 - Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MRKT 395-Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MRKT 398- Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MRKT 430 - Marketing Research

Research methodology as a managerial tool used in problem solving and decision making in marketing

Prerequisites: (MGMT $219^{\mathrm{D}}$ or BUSA $219^{\mathrm{D}}$ or ECON $219^{\mathrm{D}}$ ) and (MRKT $330^{\mathrm{D}}$ or MRKT $230^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MRKT 431 - Marketing Seminar

Advanced topics in marketing with emphasis on the analysis and solution of marketing problems.

Prerequisites: MGMT $320^{D}$ and MRKT $332^{D}$ and MRKT $333^{D}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MRKT 437 - International Marketing

The marketing issues of firms engaged in international business with emphasis on strategies for successful foreign market penetration.

Prerequisites: MRKT $330^{\circ}$ or MRKT $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall, Spring, \& Summer
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MRKT 450 - Internship

Supervised placement, work, and research in selected public and private organizations.

Credits: 1-12
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MRKT 490 - Independent Study

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MRKT 495 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MRKT 498 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Business Administration, Minor (NonBSBA Majors)

The Business Administration minor provides excellent value for nonBSBA students. The program offers essential knowledge in business functional areas such as Economics, Accounting, Finance, Management, and Marketing. The Business Administration minor not only enhances students' career readiness but also cultivates future entrepreneurs.

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

## Related Links

Business Administration, Minor Program Page (https://www.sru.edu/ academics/majors-and-minors/business-administration-minor/)

Management and Marketing Department Page (https://www.sru.edu/ academics/colleges-and-departments/cob/school-of-business/ management-and-marketing/)

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

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher

## Minor Requirements

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| ECON 201 | Principles of Macroeconomics | 3 |
| or ECON 202 | Principles of Microeconomics |  |
| ACCT 209 | Financial Accounting | 3 |
| MRKT 230 | Principles of Marketing | 3 |
| HCAM 360 | Healthcare Organizational Dynamics | 3 |
| or MGMT 351 | Organizational Behavior |  |
| Electives |  |  |
| Select 2 additional courses from the 200, 300, 400 level in any business discipline (ACCT, ECON, FIN, MGMT, MRKT) |  |  |
| Select 2 additional courses from the 300 or 400 level in any business discipline (ACCT, ECON, FIN, MGMT, MRKT) |  |  |
| Total Hours |  | 24 |
| * Some course descriptions specific cour | y require pre-requisites. Please see cours termine if there are any pre-requisites for |  |

## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN BUSINESS ADMINISTRATION (51A)
This program is effective as of Fall 2015.
Revised 07.26.2021
UCC 10.29.19

## Business: Management Pre-MBA, Minor (Non-Business Majors Only)

The Management Pre-MBA minor is essential for students who plan to pursue a MBA degree. This minor provides fundamental knowledge in business functional areas such as Economics, Accounting, Finance, Management, Marketing, and Management Information Systems. The Management Pre-MBA minor prepares non-BSBA students for more advanced courses in the MBA program.

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

## Related Links

Management Pre-MBA, Minor Program Page (https://www.sru.edu/ academics/majors-and-minors/management-pre-mba-minor/)

Management and Marketing Department Page (https://www.sru.edu/ academics/colleges-and-departments/cob/school-of-business/ management-and-marketing/)

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

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher

## Minor Requirements

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

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  |  |
| ACCT 209 | Financial Accounting | 3 |
| BUSA 340 | Legal Environment of Business | 3 |
| ECON 202 | Principles of Microeconomics | 3 |
| ECON 219 | Business Analytics I | 3 |
| FIN 320 | Managerial Finance | 3 |
| HCAM 360 | Healthcare Organizational Dynamics | 3 |
| or MGMT 351 | Organizational Behavior <br> MIS 265 | Management Information Systems |
| MRKT 230 | Principles of Marketing | 3 |
| Total Hours |  | $\mathbf{2 4}$ |

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


## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN BUSINESS MANAGEMENT PRE MBA (51K)
For Non BSBA students
This program is effective as of Fall 2018.
Revised 07.26.2021
UCC 10.29.19

## Human Resource Management, Minor (BSBA and HCAM Majors)

The Human Resource Management minor provides excellent value for BSBA and HCAM students. The program offers essential knowledge in a solid introduction to HR systems and practices that offer the ability to become an HR manager. The HRM minor will broaden the learning experiences and professional opportunities of Business majors by creating a second focus in HR management. You will be prepared to work in the field of HRM in small, medium, and large organizations in either the public or private sector.

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

## Related Links

Management: Human Resources Program Page (https://www.sru.edu/ academics/majors-and-minors/management-human-resources/)

Management and Marketing Department Page (https://www.sru.edu/ academics/colleges-and-departments/cob/school-of-business/ management-and-marketing/)

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

## Curriculum Guide

GPA Requirement
GPA: 2.0 or higher
Minor Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  |  |
| MGMT 354 | Human Resources Management | 3 |
| HRM Minor (Core) |  | 3 |
| MGMT 364 | Recruitment and Selection | 3 |
| MGMT 452 | Management-Labor Relations |  |


| MGMT 455 | Compensation Management |
| :--- | :--- |
| MGMT 460 | Training and Development |
| Additional Courses |  |
| Select one of the following: | 3 |
| BUSA 451 | Employment Law |
| MGMT 341 | Organizational Leadership |
| MGMT 450 | Internship |
| SAFE 118 | Introduction to Safety |

Total Hours

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


## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
Minor in Human Resource Management (51H)
This program is effective as of Summer 2021.
Revised 10.28.2021
UCC 03.02.21

## Human Resource Management, Minor (Non-BSBA Majors)

The Human Resource Management minor provides excellent value for non BSBA students. The program offers essential knowledge in a solid introduction to HR systems and practices that offer the ability to become an HR manager. The HRM minor will broaden the learning experiences and professional opportunities of Business majors by creating a second focus in HR management. You will be prepared to work in the field of HRM in small, medium, and large organizations in either the public or private sector.

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

## Related Links

Management: Human Resources Program Page (https://www.sru.edu/ academics/majors-and-minors/human-resource-management-(minor)/)

Management and Marketing Department Page (https://www.sru.edu/ academics/colleges-and-departments/cob/school-of-business/ management-and-marketing/)

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

| CURRICULUM GUDE |  |  |
| :---: | :---: | :---: |
| GPA REQUIREMENT |  |  |
| GPA: 2.0 or higher |  |  |
| MINOR REQUIREMENTS |  |  |
| Code | Title | Hours |
| Required Courses |  |  |
| MGMT 351 | Organizational Behavior | 3 |
| MGMT 354 | Human Resources Management | 3 |
| HRM Minor (Core) |  |  |
| MGMT 364 | Recruitment and Selection | 3 |
| MGMT 455 | Compensation Management | 3 |
| MGMT 460 | Training and Development | 3 |
| Additional Courses |  |  |
| Select one of the following: |  | 3 |
| MGMT 341 | Organizational Leadership |  |
| MGMT 450 | Internship |  |
| MGMT 452 | Management-Labor Relations |  |
| Total Hours |  | 18 |

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


## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
Minor in Human Resource Management (51M)
This program is effective as of Summer 2021.
Revised 10.28.2021
UCC 03.02.21

## Management, Bachelor of Science in Business Administration (BSBA) - Concentration in General Management <br> Policy for Changing to Management Major: <br> A Slippery Rock University student wishing to change their major to Management MUST have a minimum overall GPA of 2.0.

## Program Learning Outcomes

- Critical Thinking and Problem Solving: Students graduating with a degree in business administration will demonstrate effective critical thinking and problem-solving skills. Students will:
- Apply critical thinking skills to analyze and interpret financial statements to judge business performance.
- Apply critical thinking skills using quantitative techniques for problem solving and strategic decision making
- Communication: Students graduating with a degree in business administration will demonstrate competency in oral and written communication skills. Students will:
- Prepare in proper format and style the following documents: business report (one to two pages), business memo, research report and presentation.
- Deliver an effective oral presentation on a business and/or professional topic.
- Information Technology: Students will demonstrate proficiency in the use of computers and software to manage information with statistical analysis, spreadsheet, database, and other appropriate applications.
- Ethics: Students graduating with a degree in business administration will demonstrate an understanding of the legal environment and ethical standards of business and an awareness of the implications of their behavior and actions as a business professional. Students will apply an appropriate framework for examining ethical dilemmas and be able to (1) identify ethical issues and stakeholders, (2) evaluate alternative course(s) of action, and (3) formulate an appropriate action plan.
- Professional Proficiency: Students graduating with a degree in business administration will have acquired the necessary skills and knowledge to meet professional competencies as business professionals and global citizens. Students will:
- Demonstrate an understanding of the history and vocabulary unique to business disciplines.
- Demonstrate knowledge of procedures, concepts, and technical business skills through practical application (forecasting, budgeting, financial statement analyses, business plans, strategic planning).
- Demonstrate the ability to read and interpret financial statements in the decision-making process.
- Demonstrate effective teamwork and collaborative skills in a simulated business environment.


## Related Links

Management - General Management, BSBA Program Page (https:// www.sru.edu/academics/majors-and-minors/management-generalmanagement/)

Management and Marketing Department Page (https://www.sru.edu/ academics/colleges-and-departments/cob/school-of-business/ management-and-marketing/)

Management On-line Completion Page (https://catalog.sru.edu/ undergraduate/business/management-marketing/management-bsba-online-degree-completion-program/)

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

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher
Core GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | $42-43$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 66 |
| Electives | 12 |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| Select one of the following: |  | 3-4 |
| MATH 117 | Quantitative Reasoning |  |
| MATH 123 | Introduction to Applied Calculus |  |
| MATH 225 | Calculus I |  |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15-16 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p.1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| ECON 202 | Principles of Microeconomics | 3 |
| Natural Sciences Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Sciences Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |
| Thematic Thread |  |  |
| Select 12 Credits (p. 1378) ${ }^{2}$ |  | 12 |
| Total Hours |  | 42-43 |
| Course offered in multiple subjects; cannot take course in first major subject. |  |  |
| From at least 3 categories; no more than 6 credits fr department; 6 credits must be 300 -level or above. |  |  |

## Basic Math Requirement

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

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

## Total Hours

## Computer Competency

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

## Major Requirements

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Basic Core Courses |  |  |
| ECON 201 | Principles of Macroeconomics ${ }^{1}$ | 3 |
| ECON 202 | Principles of Microeconomics ${ }^{1}$ | 3 |
| ECON 219 | Business Analytics ${ }^{1}$ | 3 |
| or MGMT 219 | Business Analytics I |  |
| ECON 319 | Business Analytics II ${ }^{1}$ | 3 |
| or MGMT 319 | Business Analytics II |  |
| ACCT 209 | Financial Accounting ${ }^{1}$ | 3 |
| ACCT 322 | Business Analysis and Decision Making ${ }^{1}$ | 3 |
| MGMT 320 | Operations Management I ${ }^{1}$ | 3 |
| MGMT 351 | Organizational Behavior ${ }^{1}$ | 3 |
| MRKT 230 | Principles of Marketing ${ }^{1}$ | 3 |
| BUSA 303 | Issues in Global Business ${ }^{1}$ | 3 |
| or MRKT 303 | Issues in Global Business |  |
| FIN 320 | Managerial Finance ${ }^{1}$ | 3 |
| BUSA 340 | Legal Environment of Business ${ }^{1}$ | 3 |
| MGMT 458 | Business Capstone ${ }^{1}$ | 3 |
| MIS 265 | Management Information Systems ${ }^{1}$ | 3 |
| Subtotal |  | 42 |

Required Computer Science Course

| CPSC 210 | Productivity Software |
| :---: | :--- |
| or MIS 210 | Productivity Software |

Subtotal
Productivity Software

## Required Management Courses

| MGMT 454 | Management Seminar $^{2}$ | 3 |
| :--- | :--- | :--- |
| MGMT 457 | International Management $^{2}$ | 3 |
| Subtotal |  | 9 |

General Management Concentration Electives

| Required Courses |  |  |
| :---: | :---: | :---: |
| MGMT 456 | Management and Society ${ }^{2}$ | 3 |
| Plus select 3 courses from the following: |  | 9 |
| BUSA 451 | Employment Law ${ }^{2}$ |  |
| BUSA 370 | Sustainable Entrepreneurship and Innovation ${ }^{2}$ |  |
| or MGMT 370 | Sustainable Entrepreneurship and Innovation |  |
| BUSA 459 | Sustainable Business Consulting ${ }^{2}$ |  |
| or MGMT 459 | Sustainable Business Consulting |  |
| MGMT 341 | Organizational Leadership ${ }^{2}$ |  |
| MGMT 352 | Operations Management II ${ }^{2}$ |  |
| MGMT 357 | International Operations Management ${ }^{2}$ |  |
| MGMT 360 | Total Quality Management ${ }^{2}$ |  |
| MGMT 364 | Recruitment and Selection ${ }^{2}$ |  |
| MGMT 415 | Supply Chain Analytics ${ }^{2}$ | 3 |
| MGMT 450 | Internship ${ }^{2}$ |  |
| MGMT 452 | Management-Labor Relations ${ }^{2}$ |  |
| MGMT 455 | Compensation Management ${ }^{2}$ |  |
| MGMT 460 | Training and Development ${ }^{2}$ |  |
| Subtotal |  | 15 |
| Total Hours |  | 69 |

1 Course counts for 50\% of Major and not for Major GPA
2 Course counts for 50\% of Major requirements and Major GPA

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


## Co-curricular and Experiential Learning

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

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

## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
MANAGEMENT - BSBA (2350)
Concentration in General Management (GEMG)
This program is effective as of Fall 2019.
Revised 12.13.2021
UCC 11.30.2021
Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| ENGL 102 | Critical Writing | 3 |
| MATH 117 or MATH 123 or MATH 225 | Quantitative Reasoning or Introduction to Applied Calculus or Calculus I | 3 |
| INDS 101 | FYRST Seminar | 1 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| CPSC 100 | Introduction to Computing for Liberal Arts (or Computer Competency Exam) | 0-1 |
| ECON 201 | Principles of Macroeconomics | 3 |
| $\begin{aligned} & \text { CPSC } 210 \\ & \text { or MIS } 210 \end{aligned}$ | Productivity Software or Productivity Software | 3 |
|  | Hours | 16-17 |


| Spring |  |  |
| :--- | :--- | ---: |
| ENGL 104 | Critical Reading | 3 |
| SCI 102 | Understanding the Physical World | 3 |
| Humanities Inquiry (p. 1378) | 3 |  |
| Creative \& Aesthetic | Inquiry (p. 1378) | 3 |
| ECON 202 | Principles of Microeconomics | 3 |
|  | Hours | $\mathbf{1 5}$ |

## Second Year

Fall

| Select one of the following: |  | 3 |
| :---: | :---: | :---: |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| SCI 101 | Science of Life | 3 |
| ECON 219 <br> or MGMT 219 | Business Analytics I or Business Analytics I | 3 |
| MIS 265 | Management Information Systems | 3 |
| MRKT 230 | Principles of Marketing | 3 |
| Declare a Thematic Thread ${ }^{3}$ |  |  |


| Spring |  |  |
| :--- | :--- | :--- |
| ACCT 209 | Financial Accounting | 3 |
| MGMT 320 | Operations Management I | 3 |
| MGMT 351 | Organizational Behavior | 3 |
| Thematic Thread Requirement $(\mathrm{p} .1378)$ | 3 |  |


| Elective |  | 3 |
| :---: | :---: | :---: |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| ECON 319 or MGMT 319 | Business Analytics II or Business Analytics II | 3 |
| FIN 320 | Managerial Finance | 3 |
| MGMT 354 | Human Resources Management | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Elective |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| ACCT 322 | Business Analysis and Decision Making | 3 |
| $\begin{aligned} & \text { BUSA } 303 \\ & \text { or MRKT } 303 \end{aligned}$ | Issues in Global Business or Issues in Global Business | 3 |
| MGMT 450 | Internship (OR MGMT Elective) | 3 |
| Elective |  | 3 |
|  | Hours | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| BUSA 340 | Legal Environment of Business | 3 |
| Management Elective |  | 3 |
| MGMT 457 | International Management | 3 |
| MGMT 456 | Management and Society | 3 |
| MBA Course ${ }^{2}$ |  |  |
|  | Hours | 15 |
| Spring |  |  |
| MGMT 458 | Business Capstone | 3 |
| MGMT 454 | Management Seminar | 3 |
| Management Elective |  | 3 |
| Elective |  | 3 |
| Elective |  | 3 |
| MBA Course ${ }^{2}$ |  |  |
|  | Hours | 15 |
| Total Hours** |  |  |
| 1 Course offered in multiple subjects; cannot take course in first major subject |  |  |
| SRU Undergraduates who have earned 90 or more credits (including in-progress courses) with a minimum 2.75 GPA are eligible to apply, enroll, and earn graduate level credit. Credits earned are graduate level only, separate from the undergraduate credits earned for the degree and are not calculated in the student's undergraduate credit and grade point totals. See policy details here: Senior Undergraduate Students Earning Graduate Credit (https://catalog.sru.edu/academic-policies/senior-undergraduate-students-earning-graduate-credit/). |  |  |
| Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread. |  |  |
| * Students are encouraged to take INDS 101 as a Free Elective. |  |  |
| ** This document is more than 120 cred | eant to serve as a guide. Some planners may because faculty have created flexibility in ch |  |

courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 2350
Concentration Code: GEMG
Revised: 08.30.2021

## Management, Bachelor of Science in Business Administration (BSBA) Concentration in Human Resources Policy for Changing to Management Major: <br> A Slippery Rock University student wishing to change their major to Management MUST have a minimum overall GPA of 2.0.

## Program Learning Outcomes

- Critical Thinking and Problem Solving: Students graduating with a degree in business administration will demonstrate effective critical thinking and problem-solving skills. Students will:
- Apply critical thinking skills to analyze and interpret financial statements to judge business performance.
- Apply critical thinking skills using quantitative techniques for problem solving and strategic decision making
- Communication: Students graduating with a degree in business administration will demonstrate competency in oral and written communication skills. Students will:
- Prepare in proper format and style the following documents: business report (one to two pages), business memo, research report and presentation.
- Deliver an effective oral presentation on a business and/or professional topic.
- Information Technology: Students will demonstrate proficiency in the use of computers and software to manage information with statistical analysis, spreadsheet, database, and other appropriate applications.
- Ethics: Students graduating with a degree in business administration will demonstrate an understanding of the legal environment and ethical standards of business and an awareness of the implications of their behavior and actions as a business professional. Students will apply an appropriate framework for examining ethical dilemmas and be able to (1) identify ethical issues and stakeholders, (2) evaluate alternative course(s) of action, and (3) formulate an appropriate action plan.
- Professional Proficiency: Students graduating with a degree in business administration will have acquired the necessary skills and knowledge to meet professional competencies as business professionals and global citizens. Students will:
- Demonstrate an understanding of the history and vocabulary unique to business disciplines.
- Demonstrate knowledge of procedures, concepts, and technical business skills through practical application (forecasting, budgeting, financial statement analyses, business plans, strategic planning).
- Demonstrate the ability to read and interpret financial statements in the decision-making process.
- Demonstrate effective teamwork and collaborative skills in a simulated business environment.


## Related Links

Management - Human Resources, BSBA Program Page (https:// www.sru.edu/academics/majors-and-minors/management-humanresources/)

Management and Marketing Department Page (https://www.sru.edu/ academics/colleges-and-departments/cob/school-of-business/ management-and-marketing/)

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

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher Overall GPA: 2.0 or higher
Core GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | $42-43$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 69 |
| Electives | 9 |

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


## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| Select one of the following: |  | 3-4 |
| MATH 117 | Quantitative Reasoning |  |
| MATH 123 | Introduction to Applied Calculus |  |
| MATH 225 | Calculus I |  |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15-16 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |


| ECON 202 | Principles of Microeconomics | 3 |
| :--- | ---: | ---: |
| Natural Sciences Inquiry |  |  |
| SCI $101 \quad$ Science of Life |  |  |
| Physical Sciences Inquiry |  |  |
| SCI 102 Understanding the Physical World | 3 |  |
| Subtotal | 15 |  |
| Thematic Thread |  |  |
| Select 12 Credits $\left(\right.$ p. 1378) ${ }^{2}$ | 12 |  |
| Total Hours | $\mathbf{4 2 - 4 3}$ |  |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

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

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | $\mathbf{0 - 3}$ |

Computer Competency
Code Title Hours

| Demonstrate "computer competency" by one of the following: |
| :--- |
| Pass Computer Competency Exam OR |
| Select one of the following at SRU or another post-secondary <br> institution: |
| CPSC 100 |
| CPSC 110 |
| CPSC 130 | | Computer Concepts |
| :--- |

PE 202 Technology for Wellness
Total Hours

## Major Requirements

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Basic Core Courses |  |  |
| ACCT 209 | Financial Accounting ${ }^{1}$ | 3 |
| ACCT 322 | Business Analysis and Decision Making ${ }^{1}$ | 3 |
| BUSA 303 | Issues in Global Business ${ }^{1}$ | 3 |
| or MRKT 303 | Issues in Global Business |  |
| BUSA 340 | Legal Environment of Business ${ }^{1}$ | 3 |
| ECON 201 | Principles of Macroeconomics ${ }^{1}$ | 3 |
| ECON 202 | Principles of Microeconomics ${ }^{1}$ | 3 |
| ECON 219 | Business Analytics I ${ }^{1}$ | 3 |
| or MGMT 219 | Business Analytics I |  |
| ECON 319 | Business Analytics II ${ }^{1}$ | 3 |


| or MGMT 319 | Business Analytics II |  |
| :---: | :---: | :---: |
| FIN 320 | Managerial Finance ${ }^{1}$ | 3 |
| MGMT 320 | Operations Management I ${ }^{1}$ | 3 |
| MGMT 351 | Organizational Behavior ${ }^{1}$ | 3 |
| MRKT 230 | Principles of Marketing ${ }^{1}$ | 3 |
| MGMT 458 | Business Capstone ${ }^{1}$ | 3 |
| MIS 265 | Management Information Systems ${ }^{1}$ | 3 |
| Subtotal |  | 42 |

Required Computer Science Course

|  | Productivity Software ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| or MIS 210 | Productivity Software |  |
| Subtotal |  | 3 |
| Required Management Courses |  |  |
| MGMT 354 | Human Resources Management ${ }^{2}$ | 3 |
| MGMT 454 | Management Seminar ${ }^{2}$ | 3 |
| MGMT 457 | International Management ${ }^{2}$ | 3 |
| Subtotal |  | 9 |

Human Resources Concentration Electives
Required Courses
MGMT 364 Recruitment and Selection ${ }^{2}$ 3
MGMT 452 Management-Labor Relations ${ }^{2}$ 3
MGMT 455 Compensation Management ${ }^{2} 3$
MGMT $460 \quad$ Training and Development ${ }^{2}{ }^{2} 3$

Plus select one from the following: 3

| MGMT 341 | Organizational Leadership ${ }^{2}$ |  |
| :--- | :--- | :--- |
| MGMT 450 | Internship |  |
| MGMT 456 | Management and Society ${ }^{2}$ |  |
| Subtotal |  | 15 |
| Total Hours |  | $\mathbf{6 9}$ |

1 Course counts for $50 \%$ of Major and not for Major GPA
2 Course counts for $50 \%$ of Major and Major GPA

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


## Co-curricular and Experiential Learning

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

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

## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
MANAGEMENT - BSBA (2350)
Concentration in Human Resources (HURS)
This program is effective as of Summer 2021.
Revised 10.28.21
UCC 03.02.21
Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts (or Computer Competency Exam) | 0-1 |
| $\begin{aligned} & \text { CPSC } 210 \\ & \text { or MIS } 210 \end{aligned}$ | Productivity Software or Productivity Software | 3 |
| ECON 201 | Principles of Macroeconomics | 3 |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar * | 1 |
| MATH 117 or MATH 123 or MATH 225 | Quantitative Reasoning or Introduction to Applied Calculus or Calculus I | 3 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
|  | Hours | 16-17 |
| Spring |  |  |
| ECON 202 | Principles of Microeconomics | 3 |
| ENGL 104 | Critical Reading | 3 |
| SCI 102 | Understanding the Physical World | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
|  | Hours | 15 |

## Second Year

Fall

| $\text { ECON } 219$ <br> or MGMT 219 | Business Analytics I or Business Analytics I | 3 |
| :---: | :---: | :---: |
| MIS 265 | Management Information Systems | 3 |
| MRKT 230 | Principles of Marketing | 3 |
| SCI 101 | Science of Life | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Declare a Thematic Thread ${ }^{3}$ |  |  |
|  | Hours | 15 |


| Spring |  |  |
| :---: | :---: | :---: |
| MGMT 320 | Operations Management I | 3 |
| MGMT 351 | Organizational Behavior | 3 |
| ACCT 209 | Financial Accounting | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Elective |  | 3 |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| ECON 319 or MGMT 319 | Business Analytics II or Business Analytics II | 3 |
| FIN 320 | Managerial Finance | 3 |
| MGMT 354 | Human Resources Management | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Elective |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| ACCT 322 | Business Analysis and Decision Making | 3 |
| BUSA 303 or MRKT 303 | Issues in Global Business or Issues in Global Business | 3 |
| MGMT 460 | Training and Development | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Elective |  | 3 |
|  | Hours | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| MGMT 364 | Recruitment and Selection | 3 |
| MGMT 452 | Management-Labor Relations | 3 |
| MGMT 457 | International Management | 3 |
| BUSA 340 | Legal Environment of Business | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| MBA Course ${ }^{2}$ |  |  |
|  | Hours | 15 |
| Spring |  |  |
| MGMT 454 | Management Seminar | 3 |
| MGMT 455 | Compensation Management | 3 |
| MGMT 458 | Business Capstone | 3 |
| Elective |  | 6 |
| MBA Course ${ }^{2}$ |  |  |
|  | Hours | 15 |
|  | Total Hours** |  |

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

1 *Course offered in multiple subjects; cannot take course in first major subject. in-progress courses) with a minimum 2.75 GPA are eligible to apply, enroll, and earn graduate level credit. Credits earned are graduate level only, separate from the undergraduate credits earned for the degree and are not calculated in the student's undergraduate credit and grade point totals. See policy details here: Senior Undergraduate Students Earning Graduate Credit (https://catalog.sru.edu/academic-policies/senior-undergraduate-students-earning-graduate-credit/).

3 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 2350
Concentration Code: HURS
Revised: 09.07.2021

# Management, Bachelor of Science in Business Administration (BSBA) - Concentration in Supply Chain Management 

## Policy for Changing to Management Major: <br> A Slippery Rock University student wishing to change their major to Management MUST have a minimum overall GPA of 2.0.

## Program Learning Outcomes

- Critical Thinking and Problem Solving: Students graduating with a degree in business administration will demonstrate effective critical thinking and problem-solving skills. Students will:
- Apply critical thinking skills to analyze and interpret financial statements to judge business performance.
- Apply critical thinking skills using quantitative techniques for problem solving and strategic decision making
- Communication: Students graduating with a degree in business administration will demonstrate competency in oral and written communication skills. Students will:
- Prepare in proper format and style the following documents: business report (one to two pages), business memo, research report and presentation.
- Deliver an effective oral presentation on a business and/or professional topic.
- Information Technology: Students will demonstrate proficiency in the use of computers and software to manage information with statistical analysis, spreadsheet, database, and other appropriate applications.
- Ethics: Students graduating with a degree in business administration will demonstrate an understanding of the legal environment and ethical standards of business and an awareness of the implications of their behavior and actions as a business professional. Students will apply an appropriate framework for examining ethical dilemmas and be able to (1) identify ethical issues and stakeholders, (2) evaluate alternative course(s) of action, and (3) formulate an appropriate action plan.
- Professional Proficiency: Students graduating with a degree in business administration will have acquired the necessary skills
and knowledge to meet professional competencies as business professionals and global citizens. Students will:
- Demonstrate an understanding of the history and vocabulary unique to business disciplines.
- Demonstrate knowledge of procedures, concepts, and technical business skills through practical application (forecasting, budgeting, financial statement analyses, business plans, strategic planning).
- Demonstrate the ability to read and interpret financial statements in the decision-making process.
- Demonstrate effective teamwork and collaborative skills in a simulated business environment.


## Related Links

Management - Supply Chain Management, BSBA Program Page (https:// www.sru.edu/academics/majors-and-minors/management-supply-chainmanagement/)

Management and Marketing Department Page (https://www.sru.edu/ academics/colleges-and-departments/cob/school-of-business/ management-and-marketing/)

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

## CURRICULUM GUIDE

## GPA REQUIREMENT

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher
Core GPA: 2.0 or higher

## SUMMARY*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | $42-43$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 66 |
| Electives | 12 |

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


## ROCK STUDIES REQUIREMENTS

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


| Subtotal |  | 15-16 |
| :---: | :---: | :---: |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Cred | 378) | 3 |
| Humanities Inquiry |  |  |
| Select 3 Cred | 378) | 3 |
| Social Science Inquiry |  |  |
| ECON 202 | Principles of Microeconomics | 3 |
| Natural Sciences Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Sciences Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |
| Thematic Thread |  |  |
| Select 12 Cre | 1378) ${ }^{2}$ | 12 |
| Total Hours |  | 42-43 |
| Course offered in multiple subjects; cannot take course in first major subject. |  |  |
| From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above. |  |  |
| Basic Math Requirement |  |  |
| Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree. |  |  |
| Code | Title | Hours |
| Complete one | following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 Beginning Algebra |  |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate "computer competency" by one of the following: |  | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## MAJOR REQUIREMENTS

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Basic Core Courses |  |  |
| ACCT 209 | Financial Accounting ${ }^{1}$ | 3 |
| ACCT 322 | Business Analysis and Decision Making ${ }^{1}$ | 3 |
| BUSA 303 | Issues in Global Business ${ }^{1}$ | 3 |


| or MRKT 303 | Issues in Global Business |  |
| :---: | :---: | :---: |
| BUSA 340 | Legal Environment of Business ${ }^{1}$ | 3 |
| ECON 201 | Principles of Macroeconomics ${ }^{1}$ | 3 |
| ECON 202 | Principles of Microeconomics ${ }^{1}$ | 3 |
| ECON 219 | Business Analytics $1^{1}$ | 3 |
| or MGMT 219 | Business Analytics I |  |
| ECON 319 | Business Analytics II ${ }^{1}$ | 3 |
| or MGMT 319 | Business Analytics II |  |
| FIN 320 | Managerial Finance ${ }^{1}$ | 3 |
| MGMT 320 | Operations Management I ${ }^{1}$ | 3 |
| MGMT 351 | Organizational Behavior ${ }^{1}$ | 3 |
| MGMT 458 | Business Capstone ${ }^{1}$ | 3 |
| MIS 265 | Management Information Systems ${ }^{1}$ | 3 |
| MRKT 230 | Principles of Marketing ${ }^{1}$ | 3 |
| Subtotal |  | 42 |
| Required Computer Science Course |  |  |
| CPSC 210 <br> or MIS 210 | Productivity Software Productivity Software | 3 |
| Subtotal |  | 3 |
| Required Management Courses |  |  |
| MGMT 354 | Human Resources Management ${ }^{2}$ | 3 |
| MGMT 454 | Management Seminar ${ }^{2}$ | 3 |
| MGMT 457 | International Management ${ }^{2}$ | 3 |
| Subtotal |  | 9 |

Supply Chain Management Concentration Electives

| Required Courses |  | 3 |
| :--- | :--- | :--- |
| MGMT 352 | Operations Management II | 3 |
| MGMT 415 | ${\text { Supply Chain Analytics }{ }^{2}}^{2}$ 2 | 3 |
| MRKT 331 | Distribution Management $^{2}$ | 3 |
| MRKT 332 | Business Marketing ${ }^{2}$ | 6 |
| Plus select 2 courses from the following: |  |  |


| MRKT 335 | Retail Management $^{2}$ |
| :--- | :--- |
| MGMT 357 | International Operations Management $^{2}$ |
| MGMT 360 | Total Quality Management $^{2}$ |
| MGMT 450 | Internship $^{2}$ |
| MIS 323 | Data Base Systems $^{2}$ |
| or CPSC 323 | Fundamentals of Database Systems $^{2}$ |
| MIS 443 | Project Management $^{2}$ |
| Subtotal |  |
| Total Hours |  |

1 Course counts for $50 \%$ of Major and not for Major GPA
2 Course counts for $50 \%$ of Major requirements and Major GPA

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


## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
MANAGEMENT - BSBA (2350)
Concentration in Supply Chain Management (SCMG)
This program is effective as of Fall 2022
Revised 06.03.2022
UCC 11.30.2021

## Management, Bachelor of Science in Business Administration (BSBA) Online Degree Completion Program Policy for Changing to Management Major: <br> A Slippery Rock University student wishing to change their major to the Management Online BS degree completion programs MUST have a minimum overall GPA of 2.0 .

## Program Learning Outcomes

- Critical Thinking and Problem Solving: Students graduating with a degree in business administration will demonstrate effective critical thinking and problem-solving skills. Students will:
- Apply critical thinking skills to analyze and interpret financial statements to judge business performance.
- Apply critical thinking skills using quantitative techniques for problem solving and strategic decision making
- Communication: Students graduating with a degree in business administration will demonstrate competency in oral and written communication skills. Students will:
- Prepare in proper format and style the following documents: business report (one to two pages), business memo, research report and presentation.
- Deliver an effective oral presentation on a business and/or professional topic.
- Information Technology: Students will demonstrate proficiency in the use of computers and software to manage information with statistical analysis, spreadsheet, database, and other appropriate applications.
- Ethics: Students graduating with a degree in business administration will demonstrate an understanding of the legal environment and ethical standards of business and an awareness of the implications of their behavior and actions as a business professional. Students will apply an appropriate framework for examining ethical dilemmas and be able to (1) identify ethical issues and stakeholders, (2) evaluate alternative course(s) of action, and (3) formulate an appropriate action plan.
- Professional Proficiency: Students graduating with a degree in business administration will have acquired the necessary skills and knowledge to meet professional competencies as business professionals and global citizens. Students will:
- Demonstrate an understanding of the history and vocabulary unique to business disciplines.
- Demonstrate knowledge of procedures, concepts, and technical business skills through practical application (forecasting, budgeting, financial statement analyses, business plans, strategic planning).
- Demonstrate the ability to read and interpret financial statements in the decision-making process.
- Demonstrate effective teamwork and collaborative skills in a simulated business environment.


## Related Links

Online Degree Completion Information (https://www.sru.edu/academics/ online-learning/online-degree-completion-ug-programs/)

Management and Marketing Department Page (https://www.sru.edu/ academics/colleges-and-departments/cob/school-of-business/ management-and-marketing/)

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

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher
Core GPA: 2.0 or higher

## Summary*

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

Electives 12

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


## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Basic Core Courses |  |  |
| Complete 33-39 credits | Principles of Macroeconomics ${ }^{1}$ | 3 |
| ECON 201 | Principles of Microeconomics ${ }^{1}$ | 3 |
| ECON 202 |  | 45 |

1 Indicates that SRU assumes to be completed as part of an associate degree

## Basic Math Requirement

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

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Complete one of the following: | $0-3$ |

Meet required minimum SAT or ACT math score OR

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

## Major Requirements

- 33 major credits must be taken at SRU or another PASSHE University
- SRU course offerings for this online Management program are based on the assumption that the student has completed minimum course competencies and an associate degree in business administration, which is comprised of most of the Management Basic Core Requirements and many Rock Studies Requirements. Because associate degree curricula varies from transfer institution to institution, and because each online student transfers to SRU with a unique record of transfer courses and SRU degree completion needs, it is important for students to plan ahead for course offerings each term and to register as early as possible for each subsequent SRU semester/term.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Basic Core Courses |  |  |
| ECON 201 | Principles of Macroeconomics 1,2,3 | 3 |
| ECON 202 | Principles of Microeconomics ${ }^{\text {1,2,3 }}$ | 3 |
| ACCT 209 | Financial Accounting ${ }^{1,3}$ | 3 |
| ACCT 322 | Business Analysis and Decision Making ${ }^{1}$ | 3 |
| ECON 219 | Business Analytics I ${ }^{1,3}$ | 3 |
| or MGMT 219 | Business Analytics I |  |
| ECON 319 | Business Analytics II ${ }^{1}$ | 3 |
| or MGMT 319 | Business Analytics II |  |
| MGMT 320 | Operations Management I ${ }^{1}$ | 3 |
| MRKT 230 | Principles of Marketing ${ }^{1,3}$ | 3 |
| MGMT 351 | Organizational Behavior ${ }^{1}$ | 3 |
| BUSA 303 | Issues in Global Business ${ }^{1}$ | 3 |
| or MRKT 303 | Issues in Global Business |  |
| FIN 320 | Managerial Finance | 3 |
| BUSA 340 | Legal Environment of Business ${ }^{\text {1,3 }}$ | 3 |
| MGMT 458 | Business Capstone ${ }^{1}$ | 3 |
| MIS 265 | Management Information Systems ${ }^{1}$ | 3 |
| Subtotal |  | 42 |

## Required Computer Science Course

| MIS 210 | Productivity Software ${ }^{1,3}$ | 3 |
| :--- | :--- | :--- |
| Subtotal | 3 |  |

## Required Management Course

MGMT $354 \quad$ Human Resources Management ${ }^{4}$
3

| MGMT 454 | Management Seminar $^{4}$ | 3 |
| :--- | :--- | ---: |
| MGMT 456 | Management and Society $^{4}$ | 3 |
| MGMT 457 | International Management $^{4}$ | 3 |
| Subtotal |  | 12 |

Business Electives
Select three of the following: 9

| BUSA 370 | Sustainable Entrepreneurship and Innovation ${ }^{4}$ |
| :---: | :---: |
| or MGMT 370 | Sustainable Entrepreneurship and Innovation |
| BUSA 451 | Employment Law ${ }^{4}$ |
| BUSA 459 | Sustainable Business Consulting ${ }^{4}$ |
| or MGMT 459 | Sustainable Business Consulting |
| MGMT 341 | Organizational Leadership ${ }^{4}$ |
| MGMT 352 | Operations Management II ${ }^{4}$ |
| MGMT 357 | International Operations Management ${ }^{4}$ |
| MGMT 360 | Total Quality Management ${ }^{4}$ |
| MGMT 364 | Recruitment and Selection ${ }^{4}$ |
| MGMT 415 | Supply Chain Analytics |
| MGMT 450 | Internship ${ }^{4}$ |
| MGMT 452 | Management-Labor Relations ${ }^{4}$ |
| MGMT 455 | Compensation Management ${ }^{4}$ |
| MGMT 460 | Training and Development ${ }^{4}$ |
| Subtotal |  |
| Total Hours |  |

1 Course counts for 50\% of Major and not for Major GPA
2 Course maybe counted as both a Major and Rock Studies Requirement, but earns credit only once toward the 120-credits total.

Indicates that SRU assumes to be completed as part of an associate degree.
4 Course counts for $50 \%$ of Major and Major GPA

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


## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
MANAGEMENT - BSBA (2347)
This program is effective as of Fall 2019.
Revised 12.13.2021
UCC 11.30.2021

## Management, Minor (BSBA majors)

The Business Administration minor provides excellent value for BSBA students. The program offers essential knowledge in business functional
areas such as Accounting, Finance, Management, and Marketing. The Business Administration minor not only enhances students' career readiness but also cultivates future entrepreneurs.

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

## Related Links

Management, Minor Program Page (https://www.sru.edu/academics/ majors-and-minors/management-general-management/)

Management and Marketing Department Page (https://www.sru.edu/ academics/colleges-and-departments/cob/school-of-business/ management-and-marketing/)

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

## Curriculum Guide

GPA Requirement
Minor GPA: 2.0 or higher

## Minor Requirements

(Only School of Business Program Students may declare: ACCT, ECON, FIN, HCAM, IS, MGMT and MRKT)

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

| Code | Title | Hours |
| :--- | :--- | :---: |
| Required Courses |  |  |
| FIN 320 | Managerial Finance | 3 |
| MGMT 320 | Operations Management I | 3 |
| MGMT 351 | Organizational Behavior | 3 |
| MGMT 354 | Human Resources Management | 3 |
| MGMT 457 | International Management | 3 |
| MRKT 230 | Principles of Marketing | 3 |
| Select two of the following Management courses: ${ }^{1}$ | 6 |  |

## 300/400 level MGMT course

300/400 level MGMT course

## Total Hours

1 Business core courses may not be used as electives.

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


## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN MANAGEMENT for SBUS Program Students - (51C)
This program is effective as of Fall 2019.
Revised 07.26.2021
UCC 3.26.2019

## Marketing, Bachelor of Science in Business Administration (BSBA) Policy for Changing to Marketing Major: <br> A Slippery Rock University student wishing to change their major to Marketing MUST have a minimum overall GPA of 2.0.

## Program Learning Outcomes

- Critical Thinking and Problem Solving: Students graduating with a degree in business administration will demonstrate effective critical thinking and problem-solving skills. Students will:
- Apply critical thinking skills to analyze and interpret financial statements to judge business performance.
- Apply critical thinking skills using quantitative techniques for problem solving and strategic decision making
- Communication: Students graduating with a degree in business administration will demonstrate competency in oral and written communication skills. Students will:
- Prepare in proper format and style the following documents: business report (one to two pages), business memo, research report and presentation.
- Deliver an effective oral presentation on a business and/or professional topic.
- Information Technology: Students will demonstrate proficiency in the use of computers and software to manage information with statistical analysis, spreadsheet, database, and other appropriate applications.
- Ethics: Students graduating with a degree in business administration will demonstrate an understanding of the legal environment and ethical standards of business and an awareness of the implications of their behavior and actions as a business professional. Students will apply an appropriate framework for examining ethical dilemmas and be able to (1) identify ethical issues and stakeholders, (2) evaluate alternative course(s) of action, and (3) formulate an appropriate action plan.
- Professional Proficiency: Students graduating with a degree in business administration will have acquired the necessary skills and knowledge to meet professional competencies as business professionals and global citizens. Students will:
- Demonstrate an understanding of the history and vocabulary unique to business disciplines.
- Demonstrate knowledge of procedures, concepts, and technical business skills through practical application (forecasting, budgeting, financial statement analyses, business plans, strategic planning).
- Demonstrate the ability to read and interpret financial statements in the decision-making process.
- Demonstrate effective teamwork and collaborative skills in a simulated business environment.


## Related Links

Marketing, BSBA Program Page (https://www.sru.edu/academics/ majors-and-minors/marketing/)

Management and Marketing Department Page (https://www.sru.edu/ academics/colleges-and-departments/cob/school-of-business/ management-and-marketing/)

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

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher Overall GPA: 2.0 or higher Core GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | $42-43$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 63 |
| Electives | 15 |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUB 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | $3-4$ |
| Select one of the following: |  |  |
| MATH 117 | Quantitative Reasoning |  |
| MATH 123 | Introduction to Applied Calculus |  |
| MATH 225 |  | Calculus I |
| Select one of the following: |  |  |


| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :--- | :--- | ---: |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  |  |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  |  |
| Humanities Inquiry | 3 |  |
| Select 3 Credits (p. 1378) |  |  |
| Social Science Inquiry | Principles of Microeconomics | 3 |
| ECON 202 |  |  |

## Natural Sciences Inquiry

SCI 101

Physical Sciences Inquiry

| SCI 102 | Understanding the Physical World | 3 |
| :--- | ---: | ---: |
| Subtotal | 15 |  |
| Thematic Thread |  |  |
| Select 12 Credits $(\mathrm{p} .1378)^{2}$ | 12 |  |
| Total Hours | $\mathbf{4 2 - 4 3}$ |  |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

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

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required | minimum SAT or ACT math score OR |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | $\mathbf{0 - 3}$ |

## Computer Competency

Code Title Hours

Demonstrate "computer competency" by one of the following: 0-3
Pass Computer Competency Exam OR
Select one of the following at SRU or another post-secondary institution:

| CPSC 100 | Introduction to Computing for Liberal Arts |
| :---: | :--- |
| CPSC 110 | Computer Concepts |
| CPSC 130 | Introduction to Computing and <br>  <br> Programming |
| PE 202 | Technology for Wellness |
| Total Hours |  |

## Major Requirements

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Basic Core Courses |  |  |
| ECON 201 | Principles of Macroeconomics ${ }^{1}$ | 3 |
| ECON 202 | Principles of Microeconomics ${ }^{1}$ | 3 |
| ECON 219 | Business Analytics I ${ }^{1}$ | 3 |
| or MGMT 219 | Business Analytics I |  |
| ECON 319 | Business Analytics II ${ }^{1}$ | 3 |
| or MGMT 319 | Business Analytics II |  |
| ACCT 209 | Financial Accounting ${ }^{1}$ | 3 |
| ACCT 322 | Business Analysis and Decision Making ${ }^{1}$ | 3 |
| MGMT 320 | Operations Management ${ }^{1}$ | 3 |
| MRKT 230 | Principles of Marketing ${ }^{1}$ | 3 |
| MGMT 351 | Organizational Behavior ${ }^{1}$ | 3 |
| BUSA 303 | Issues in Global Business ${ }^{1}$ | 3 |
| or MRKT 303 | Issues in Global Business |  |


| FIN 320 $^{2}$ | Managerial Finance $^{1}$ | 3 |
| :--- | :--- | ---: |
| BUSA 340 $^{1}$ | Legal Environment of Business $^{1}$ | 3 |
| MGMT 458 | Business Capstone $^{1}$ | 3 |
| MIS 265 $^{1}$ | Management Information Systems $^{1}$ | 3 |
| Subtotal $^{\text {Man }}$ |  | 42 |

## Required Computer Science Course

| CPSC 210 | Productivity Software |  |
| :---: | :--- | :--- |
| or MIS 210 | Productivity Software | 3 |

Subtotal

## Required Marketing Courses

| MRKT 332 | Business Marketing $^{2}$ | 3 |
| :--- | :--- | ---: |
| MRKT 333 | Consumer Behavior $^{2}$ | 3 |
| MRKT 430 | Marketing Research $^{2}$ | 3 |
| MRKT 431 | Marketing Seminar $^{2}$ | 3 |
| MRKT 437 | International Marketing $^{2}$ | 3 |
| Subtotal |  | 15 |

Business Elective
Select one of the following: 3

| MRKT 331 | ${\text { Distribution Management }{ }^{2}}^{2}$ |
| :--- | :--- |
| MRKT 334 | Advertising Management ${ }^{2}$ |
| MRKT 335 | ${\text { Retail Management }{ }^{2}}^{2}$ |
| MRKT 336 | Professional Selling $^{2}$ |
| MRKT 338 | E-Commerce $^{2}$ |
| MRKT 390 | Experimental $^{2}$ |
| MRKT 450 | Internship $^{2}$ |
| MRKT 490 | Independent Study $^{2}$ |
| Subtotal |  |
| Total Hours |  |

1 Course counts for $50 \%$ of Major and not for Major GPA
2 Course counts for $50 \%$ of Major and Major GPA

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


## Co-curricular and Experiential Learning

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

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

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled

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

PASSHE - Pennsylvania State System of Higher Education Institutions
MARKETING - BSBA (2343)
This program is effective as of Fall 2021
Revised 10.28.21
UCC 04.13.21
Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| ENGL 102 | Critical Writing | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| INDS 101 | FYRST Seminar* | 1 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| CPSC 100 | Introduction to Computing for Liberal Arts (or Computer Competency Exam) | 0-1 |
| ECON 201 | Principles of Macroeconomics | 3 |
| $\begin{aligned} & \text { CPSC } 210 \\ & \quad \text { or MIS } 210 \end{aligned}$ | Productivity Software or Productivity Software | 3 |
|  | Hours | 16-17 |
| Spring |  |  |
| ENGL 104 | Critical Reading | 3 |
| SCI 102 | Understanding the Physical World | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
| ECON 202 | Principles of Microeconomics | 3 |
|  | Hours | 15 |
| Second Year |  |  |

## Fall

Select one of the following: 3

| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :---: | :---: | :---: |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| SCI 101 | Science of Life | 3 |
| $\begin{aligned} & \text { ECON } 219 \\ & \text { or MGMT } 219 \end{aligned}$ | Business Analytics I or Business Analytics I | 3 |
| MIS 265 | Management Information Systems | 3 |
| MRKT 230 | Principles of Marketing | 3 |
| Declare a Thematic Thread ${ }^{3}$ |  |  |
|  | Hours | 15 |

## Spring

Thematic Thread Requirement (p. 1378) 3
ACCT 209 Financial Accounting 3
MGMT 320 Operations Management I 3


| Spring |  |  |
| :--- | :--- | ---: |
| MGMT 458 | Business Capstone | 3 |
| MRKT 431 | Marketing Seminar | 3 |
| Marketing Elective $^{4}$ |  | 3 |
| Elective $^{5}$ |  | 3 |
| Elective $^{5}$ |  | 3 |
| MBA Course $^{2}$ | Hours | $\mathbf{1 5}$ |
|  | Total Hours** | $\mathbf{1 2 1 - 1 2 2}$ |

1 Course offered in multiple subjects; cannot take course in first major subject.
SRU Undergraduates who have earned 90 or more credits (including in-progress courses) with a minimum 2.75 GPA are eligible to apply, enroll, and earn graduate level credit. Credits earned are graduate level only, separate from the undergraduate credits earned for the degree and are not calculated in the student's undergraduate credit and grade point totals. See policy details here: Senior Undergraduate Students Earning Graduate Credit (https://catalog.sru.edu/academic policies/senior-undergraduate-students-earning-graduate-credit/).
Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread.
4 Select 3 credits of the following: BUSA 370 or MGMT 370, BUSA 459 or MGMT 459, HCAM 415 , MRKT 331, MRKT 334, MRKT 335, MRKT 336, MRKT 338, MGMT 352, MGMT 360, MRKT 390, MRKT 450, MRKT 590

5 Students are encouraged to take the following courses for electives: MRKT 334, MRKT 335, MRKT 336, MRKT 338, MRKT 450 and/or HCAM 415

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

Major Code: 2343
Revised: 01.04.2021
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

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

Marketing is at the core of many decisions in a company AND it is more than selling goods or services. It is a collection of skills that are useful in any career. No matter what major you have, knowing who your customer is and how to communicate with that business or consumer, to solve their problems, totally depends on marketing. No company can be successful without understanding how to address the wants and needs of their customers and a minor in marketing will help you in that role no matter what job you have.

With a marketing minor, you learn how imperative the 4Ps of marketing (product, price, promotion and placement/distribution) combine to solve customers' problems with the right product, at the price, using the right incentive and communication (promotions), at the right place and time.

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

## Related Links

Marketing, Minor Program Page (https://www.sru.edu/academics/ majors-and-minors/marketing/)

Management and Marketing Department Page (https://www.sru.edu/ academics/colleges-and-departments/cob/school-of-business/ management-and-marketing/)

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

Marketing is at the core of many decisions in a company AND it is more than selling goods or services. It is a collection of skills that are useful in any career. No matter what major you have, knowing who your customer is and how to communicate with that business or consumer, to solve their problems, totally depends on marketing. No company can be successful without understanding how to address the wants and needs of their customers and a minor in marketing will help you in that role no matter what job you have.

With a marketing minor, you learn how imperative the 4Ps of marketing (product, price, promotion and placement/distribution) combine to solve customers' problems with the right product, at the price, using the right incentive and communication (promotions), at the right place and time.

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.0 or higher

## Minor Requirements

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| FIN 320 | Managerial Finance | 3 |
| MGMT 320 | Operations Management I | 3 |
| MGMT 351 or HCAM 360 | Organizational Behavior <br> Healthcare Organizational Dynamics | 3 |
| MRKT 230 | Principles of Marketing | 3 |
| MRKT 332 | Business Marketing | 3 |
| MRKT 333 | Consumer Behavior | 3 |
| MRKT 437 | International Marketing | 3 |
| Elective |  |  |
| Select one 300 or 4 | level course: | 3 |
| MRKT 300/400 | MRKT 300/400 level courses |  |

## Total Hours

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


## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN MARKETING for SBUS Program Students - (51D)
This program is effective in Fall 2021
Revised 07.30.2021
UCC 04.13.2021

## Sustainable Management, Minor (BSBA majors only)

Since the formation of the United Nations Global Compact and the release of the seventeen United Nations Sustainable Development Goals, business has increasingly become viewed as having potential to be a force for good. A minor in sustainable management provides an opportunity for students to learn the basic tenets of sustainability
through the lens of the SDGs and triple bottom line (people, planet and profit) and management.

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

## Related Links

Sustainable Management, Minor Program Page (https://www.sru.edu/ academics/majors-and-minors/sustainable-management-(minor)/)

Management and Marketing Department Page (https://www.sru.edu/ academics/colleges-and-departments/cob/school-of-business/ management-and-marketing/)

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

## Curriculum Guide

## GPA Requirement

2.0 or higher Minor GPA

## Minor Requirements

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| ECON 202 | Principles of Microeconomics | 3 |
| ECON 315 or BUSA 315 | Economics of Sustainable Development Economics of Sustainable Development | 3 |
| MGMT 351 | Organizational Behavior | 3 |
| $\text { BIOL } 105$ <br> or EGEO 100 | Environmental Biology <br> Environmental Geology | 3 |
| Internship or Business Consulting |  |  |
| Course not selected in this block may be taken as an elective below |  |  |
| MGMT 449 or MGMT 459 | Sustainable Management Internship Sustainable Business Consulting | 3 |
| Elective Courses |  |  |
| Select nine credits: |  | 9 |
| BUSA 370 <br> or MGMT 370 | Sustainable Entrepreneurship and Innovation <br> Sustainable Entrepreneurship and Innovation |  |
| BUSA 459 or MGMT 459 | Sustainable Business Consulting Sustainable Business Consulting |  |
| MGMT 352 | Operations Management II |  |
| MGMT 449 | Sustainable Management Internship |  |
| BUSA 451 | Employment Law |  |
| MGMT 456 | Management and Society |  |
| MRKT 338 | E-Commerce |  |
| Total Hours |  | 24 |

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


## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN SUSTAINABLE MANAGEMENT (51J)
For BSBA students
This program is effective as of Fall 2019.
Revised 6-2019
UCC 3.26.2019

## Military Science (Army ROTC)

| Chair | Secretary | Location | Department <br> Phone |
| :--- | :--- | :--- | :--- |
| LTC Jennifer Becky Lindey 101 Lowry Center <br> Martin   |  |  |  |

Department Web Site URL (http://www.sru.edu/academics/colleges-and-departments/cob/departments/military-science-(rotc)/)

## The Rock Difference

The Department of Military Science (Army ROTC) provides a program of leadership development, which prepares college students for service as Officers in the United States Army. After graduation, they serve as commissioned officers on active duty, or as an officer in an Army Reserve or National Guard unit. These officers possess self-confidence, selfdiscipline, physical stamina, poise, and other attributes essential to leaders of character - one who is prepared to serve the nation or the commonwealth both in and out of uniform.

## Faculty

LTC Jennifer Martin - Department Chairperson/Professor of Military Science
CPT Adam Readout - Assistant Professor of Military Science
Mr. Bret Rogowitz - Enrollment Officer/Assistant Professor of Military Science
Mr. Bill Perez - Instructor
Mr. Andrew Leonhard - Instructor
Mr. Chris Wolf - Human Resources
Mr. Dan Renaud - Supply Technician
CPT Stephen Peters - Assistant Professor of Military Science
SFC Henry Devries - Assistant Professor of Military Science
SFC Ryan Graeves - National Guard Recruiter
SGT Michael Lavan - National Guard Recruiter

## Courses

MS 100-The American Military Experience
Establishes a framework of reference regarding military service, an understanding of the profession of arms and its impact on and place in American society. The course begins the Army's leadership development process. Includes a lab. ++

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms Thematic Thread(s): Leadership Development, Transfer Thread Completion Course

## MS 102 - Principles of Leadership

This course continues the student's introduction to the military organization and begins to teach leadership techniques and principles using military situations as a point of reference. Various academic studies of civilian-based leadership theories and styles are examined and compared to military theories and styles. Includes a lab. ++

Credits: 3
Term(s) Typically Offered: Offered Spring Terms

## MS 139-University Seminar

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

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## MS 190-Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
MS 195 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## Credits: 1-6

Term(s) Typically Offered: Offered as Needed

## MS 198 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## Programs

[^5]
## MS 201- Basic Military Skills

Begins to teach basic military skills such as map reading, land navigation using a map and compass, first aid, weapons marksmanship, drill and small unit tactics. Includes a lab. ++

Credits: 3
Term(s) Typically Offered: Offered Fall Terms

## MS 202 - Intermediate Military Skills

Continues instruction in map reading, land navigation using a map and compass, first aid, weapons marksmanship, drill and small unit tactics. Begins to integrate all skills into leading small units in tactical situations. Includes a lab. ++

Credits: 3
Term(s) Typically Offered: Offered Spring Terms

## MS 209 - Evolution of Modern Military Art

A survey of the development of all branches of the American military spanning the colonial period to present day, this course includes a brief introduction to the development of the western way of war from preHellenistic conflict through the Middle Ages in Europe. Technological innovation, evolution of tactical through strategic levels of warfare, and the symbiotic relationship between military development, national policy, and societal expectations will be examined.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## MS 250 - ROTC Basic Leadership Practicum

A five week experience of training and evaluation conducted in a tactical framework at Fort Knox, Kentucky. Students learn basic military skills which enable them to take advanced military science courses on campus.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## MS 280 - Leadership Seminar

This course involves individualized instruction, research and presentation on research in areas required to fill in a students knowledge base to be able to move into the ROTC advanced course. This course may be taken only once.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## MS 290 - Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MS 295 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## MS 298-Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MS 301 - Fundamentals of Tactical Operations

Focuses on tactics at the squad level. Students learn the troop leading procedures and how to give both oral and written operations orders. Students continue to enhance their skills at land navigation and rifle marksmanship. Physical fitness conditioning is a mandatory part of the laboratory. Includes a lab. ++

Credits: 4
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MS 302-Advanced Military Skills

Continues development of intermediate level cadet leader skills in preparation for attendance at the Leadership Development and Assessment Course at Ft. Lewis, Washington. The course is supplementary in scope and includes leadership, written and oral communications, operations and tactics, land navigation, weapons, and radio and wire communications subjects. A laboratory experience is required.++

Credits: 4
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MS 350-ROTC Advanced Leadership Practicum

A five week experience of training and evaluation conducted in a tactical framework at Fort Lewis, Washington. Cadets demonstrate and learn advanced military skills. Cadets also demonstrate their leadership skills in a variety of leadership positions in tactical and non-tactical environments.

Prerequisites: MS $301^{\mathrm{D}}$ and MS 302 ${ }^{\mathrm{D}}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MS 390-Experimental

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

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## MS 395 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MS 398 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MS 401 - Leadership Dimensions and Concepts

This course begins the transition from cadet to officer. Focus is on organization of the Army, command and staff functions, officer and noncommissioned officer evaluation system, military law and development of training. Students participate in a staff ride to a significant military battlefield. Includes a lab. ++

Credits: 4
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MS 402 - Officership and the Profession of Arms

This course continues the transition from cadet to officer. Students begin a critical analysis of the role of the officer and the noncommissioned officer, and their interaction, at the platoon, company and battalion level. Students are introduced to joint operations and conduct some critical analysis of national military policy. Includes a lab. ++

Credits: 4
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MS 450 - The Cadet Troop Leadership Internship

A three-week experience as a leader in a U.S. Army unit, under the close supervision of a U.S. Army lieutenant or captain. It gives the student the opportunity to lead real soldiers in a real U.S. Army unit. The intern will actually supervise the planning and execution of the unit's scheduled training.

Prerequisites: MS $301^{\mathrm{D}}$ and MS $302^{\mathrm{D}}$ and MS $350^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MS 490 - Independent Study

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MS 495 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MS 498 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Army ROTC

## Requirements for Enrollment

The general requirements for enrollment in Army ROTC stipulate that students be accepted as a regularly enrolled university student and be a citizen of the United States. Veterans and JROTC graduates may receive exemptions from the basic course as approved by the Professor of Military Science (PMS). For continuation in ROTC during the junior and senior years, students must have a 2.500 grade point average in their academic area, have successfully completed requirements for the Basic Course, pass a physical examination, and be accepted by the PMS. Advanced Course students must agree in writing to complete the junior and senior years.

## Army ROTC Scholarship/Financial Assistance

Army ROTC offers two-year, three-year, and four-year scholarships on a competitive basis to the most outstanding students who apply. Three and two-year scholarships are awarded to students already enrolled in college. Students who attend the LTC in the two-year program may compete for two-year scholarships.

Each scholarship pays for college tuition and required educational fees and provides a specified amount for textbooks. Each scholarship also includes subsistence allowance of $\$ 3,500-\$ 5,000$ for every year the scholarship is in effect.

All cadets in the Advanced Course receive a subsistence allowance of $\$ 4,500-\$ 5,000$ for each of the two years (This is not in addition to the subsistence allowance provided to scholarship recipients), as well as pay for attending the five-week Leadership Development and Assessment Course during the summer between their Junior and Senior years.

## The Simultaneous Membership Program

Students who have not been awarded an ROTC scholarship can get a head start on their military careers and their future through the Simultaneous Membership Program (SMP). This program allows students to be members of the Army National Guard or the Army Reserve and Army ROTC at the same time.

SMP students are paid at the rate of at least a Sergeant (E-5) for their guard or reserve training assemblies, plus the aforementioned allowance from the ROTC Advanced Course. SMP students may also be eligible for
additional federal and state educational benefits. They serve as officer trainees in their guard or reserve units and, under the close supervision of a commissioned officer, perform duties commensurate with those of a Second Lieutenant.

Cadets who successfully complete the SMP program graduate with a commission as a Second Lieutenant. Once commissioned, they may continue to serve in their Army National Guard or Army Reserve units, or they may apply for active duty in the U.S. Army.

Students can be in the SMP program all four years at college. They will be paid at the rate of Sergeant for only the final three years.

## The Two-Year Program

The two-year program is designed for junior students and community college graduates, students at four-year colleges who did not take ROTC during their first two years of school, or students entering a two-year post-baccalaureate or graduate course of study.

To enter the two-year program, students must first attend a fully-paid fiveweek Leadership Training Course (LTC), normally held during the summer between the sophomore and junior years of college. At LTC, students learn to challenge themselves physically and mentally, and to build their confidence and self-respect.

After they have successfully completed LTC, students who meet all necessary enrollment requirements may enroll in the Advanced Course.

Students who have attended basic training/AIT also qualify for the twoyear program.

## The Four-Year Program

The four-year program is divided into two parts: the Basic Course and the Advanced Course.

The Basic Course is usually taken during the first two years of college and covers such subjects as customs, traditions and organizations of the service, national defense, military history, and leadership development. In addition, a variety of outside social and professional enrichment activities are available. All necessary ROTC textbooks, uniforms, and other essential materials for the Basic Course are furnished at no cost. After completion of the Basic Course, students who have demonstrated the potential to become an officer and who have met the physical and scholastic standards are eligible to enroll in the Advanced Course. (Note: There is no military service obligation associated with taking any Basic Course electives. All electives earn academic credit.)

## Military Science

| Code | Title | Hours |
| :--- | :--- | ---: |
| Freshman Year |  |  |
| MS 100 | The American Military Experience | 3 |
| MS 102 | Principles of Leadership | 3 |
| Sophomore Year |  | 3 |
| MS 201 | Basic Military Skills | 3 |
| MS 202 | Intermediate Military Skills |  |
| Junior Year |  | 4 |
| MS 301 | Fundamentals of Tactical Operations | 4 |
| MS 302 | Advanced Military Skills | 4 |
| Senior Year |  | 4 |
| MS 401 | Leadership Dimensions and Concepts | 4 |


| MS 402 | Officership and the Profession of Arms | 4 |
| :--- | ---: | ---: |
| Required Course (Any Year) | $\mathbf{3}$ |  |
| HIST 304 | American Military History | 3 |
| Total Hours | $\mathbf{3 4}$ |  |

## Safety Management

| Chair | Secretary | Location | Department <br> Phone |
| :--- | :--- | :--- | :--- |
| Dr. Joseph Cali | April Coleman | 106 Strain Safety <br>  | Building |

Department Web Site URL (http://www.sru.edu/academics/colleges-and-departments/cob/departments/safety-management/)
Department Fact Sheet URL (https://www.sru.edu/documents/programs/ factsheets/undergraduate/safety-fs.pdf)

## Faculty

Michael Adamczyk
Assistant Professor
Safety Management
M.S., Eastern Kentucky University
B.S., Slippery Rock University

## Angela Bernardo

Associate Professor
Safety Management
Ph.D., Indiana University of Pennsylvania
M.S., West Virginia University
B.S., Slippery Rock University

## Joseph Cali

Professor
Safety Management
Ed.D., West Virginia University
M.A., Indiana University of Pennsylvania
B.A., Indiana University of Pennsylvania

## James Culligan

Instructor
Safety Management
M.S., West Virginia University
B.S., Slippery Rock University

Hope Dropp
Assistant Professor
Safety Management
M.S., Geneva College
B.S., Slippery Rock University

Joseph Losko
Assistant Professor
Safety Management
D.S., Robert Morris University
M.B.A., Waynesburg College
B.S., Slippery Rock University

David McCall
Instructor
Safety Management
M.S., University of Findlay

## B.S., Slippery Rock University

## Cindy Medford

Assistant Professor
Safety Management
M.A., University of Phoenix
B.S., Murray State University

## David Renz

Assistant Professor
Safety Management
M.B.A., Northern Illinois University
B.S., Indiana University of PA

## Rona Smeak

Associate Professor
Safety Management
Ph.D., Indiana University of PA
M.B.A., Frostburg State University
B.S., Slippery Rock University

## Programs

All first-year students who enter SRU in the Summer and Fall terms of 2019 and after will follow Rock Studies. Students who entered SRU before Spring 2019 will follow Liberal Studies. All new transfer students beginning Summer 2019 and after will follow Liberal Studies. We anticipate that transfer students will begin to enter under Rock Studies during the Summer/Fall term of 2021.

## Majors

- Safety Management, Bachelor of Science (BS) (p. 140)


## Courses

## SAFE 118 - Introduction to Safety

Examines basic safety practices, incident causal factors, and preventative measures.

Credits: 3
Term(s) Typically Offered: Offered Every Term

## SAFE 139-University Seminar

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

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## SAFE 190-Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Enrollment is limited to students with a major in Safety Management.

## SAFE 195 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Enrollment is limited to students with a major in Safety Management.

## SAFE 198 - Selected Topics

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

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Enrollment is limited to students with a major in Safety Management.
SAFE 205 - First Aid and Safety
Emphasizes prevention, protection from further harm and correct response to common emergencies resulting from trauma and/or illness confronting the citizen. Provides opportunity to earn certification in American Red Cross First Aid and American Red Cross CPR or American Health Association CPR.

Credits: 3
Term(s) Typically Offered: Offered as Needed
SAFE 218 - Legislative Compliance-General Industry
Examines workplace hazards as they relate to the Occupational Safety and Health Act and promulgated standards (Labor).

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1 may not enroll.
Enrollment is limited to students with a major in Safety Management.
SAFE 228 - Motor Transportation Fleet Safety
Focuses on the essential elements of a comprehensive motor transportation fleet safety program as they relate to protecting and conserving enterprise resources.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment is limited to students with a program in Safety Management.

## SAFE 248 - Hazardous Materials \& Waste Management

Examines the recognition, evaluation, control, and legislative compliance of hazardous materials and waste through effective safety management.

Prerequisites: CHEM $104^{\text {D }}$ or CHEM $107^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment is limited to students with a program in Safety Management.

## SAFE 258 - Construction Safety

Safety requirements and responsibilities for the construction industry.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment is limited to students with a program in Safety Management.

## SAFE 290-Experimental

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

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1 may not enroll.
Enrollment is limited to students with a major in Safety Management.

## SAFE 295 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1 may not enroll.
Enrollment is limited to students with a major in Safety Management.

## SAFE 298 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1 may not enroll.
Enrollment is limited to students with a major in Safety Management.
SAFE 318 - Principles of Industrial Hygiene
Concentrates upon the recognition, evaluation and control of employeerelated workplace health hazards. Course includes an instrumentation component.
Prerequisites: CHEM 104 (may be taken concurrently) ${ }^{\text {D }}$ or CHEM $107^{* D}$ (may be taken concurrently).
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Safety Management.
SAFE 319 - Principles of Industrial Hygiene II
Concentrates upon the recognition, evaluation and control of employeerelated workplace hazards. Course includes an instrumentation component. Courses is a continuation of SAFE 318.

Prerequisite: SAFE $318^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Safety Management.

SAFE 328 - Comprehensive Emergency Management and Fire Services Examines comprehensive emergency management and fire services as they relate to preparing, preparing, protecting, and preserving resources.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Safety Management.
SAFE 338 - Ergonomics and Human Factors
Examines workplace design adversities as well as their remediation by the safety function.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Safety Management.
SAFE 368 - Injury and Damage Incidents Evaluation
Focuses on the investigation, analysis, and evaluation of injury and property damage incidents. Includes Workers' Compensation and insurance variations.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Safety Management.

## SAFE 378 - Energy Exploration and Generation

This course examines the safety management of energy exploration and energy generation safety.
Prerequisites: SAFE $118^{D}$ and SAFE $218^{D}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Summer \& Winter Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Safety Management.

## SAFE 385 - Safety Measurement, Evaluation, and Research

This course introduces safety management students to applied safety research utilizing analysis of evaluative data and statistical procedures applicable to the safety field. The course includes discussions on databases, sampling techniques, and statistical and survey tools. This course will introduce students to data interpretation and how to prepare applied safety research documents.

Prerequisites: SAFE $118^{\mathrm{C}}$ and SAFE $218^{\mathrm{C}}$ and SAFE $258^{\mathrm{C}}$ and SAFE $318^{*} \mathrm{C}$ and SAFE $319^{* C}$ and STAT 152 (may be taken concurrently) ${ }^{\text {C }}$ (may be taken concurrently).
${ }^{\mathrm{C}}$ Requires minimum grade of C .

## Credits: 3

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

## SAFE 388 - Insurance Risk and Loss Control Management

Examines Risk as it applies to Occupational Safety and Health in an evolving world with a focus on risk assessment and treatment through Insurance and Loss Control Management.

## Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1, Senior 2 or Sophomore 2.
Enrollment limited to students with department of Safety Management.
SAFE 390 - Experimental
A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Safety Management.

## SAFE 395 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Safety Management.

## SAFE 398 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Safety Management.
SAFE 408-Contemporary Safety Topics and Issues
Examines emerging issues and topics in the field of safety. Must be taken the semester prior to internship.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Safety Management.

## SAFE 418 - Security in the Workplace

Examines security in relation to protecting assets and resources within an enterprise.

Credits: 3
Term(s) Typically Offered: Offered Every Term
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SAFE 448 - Management and Integration of Safety

Involves the development, integration, evaluation, management, and cost containment strategies of the safety function within an enterprise.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Safety Management.
SAFE 450 - Internship
Provides opportunity to apply theory and develop competencies through a work-related experience in an appropriate cooperating enterprise. Summers only.

Credits: 3-12
Term(s) Typically Offered: Offered Summer Terms
Students with a semester level of Freshman 1, Freshman 2, Junior 1,
Sophomore 1 or Sophomore 2 may not enroll.
Enrollment is limited to students with a major in Safety Management.
SAFE 478 - Environmental Permitting and Sustainability
This course examines the role of Safety Management in assessment of environmental regulations and permitting and application of sustainability practices.

Prerequisites: SAFE $118^{\mathrm{D}}$ and SAFE $218^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Summer \& Winter Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Safety Management.

## SAFE 488-Safety Training and Development

Examines workplace safety training and development as they relate to employer work task performance at all levels of an organization.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Safety Management.

## SAFE 490 - Independent Study

Students study under the supervision of a professor on a specific and significant topic. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment is limited to students with a major in Safety Management.

## SAFE 495 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment is limited to students with a major in Safety Management.

## SAFE 498 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment is limited to students with a major in Safety Management.

## Safety Management, Bachelor of Science (BS)

The Department of Safety Management offers a hands-on, practical, and applied Bachelor of Science Degree in Safety Management. The B.S. in Safety Management is designed to assure development of competencies which enable innovative approaches in the establishment and direction of comprehensive safety programs in educational, governmental, private business and industrial enterprises. Safety Management involves protecting and preserving people, property, productivity and the environment. The curriculum fosters an education that enables students to become responsible, knowledgeable and accountable safety professionals. The Bachelor of Science degree in Safety Management at Slippery Rock University meets the Board of Certified Safety Professionals (BCSP) requirements as a Qualified Academic Program (QAP). The Bachelor of Science degree in Safety Management is an Institute of Hazardous Materials Management (IHMM) Board approved Degree Program.

The Department of Safety Management also operates a National Resource Center-WVU OSHA Training Institute Education Center Host Site. The Department adheres to the OSHA requirements that an instructor be physically in the classroom with a maximum number of 40 students. Students who successfully complete SAFE 218 (General Industry) and SAFE 258 (Construction) are eligible to receive OSHA cards. The Cards are an added value to the courses. However, a student must meet all the OSHA requirements to receive the Cards. Cards are issued at the discretion of the Instructor and enrollment in the courses does not entitle the student to the Cards. The Department is also able to offer additional OSHA courses.

For Safety Management laboratory courses, the Department of Safety Management attempts to follow the recommendation of both the National Science Teachers Association (NSTA) and Laboratory Safety Institute (LSI) which is to have the lesser of 24 students per lab, and the design capacity of the room, or 55 sq. ft. per student for lecture/lab combo rooms and 45 sq. ft. per student for only lab rooms.

## GPA Policy

- Once admitted to the Safety Management major, all students must maintain an overall GPA of 2.0 and a Major GPA of 2.0 in order to
graduate with a Bachelor of Science Degree in Safety Management. It is solely the students' responsibility to monitor and meet this requirement.


## Professional Certifications

## Board of Certified Safety Professionals

Upon graduation (must apply within one year), Slippery Rock University Safety Majors are eligible for the Graduate Safety Practitioner (GSP) designation which waives the Associate Safety Professionals (ASP) examination and provides a pathway to the professional certification of a Certified Safety Professional (CSP). Upon four years of qualifying experience, Safety Management graduates are eligible to sit for the CSP examination. Accredited by the American Standards Institute and the National Council on Competency Assessment.

For additional information, visit: www.bcsp.org (https://www.bcsp.org)

## The Institute of Hazardous Materials Management (IHMM)

The Bachelor of Science Degree in Safety Management is an IHMM approved Degree Program. Upon graduation, Slippery Rock University Safety Majors are eligible for the Associate Safety and Health Manager Certification (ASHM) designation since the examination is waived. The ASHM provides a pathway to the professional certification of a Certified Safety and Health Manager (CSHM). Upon two years of qualifying experience, Safety Management graduates are eligible to sit for the CSHM examination. Accredited by the Council of Engineering and Scientific Specialty Boards.

For additional information about the ASHM, visit: inmm.org/ashm/ (https://ihmm.org/ashm/)
To set up an account, click here (https://online.ihmm.org/ihmmssa/f/? p=STDSSA:101:...:P101_VC,P101_CONTEXT,CUST_CONTEXT,G_SUCCESS_URL:,,,ssa؛

## Internship Program

The internship offers students the opportunity to obtain firsthand experience in the work place. Students are provided the opportunity to apply concepts and techniques learned in the classroom to the workplace environment. The internship program is administered in cooperation with a variety of organizations, including government, industry, insurance, health care and other related enterprises, The 12week, 12 -credit internship is offered only during the summer term, with the majority of interns receiving compensation.

Contact the Department of Safety Management for the most current requirements.

## Safety Management Department Attendance Policy

Attend and participate in class. There is no distinction between "excused and unexcused". When you are absent from class, you are absent. It is your responsibility to find out what was covered that day. As a Safety major, in order to prepare you for a career as a professional Safety practitioner, you are expected to attend class regularly and promptly. Attendance Policy requirements are noted on course instruction syllabus.

## Electronic Device Use In Class

Electronic devices such as cell phones, pagers, video games, etc. are not permitted on and must be put away during class. Student must obtain
instructor's permission to use a laptop or any word processing device in the classroom. Also, no tape recording of class unless permission is given by the instructor. Electronic device use requirements are noted on course instructor syllabus.

## Program Learning Outcomes

- Professional Interaction: To interact and communicate with managerial, supervisory, labor and external public using a combination of communication, training, and technological skills for a clear exchange of ideas and information. These skills include: integrating different media in a variety of professional settings, using computers and other informational technology, using data, listening and comprehending the viewpoints of others, and effectively presenting information in oral and written formats.
- Professional Decision Making: To use critical and creative thinking in preserving enterprise resources, solving problems, making decisions and gaining new insights in professional decision-making. These skills include: clarifying and justifying assumptions, reasoning with considerations of implications and consequences, inferring and drawing conclusions, and evaluating the historical, financial, legal and political decisions that impact on the safety function.
- Professional Ethics and Responsibility: To value the need for lifelong personal and professional development and mandate for ethical, responsible, and accountable professional practice or performance which includes a sensitivity to and affirmation of moral values in an evolving technologic and litigious society.
- Professional Competence and Application: To synthesize the body of knowledge of safety and environmental management as a basis for the performance of the skills and abilities required for an entrylevel professional. This ability includes applying research findings to assure currency in the practice and the advancement of theoretical knowledge and practice within the profession.


## Related Links

Safety Management, BS Program Page (https://www.sru.edu/academics/ majors-and-minors/safety-management/)

Safety Management Department Page (https://www.sru.edu/academics/ colleges-and-departments/cob/departments/safety-management/)

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

## Curriculum Guide <br> GPA Requirement

Overall GPA: 2.00 or higher
Major GPA: 2.00 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | $42-43$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 60 |
| Electives | 18 |

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


## Rock Studies Requirements



Physical Sciences Inquiry

| CHEM 104 | Introduction Chemistry I | 3 |
| :--- | :--- | :--- |
| or CHEM 107 | General Chemistry I |  |

Subtotal 15

Thematic Thread
Select 12 Credits (p. 1378) ${ }^{2} \quad 12$
Total Hours 42-43

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 Categories; no more than 6 credits from one department; 6 credits must be 300 -level or above

## Basic Math Requirement

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

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra | $\mathbf{0 - 3}$ |
| Total Hours |  |  |

## Computer Competency

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

Total Hours

## Major Requirements

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Professional Courses |  |  |
| SAFE 118 | Introduction to Safety ${ }^{1}$ | 3 |
| SAFE 218 | Legislative Compliance-General Industry ${ }^{1}$ | 3 |
| SAFE 248 | Hazardous Materials \& Waste Management 1 | 3 |
| SAFE 258 | Construction Safety ${ }^{1}$ | 3 |
| SAFE 318 | Principles of Industrial Hygiene ${ }^{1}$ | 3 |
| SAFE 319 | Principles of Industrial Hygiene II ${ }^{1}$ | 3 |
| SAFE 328 | Comprehensive Emergency Management and Fire Services ${ }^{1}$ | 3 |
| SAFE 338 | Ergonomics and Human Factors ${ }^{1}$ | 3 |
| SAFE 368 | Injury and Damage Incidents Evaluation ${ }^{1}$ | 3 |
| SAFE 408 | Contemporary Safety Topics and Issues ${ }^{1}$ | 3 |
| SAFE 448 | Management and Integration of Safety ${ }^{1}$ | 3 |
| SAFE 450 | Internship 1,3 | 12 |
| SAFE 488 | Safety Training and Development ${ }^{1}$ | 3 |
| Subtotal |  | 48 |
| Safety Electives |  |  |
| Select 6 credits of the following: |  | 6 |
| SAFE 228 | Motor Transportation Fleet Safety ${ }^{1}$ |  |
| SAFE 378 | Energy Exploration and Generation ${ }^{1}$ |  |
| SAFE 418 | Security in the Workplace ${ }^{1}$ |  |
| SAFE 478 | Environmental Permitting and Sustainability ${ }^{1}$ |  |
| Subtotal |  | 6 |
| Required Support Courses |  |  |
| MGMT 351 | Organizational Behavior ${ }^{2}$ | 3 |
| MGMT 354 | Human Resources Management ${ }^{2}$ | 3 |
| Subtotal |  | 6 |
| Total Hours |  | 60 |

## 1 Course counts for $50 \%$ of Major and Major GPA

2 Course counts for $50 \%$ of Major requirements but not for Major GPA
3 Student may select from a combination of 3 credits, 6 credits, 9 credits, or 12 credits to fulfill the 12 credit hour internship requirement.

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


## Additional Required Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| CHEM 104 | Introduction Chemistry I | 3 |
| or CHEM 107 | General Chemistry I | 3 |
| CHEM 106 | Introductory Chemistry II |  |
| or CHEM 108 | General Chemistry II |  |

Select one of the following: 3-4

| STAT 152 | Elementary Statistics I |  |
| :---: | :--- | :--- |
| MATH 125 | Precalculus |  |
| MATH 225 | Calculus I |  |
| Total Hours |  | $\mathbf{9 - 1 0}$ |

SAFETY MANAGEMENT - BS (2176)
This program is effective as of Fall 2019.
Revised 05.27.2021
UCC 03.16.2021

## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| CHEM 104 | Introduction Chemistry I | 3 |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar * | 1 |
| SAFE 118 | Introduction to Safety | 3 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
|  | Hours | 16 |
| Spring |  |  |
| CHEM 106 | Introductory Chemistry II | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
| Social Science Inquiry (p. 1378) |  | 3 |
|  | Hours | 15 |

## Second Year

Fall
SAFE 218 Legislative Compliance-General Industry 3
Select one of the following: 3

| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :---: | :---: | :---: |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| SAFE 228 | Motor Transportation Fleet Safety | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Free Elective |  | 3 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 15 |
| Spring |  |  |
| MGMT 351 | Organizational Behavior | 3 |
| SAFE 248 | Hazardous Materials \& Waste Management | 3 |
| SAFE 258 | Construction Safety | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| MGMT 354 | Human Resources Management | 3 |
| SAFE 318 | Principles of Industrial Hygiene | 3 |
| SAFE 328 | Comprehensive Emergency Management and Fire Services | 3 |
| SAFE 338 | Ergonomics and Human Factors | 3 |
| SAFE 368 | Injury and Damage Incidents Evaluation | 3 |
| SAFE 488 | Safety Training and Development | 3 |
|  | Hours | 18 |


| Spring |  | 3 |
| :--- | :--- | ---: |
| SAFE 319 | Principles of Industrial Hygiene II | 3 |
| SAFE 408 | Contemporary Safety Topics and Issues | 3 |
| SAFE 418 | Security in the Workplace | 3 |
| SAFE 448 | Management and Integration of Safety | 3 |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| Hours | $\mathbf{1 5}$ |  |


| Summer |  |  |
| :--- | :--- | :--- |
| SAFE 450 | Internship | 12 |
|  | Hours | $\mathbf{1 2}$ |


| Fourth Year |  |
| :--- | ---: |
| Fall |  |
| Free Elective |  |
| Free Elective | 3 |
| Free Elective | 3 |
| Free Elective | 3 |
| Free Elective | 3 |
|  | Hours |
|  | Total Hours** |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread.

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

Revised: 03.04.2021
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Sport Management

| Chair | Secretary | Location | Department <br> Phone |
| :--- | :--- | :--- | :--- |
| Dr. Brian Crow | Diane Robbins | 101 Eisenberg <br> Classroom | $724-738-2060$ |
|  |  | Building |  |

Department Web Site URL (http://www.sru.edu/academics/colleges-and-departments/cob/departments/sport-management/) Department Fact Sheet URL (https://www.sru.edu/documents/programs/ factsheets/undergraduate/sportmgmt-fs.pdf)

The curriculum continues to be reviewed and adapted to meet changes in the sport industry. Evaluations from student interns and agency supervisors create the basis of the university's considerations, along with program standards developed by COSMA. The Sport Management Department is accredited by COSMA (The Commission on Sport Management Accreditation) and is one of only 50 programs in the US to be accredited. In 2010, the Department of Sport Management was the first program in the US to be accredited by the Commission on Sport Management Accreditation (COSMA), and in 2017 was the first program to be re-accredited."

## Faculty

## Robertha Abney

Associate Professor
Sport Management
Ph.D., University of Iowa
M.Ed., University of Pittsburgh
B.S., South Carolina State College

## Robert Crow

Professor
Sport Management
Ed.D., West Virginia University
M.B.A., West Virginia University
B.S., West Liberty State College

## Catriona Higgs

Professor
Sport Management
Ph.D., Texas Woman's University
M.S., University of Stirling (Scotland)
B.Ed., Dunfermline College (Scotland)

## Programs

All first-year students who enter SRU in the Summer and Fall terms of 2019 and after will follow Rock Studies. Students who entered SRU before Spring 2019 will follow Liberal Studies. All new transfer students beginning Summer 2019 and after will follow Liberal Studies.

We anticipate that transfer students will begin to enter under Rock Studies during the Summer/Fall term of 2021.

## Majors

- Sport Management, Bachelor of Science (BS) (p. 147)


## Minors

- Sport Management, Minor (p. 149)


## Courses

## SPMT 139-University Seminar

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

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## SPMT 150-Sport Management Practicum

The SPMT practicum is designed to provide the student with a realistic experience at at level and in a setting similar to that in which he/she wishes to obtain employment. The practicum experience is a 50 -hour learning opportunity in which the student assists in a particular aspect of an organization in the sport industry. SPMT 150 may be repeated to a maximum of 4 credits in 4 different experiences, and each should be with a different organization.

Prerequisite: SPMT $194^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Term(s) Typically Offered: Offered Every Term
Enrollment limited to students with department of Sport Management.

## SPMT 190-Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## SPMT 194 - Introduction to Sport Management

This course is an introduction to the field of sport management. Career options and managerial content will be reviewed. Foundation studies of sport, including history, philosophy, and professional skills, will be discussed. Must achieve at least a C grade before progressing to other SPMT courses.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment is limited to students with a program in Sport Management or Sport Management.

## SPMT 195 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## SPMT 196-Global Sport Management

As the economy has shifted from a domestic to a globally competitive marketplace, the demand has grown for sport managers who can function effectively in the international environment. This course develops a framework for understanding the international aspects of sport management. It provides future sport managers with a broad view of the factors underlying international sport competition, sport economics, sport marketing, sport management, and sport governance. Emphasis is on environmental dynamics, cultural and economic constraints, multinational sport business organizations, unique international sport events and international sport operations, strategy and policy.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## SPMT 198 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## SPMT 269 - American Sport in the 21st Century

This course is designed to give the students an understanding of the internal and external factors that shape sport in American culture. This course will analyze how sport mirrors societal changes and how sociological phenomena affect participation and behavior.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Summer Terms
Enrollment limited to students with department of Sport Management.

## SPMT 286-Sport Communication and Technology

This course is intended to provide students with a comprehensive understanding of communication and communication techniques that managers use to achieve excellence in sport organizations. Focus will be placed on public relations, as well as techniques for improving the communication skills of each student in an organized sport setting. Students will receive in-depth exposure to, (a) theories underlying the use of public relations in sport, (b) new technologies in sport communication,
(c) desktop publishing in sport organizations, (d) sport organizational communication techniques, and (e) sport media relations.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Sport Management.

## SPMT 290 - Experimental

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

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## SPMT 294-Sport Management and Ethics

This course is designed to integrate the concepts learned from the foundation courses in management as they apply to management areas of sport and sport agencies. The ethical strategies of sport management will be emphasized in all management decisions.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with department of Sport Management.

## SPMT 295-Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## SPMT 298 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## SPMT 301 - The Fan Experience

This course will demonstrate how the fan experience in a sport venue is impacted by marketing, promotions, the venue staff, venue design, technology, and other factors. Students will understand the customer journey and be able to identify and eliminate friction points in the fan experience.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPMT 315 - Diversity Issues in Sport Management

This course is designed to explore the persistent causes of pervasive racism and sexism in sport as it relates to the sport management field.

Prerequisites: SPMT $194^{\text {C }}$ and SPMT $196^{\text {D }}$ and SPMT $269^{\text {D }}$
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1 or Freshman 2 may not enroll.
Enrollment limited to students with department of Sport Management.

## SPMT 369-Sport Budgeting and Finance

The focus of this course is on budgeting and financial principles in the sport industry. Major components of the course include analyzing budgets from youth, community, recreational, interscholastic, intercollegiate, professional, and international sport organizations, as well as studying the financial composition and impact of the sport industry, Students will also learn to construct various types of budgets used by sport organizations.

Prerequisites: SPMT $194^{\mathrm{D}}$ and SPMT $196^{\mathrm{D}}$ and SPMT $269^{\mathrm{D}}$ and
SPMT $286^{\text {D }}$ and SPMT $294^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPMT 386 - Leadership in Athletic Administration and Sport

 ManagementThe major emphasis is on the preparation of athletic administrators and sport managers within collegiate university, high school, community and youth sport organizations. Information presented in this course will examine leadership theoretical concepts to help prepare students pursuing a career in athletics management/administration. Through critical thinking component and practical application exercises, the student will apply leadership theories, principles and concepts. Ultimately, the student will develop essential leadership competencies and skills for today's athletic administrators.

Prerequisites: SPMT $150^{\text {D }}$ and SPMT $194^{\text {C }}$ and SPMT $294^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students with department of Sport Management.

## SPMT 390-Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPMT 394 - Sport Marketing

Sport Marketing is designed to apply marketing principles to the area of sport, sport events and sport products. Marketing strategies including sales, promotions and advertising of sport will be emphasized.

Prerequisites: SPMT $150^{\mathrm{D}}$ and SPMT $194^{\mathrm{C}}$ and SPMT $196^{\mathrm{D}}$ and
SPMT $286^{\text {D }}$ and SPMT $294^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Winter Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Sport Management.

## SPMT 395 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPMT 396-Selling in the Sport Industry

This course examines the skills required for a successful career in sport sales, including personal selling, social media, and electronic sales. Students will learn sales strategies for single game tickets, season tickets, group tickets, and premium tickets and will be involved in selling tickets for a sport organization.

Prerequisites: SPMT $150^{\mathrm{D}}$ and SPMT $194^{\mathrm{C}}$ and SPMT $196^{\mathrm{D}}$ and SPMT $286^{\text {D }}$ and SPMT $294^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Spring \& Winter Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students in the BS 2150 program.
Enrollment limited to students with department of Sport Management.

## SPMT 398 - Selected Topics

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

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPMT 406-Sport Fundraising and Event Management

The course content will include multiple aspects of creating, funding, and executing a variety of sports events. Topics include event planning, staffing, managing, and evaluating. Students will plan, develop, and execute their own event. In addition, the various aspects of athletic development and fundraising, particularly at the intercollegiate level, will be explored.

Prerequisites: SPMT $150^{\mathrm{D}}$ and SPMT $194^{\mathrm{C}}$ and SPMT $196^{\mathrm{D}}$ and
SPMT $286^{\text {D }}$ and SPMT $294^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Sport Management.

## SPMT 450-Sport Management Internship

This course provides students with the opportunity to apply sport and fitness career-oriented skills in public, commercial, and private agencies. The internship is designed to be an in-depth experience. This is a Theory and Technique Course. All Sport Management coursework must be completed before enrolling in SPMT 450.

Prerequisites: SPMT $150^{\mathrm{D}}$ and SPMT $194^{\mathrm{C}}$ and SPMT $196^{\mathrm{D}}$ and
SPMT $269^{\mathrm{D}}$ and SPMT $286^{\mathrm{D}}$ and SPMT $294^{\mathrm{D}}$ and SPMT $315^{\mathrm{D}}$ and
SPMT $394^{\mathrm{D}}$ and SPMT $396^{\mathrm{D}}$ and SPMT $406^{\mathrm{D}}$ and SPMT $486^{\mathrm{D}}$ and
SPMT $494^{\text {C }}$ and SPMT $499^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1-12
Term(s) Typically Offered: Offered Summer Terms
Students with a semester level of Freshman 1, Freshman 2, Junior 1,
Junior 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students with department of Sport Management.

## SPMT 486- Sport Law and Facilities

The course will demonstrate how various aspects of law and the legal system apply to the sport industry, with a particular emphasis on risk management, and sport facility operations. In addition, the course will provide a fundamental overview of the US court system.

Prerequisites: SPMT $150^{\text {D }}$ and SPMT $194^{\text {C }}$ and SPMT $196^{\text {D }}$ and SPMT $286^{\mathrm{D}}$ and SPMT $294^{\mathrm{D}}$ and SPMT $269^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Spring \& Summer Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Sport Management.

## SPMT 490 - Independent Study

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPMT 494 - Sport Management Senior Seminar

This course is designed for the senior Sport Management student, this course will examine topics dealing with sport finance management, sport law, sport facility management, and time and stress management. Field trips to sport agencies will be required. This course must be taken in the academic semester prior to SPMT 450 (Internship).

Prerequisites: SPMT $150^{\mathrm{D}}$ and SPMT $194^{\mathrm{C}}$ and SPMT $196^{\mathrm{D}}$ and SPMT $269^{\mathrm{D}}$ and SPMT $286^{\mathrm{D}}$ and SPMT $294^{\mathrm{D}}$ and SPMT $315^{\mathrm{D}}$ and SPMT $394{ }^{\text {D }}$ and SPMT $396^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2, Junior 1,
Junior 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students with department of Sport Management.

## SPMT 495 - Workshop

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

## Credits: 1-6

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPMT 498 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPMT 499 - Sport Management Research Methods

A study of research methodology and terminology in Sport Management entailing a critical analysis of available research. Specific attention is directed to formal written communication and oral presentation skills.

Prerequisites: SPMT $150^{\mathrm{D}}$ and SPMT $194^{\mathrm{C}}$ and SPMT $196^{\mathrm{D}}$ and SPMT $269^{\mathrm{D}}$ and SPMT $286^{\mathrm{D}}$ and SPMT $294^{\mathrm{D}}$ and SPMT $394^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Sport Management.

## Sport Management, Bachelor of Science (BS)

The sport management degree program at Slippery Rock University has received specialized accreditation through the Commission on Sport Management Accreditation (COSMA) located in Fort Collins, Colorado, USA. In 2010, the Department of Sport Management was the first program in the US to be accredited by the Commission on Sport Management Accreditation (COSMA), and in 2017 was the first program to be re-accredited.

## Program Learning Outcomes

The Sport Management faculty has established five program outcomes for the undergraduate program that are implemented on a daily basis inside and outside the classroom. These program outcomes are an extension of the mission statement and connect to the university's outcomes. In order to achieve our mission, these outcomes are assessed using a variety of direct and indirect performance indicators.

- Communication: Communicate effectively in speech and in writing, using appropriate information sources, presentation formats, and technologies.
- Diversity, Ethical, Legal and Financial Practices: Integrate diverse, ethical, legal and financial principles and understand their impact on decision making in sport managerial situations.
- Technological and Global Interdependence: Demonstrate proficiency in use of current technologies and exhibit understanding of the global sport industry.
- Professional Proficiency and Development: Apply knowledge and skills to meet professional competencies within sport industry
- Critical Thinking and Problem Solving: Demonstrate ability to identify, analyze, synthesize and evaluate information and ideas through professional performance in simulated sport industry environments such as an internship, practicum or volunteer experience.


## Related Links

Sport Management, BS Program Page (https://www.sru.edu/academics/ majors-and-minors/sport-management/)

Sport Management Department Page (https://www.sru.edu/academics/ colleges-and-departments/cob/departments/sport-management/)

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

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

Code Title Hours42
Other Basic Requirements ..... 0-3
Computer Competency ..... 0-3
Major Requirements ..... 58
Electives ..... 20

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


## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Sciences Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Sciences Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |
| Thematic Thread |  |  |
| Select 12 Credits (p. 1378) ${ }^{1}$ |  | 12 |
| Total Hours |  | 42 |

1 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

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

| Code | Title | Hours | SPMT 494 | Sport Management Senior Seminar (S |
| :---: | :---: | :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |  |  |
| Meet required minimum SAT or ACT math score OR |  |  | SPMT 499 | Sport Management Research Methods (Senior) ${ }^{1}$ |
| ESAP 110 | Beginning Algebra |  |  |  |
| Total Hours |  | 0-3 | Subtotal |  |
|  |  |  | Total Hours |  |
| Computer Competency |  |  | $1$ |  |
| Code |  | Hours | Course counts for $50 \%$ of Major and Major GPA |  |
| Demonstrate "computer competency" by one of the following: |  | 0-3 | * Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that |  |
| Pass Computer Competency Exam OR |  |  |  |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  | Recommended Electives (20 credits) |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  | Code | Title |
| CPSC 110 | Computer Concepts |  | Select $\mathbf{2 0}$ credits of $\mathbf{3 0 0}$ level or above classes |  |
| CPSC 130 | Introduction to Computing and Programming |  | The Department of SPMT recommends courses to be taken from Accounting, Communication, Economics, Finance, Management |  |
| PE 202 | Technology for Wellness |  | or Marketing |  |
| Total Hours |  | 0-3 | Any 300 level or above courses that lead to the Minor in Leadership |  |
| Major Requirements |  |  | Any 300 level or above courses that lead to the Minor in Physical Education/Coaching |  |
| - 29 major credits must be taken at the 300 level or above |  |  | Any 300 level or above courses that lead to the Minor in a Foreign Language |  |
| Code | Title | Hours | This will help you complete a minor if you are interested. See your MyRockAudit for details. |  |
| Required Practical Application Courses |  |  |  |  |  |
| SPMT 150 | Sport Management Practicum (Freshman) | 1 | Additional Requirements |  |
| SPMT 150 | Sport Management Practicum (Sophomore) ${ }^{1}$ | 1 | Code | Title |
|  |  |  | Required Volunteer Hours |  |
| SPMT 150 | Sport Management Practicum (Junior) ${ }^{1}$ | 1 | Volunteer Hours - 120 hours minimum |  |
| SPMT 150 | Sport Management Practicum (Senior) ${ }^{1}$ | 1 | Required to pass the Senior Comprehensive Exam prior to Internship |  |
| Subtotal |  | 4 |  |  |  |
| Sport Management |  |  | Required First Aid \& CPR Certification |  |
| SPMT 194 | Introduction to Sport Management (Freshman) ${ }^{1}$ | 3 | Students must become certified in both First Aid \& CPR. This can be accomplished by: |  |
| SPMT 196 | Global Sport Management (Freshman) ${ }^{1}$ | 3 | Take a course (Red Cross or YMCA) |  |
| SPMT 269 | American Sport in the 21st Century $\left(\right.$ Sophomore) ${ }^{1}$ | 3 | SAFE 205 First Aid and Safety |  |
| SPMT 286 | Sport Communication and Technology $\left(\right.$ Sophomore) ${ }^{1}$ | 3 | Co-curricular and Experiential Learning <br> Students are encouraged to explore additional curricular and co-curricula |  |
| SPMT 294 | Sport Management and Ethics (Sophomore) ${ }^{1}$ | 3 | opportunities. These opportunities can deepen and enhance the learning in accounting, economics and finance. In addition, there is a strong correlation between long-term student success and engagement in these opportunities: |  |
| SPMT 315 | Diversity Issues in Sport Management (Junior) ${ }^{1}$ | 3 |  |  |  |
| SPMT 369 | Sport Budgeting and Finance (Junior/ Senior) ${ }^{1}$ | 3 | 1. Becoming involved in professional organizations <br> 2. Attending sport industry related conferences, seminars, and |  |
| SPMT 386 | Leadership in Athletic Administration and Sport Management ${ }^{1}$ | 3 | 2. Attending sport industry related conferences, seminars, and workshops |  |
| SPMT 394 | Sport Marketing (Junior) ${ }^{1}$ | 3 | 3. Networking with SRU Sport Management alumni <br> 4. International study programs (short-term, semester, and year-long) |  |
| SPMT 396 | Selling in the Sport Industry (Junior) ${ }^{1}$ | 3 | 4. International study programs (short-term, semester, and year-long) <br> 5. High-Impact Practice (HIP) designated classes |  |
| SPMT 406 | Sport Fundraising and Event Management (Senior) ${ }^{1}$ | 3 | 6. Student leadership and career education development <br> 7. Service-learning classes |  |
| SPMT 450 | Sport Management Internship (last semester) ${ }^{1}$ | 12 |  |  |
| SPMT 486 | Sport Law and Facilities (Senior) ${ }^{1}$ | 3 | This program | tive as of Spring 2020. |

Revised 08.07.20
UCC 05.13.20

## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| SPMT 194 | Introduction to Sport Management | 3 |
| SPMT 196 | Global Sport Management | 3 |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar | 1 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
|  | Hours | 16 |
| Spring |  |  |
| SPMT 150 | Sport Management Practicum | 1 |
| SPMT 294 | Sport Management and Ethics | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| SCI 101 | Science of Life | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
|  | Hours | 16 |
| Second Year |  |  |
| Fall |  |  |
| SPMT 150 | Sport Management Practicum | 1 |
| SPMT 269 | American Sport in the 21 st Century | 3 |
| SPMT 386 | Leadership in Athletic Administration and Sport Management | 3 |
| SCI 102 | Understanding the Physical World | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 16 |
| Spring |  |  |
| SPMT 286 | Sport Communication and Technology | 3 |
| SPMT 315 | Diversity Issues in Sport Management | 3 |
| Social Science Inquiry (p. 1378) |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |



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

The sport management degree program at Slippery Rock University has received specialized accreditation through the Commission on Sport Management Education (COSMA) located in Arlington, Virginia, USA. In 2010, the Department of Sport Management was the first program in the US to be accredited by the Commission on Sport Management

Accreditation (COSMA), and in 2017 was the first program to be reaccredited.

## Related Links

Sport Management, Minor Program Page (https://www.sru.edu/ academics/majors-and-minors/sport-management/)

Sport Management Department Page (https://www.sru.edu/academics/ colleges-and-departments/cob/departments/sport-management/)

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

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits
"Prerequisites will be waived provided minor requirements are taken in sequential order."

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Sport Management Courses |  |  |
| SPMT 150 | Sport Management Practicum | 1 |
| SPMT 194 | Introduction to Sport Management ${ }^{1}$ | 3 |
| SPMT 450 | Sport Management Internship ${ }^{2}$ | 3 |
| SPMT 494 | Sport Management Senior Seminar | 3 |
| Select nine credits from the following courses: |  | 9 |
| SPMT 269 | American Sport in the 21 st Century |  |
| SPMT 286 | Sport Communication and Technology |  |
| SPMT 294 | Sport Management and Ethics |  |
| SPMT 315 | Diversity Issues in Sport Management |  |
| SPMT 369 | Sport Budgeting and Finance |  |
| SPMT 394 | Sport Marketing |  |
| SPMT 396 | Selling in the Sport Industry |  |
| SPMT 406 | Sport Fundraising and Event Management |  |
| SPMT 486 | Sport Law and Facilities |  |

Total Hours
A grade of $C$ or better must be earned in this course.
2 All courses must be completed in the minor prior to enrollment in the Internship.

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


## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
Minor in Sport Management (61C)
This program is effective as of Fall 2020.
Revised 08.25.20
UCC 03.05.20

## Strategic Communication and Media

\(\left.$$
\begin{array}{lll}\text { Chair } & \text { Secretary } & \text { Location }\end{array}
$$ \begin{array}{l}Department <br>

Phone\end{array}\right\}\)| Dr. Katrina Quinn Hannah Azarian | 222 Eisenberg <br> Classroom |
| :--- | :--- |
|  | Building |

Department Web Site URL (https://www.sru.edu/academics/colleges-and-departments/cob/departments/communication/)
Department Fact Sheet URL (https://www.sru.edu/documents/programs/ factsheets/undergraduate/comm-fs.pdf)

## Faculty

Nicholas Artman
Assistant Professor
Strategic Comm and Media
Ph.D., Indiana University of PA
M.A., Indiana University of PA
B.S., Indiana University of PA

## Brett Barnett

Professor
Strategic Comm and Media
Ph.D., Bowling Green State University
M.A., University of Akron
B.A., Ohio State University

Franklyn Charles
Assistant Professor
Strategic Comm and Media
PH.D., Ohio University
M.A., Ohio University
B.A., University of South Florida

## Emily Dolan

Assistant Professor
Strategic Comm and Media
Ph.D., University of Buffalo-SUNY
M.A., Syracuse University
B.A, Slippery Rock University

## Brittany Fleming

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B.S., Indiana University of PA

Thomas Flynn

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M.A., Ohio University
B.A., University of Toledo

## Joseph Harry

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M.A., Ohio State University
B.A., University of North Florida

## David Keppel

Assistant Professor
Strategic Comm and Media
Ph.D., Indiana University of Pennsylvania
M.S., Rochester Institute of Technology
B.S., Slippery Rock University

## Fadoua Loudiy

Assistant Professor
Strategic Comm and Media
Ph.D., Duquesne University
M.A., University of Pittsburgh
B.A., Mohammed V University

## Michele Papakie

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M.A., California University of Pennsylvania
B.A., Indiana University of Pennsylvania

Christine Pease-Hernandez
Associate Professor
Strategic Comm and Media
Ph.D., Bowling Green University M.A.
M.A., Central Michigan University
B.A., Saginaw Valley State University

## Allison Peiritsch

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M.A., Duquesne University
B.A., Indiana University of PA

## Li Pu

Associate Professor
Strategic Comm and Media
Ph.D., University of Oregon
M.S., Southern Illinois University
B.A., Sichuan International Studies University

## Katrina Quinn

Professor
Strategic Comm and Media
Ph.D., Indiana University of Pennsylvania
M.A., Indiana University of Pennsylvania
B.A., University of Notre Dame

Strategic Comm and Media
M.B.A., Gaylord College
M.B.A., University of Dhaka
B.B.A., University of Dhaka

Douglas Strahler
Associate Professor
Strategic Comm and Media
Ed.D., Duquesne University
M.S., Syracuse University
B.S., Slippery Rock University

## Mark Zeltner

Associate Professor
Strategic Comm and Media
Ph.D., University of Missouri at Columbia
M.A., University of Tulsa
B.S., Northwest Missouri State University

## Programs

All first-year students who enter SRU in the Summer and Fall terms of 2019 and after will follow Rock Studies. Students who entered SRU before Spring 2019 will follow Liberal Studies. All new transfer students beginning Summer 2019 and after will follow Liberal Studies. We anticipate that transfer students will begin to enter under Rock Studies during the Summer/Fall term of 2021.

## Majors

- Communication Studies, Bachelor of Arts (BA) (p. 161)
- Communication, Bachelor of Science (BS) - Concentration in Advertising (p. 163)
- Communication, Bachelor of Science (BS) - Concentration in Converged Journalism (p. 166)
- Communication, Bachelor of Science (BS) - Concentration in Digital Media Production (p. 168)
- Communication, Bachelor of Science (BS) - Concentration in Health Communication (p. 171)
- Communication, Bachelor of Science (BS) - Concentration in Integrated Marketing Communication (p. 174)
- Communication, Bachelor of Science (BS) - Concentration in Public Relations (p. 176)


## Minors

- Communication - Graphic Design, Minor (Art Majors Only) (p. 160)
- Communication, Minor (p. 179)


## Certificates

- Global and Intercultural Communication, Certificate (p. 179)


## Courses

COMM 110-Communication Concepts
An overview of basic theories concerning the communication process.
Recommended as a basis for major study in the area.
Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): Transfer Thread Completion Course

## Md Nazmul Rony

Assistant Professor

## COMM 115 - Visual Literacy

A cornerstone course that involves the study of visual forms of communication with an emphasis on image-based media (newspaper, magazine, film, television, photography, informational graphics, interactive multimedia, digital games and web-based technologies). Topics include visual interpretation, visual manipulation, visual conventions, the role of visual media in cultural processes, and aesthetic appreciation.

## Credits: 3

Term(s) Typically Offered: Offered Fall, Winter, \& Spring
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Global
Citizenship, Creating Art, Innovation, Entrepreneurship, and Positive
Change, Transfer Thread Completion Course

## COMM 120-Introduction to Digital Photography

This course provides an introduction to the basic concepts of digital photography. Technical and compositional elements for the creation of quality digital photography are covered. Focus on this course is on the commercial application of photography for media production.

## Credits: 3

Term(s) Typically Offered: Offered as Needed

## COMM 139-University Seminar

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

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## COMM 190 - Experimental

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

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## COMM 195-Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## COMM 198-Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## COMM 200-Civil Discourse: Theory \& Practice

Theory and practice of promoting shared understanding and the common good through civil discourse as related to the development and presentation of oral messages. Students will be expected to develop an understanding of the principles and practices of public speechmaking that constitute civil discourse, how the First Amendment enables it, its history and role in problem-solving, and the influence of mediated discourse on democracy.

Credits: 3
Term(s) Typically Offered: Offered Every Term

## COMM 201 - Digital Imaging

This course exposes students to the use and manipulation of electronically generated images through hands-on experience with digital cameras and scanners. Market specific imaging software is used to further enhance and manipulate imagery. Course topics include visual aesthetics, composition, image layering, photo-retouching, spatial relationships, compression techniques, digital painting, editing, color adjustment, filtering, image capture and file formatting.

## Credits: 3

Enrollment limited to students with department of Strategic Comm and Media.

## COMM 204-Environmental Communication

In this course, students will learn about the theoretical and applied concepts that guide the discipline of environmental communication including rhetoric \& discourse, media, public participation, social marketing, collaboration \& conflict resolution, risk communication, and pop culture. Students will demonstrate understanding and show application of materials for successful environmental communication in a variety of protected areas and conservation settings.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

## COMM 205-Audio Production

An introduction to the aesthetic and technical production of audio for a variety of media and disciplines. Course topics include principles of hearing, sound, acoustics, and psychoacoustics, field and studio recording techniques, tools and applications for single and multi-track production and editing; and the development of vocal techniques associated with on-air announcing for radio, television and online productions.

Prerequisite: COMM $110^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1 may not enroll.

## COMM 215-Small Group Communication

Communication problems and processes in small groups. Topics include role and nature of the small group, communication structure, problemsolving techniques, and leadership.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Thematic Thread(s): Leadership Development, Transfer Thread Completion Course

## COMM 217- Intercultural Communication

This course is designed to create a greater understanding of communication patterns and breakdowns which occur as members of one culture group interact with those of another culture group. This course will also develop an increased awareness of particular skills and knowledge that can foster more effective intercultural communication.

Credits: 3
Term(s) Typically Offered: Offered Fall, Spring, \& Summer
Thematic Thread(s): Global Citizenship, Comparative Perspectives of Justice \& Society, Leadership Development, Transfer Thread Completion Course, Transnational Culture

## COMM 228 - Principles of Creative Advertising

This course introduces students to the history, role and context of advertising and how advertising messages solve communication problems by informing, changing attitudes and motivating behavioral changes among an organization's target audiences. Students will learn fundamentals about the advertising development and execution process, including theory and strategy, copy writing, design and selection of media.

Credits: 3
Term(s) Typically Offered: Offered as Needed, Offered Spring Terms Even Enrollment limited to students with department of Strategic Comm and Media.

## COMM 231 - Introduction to Public Relations and IMC

This course seeks to introduce public relations students to the history, role and context of public relations, and to the process through which public relations professionals establish and maintain lines of communication between an organization and its publics. The course examines the nature of public opinion, methods of audience analysis, and message design, and engages in skill development relevant to the professional practice of public relations.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## COMM 232-Publication Production

This course will be concerned with the nonverbal aspects of print communication, i.e., areas by which the communication process can be enhanced by the use of pictures, charts, graphs, white space, type faces and sizes, etc. It seeks to make students aware of the fact that print communication does not involve only words.

## Credits: 3

## COMM 235-Introduction to Digital Design

Exposes students to the manipulation of digital images and their use in digital publication through hands-on experience with market-specific software. Course topics include visual aesthetics, composition, spatial relationships, type-faces, and file formatting.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## COMM 242-Journalistic Writing

Basic course in journalistic news structuring techniques and straight news writing for print, broadcast and online news formats. Students practice and write in-class news stories utilizing basic news organization, professional journalistic writing styles, and quotation modes appropriate to different news platforms.

Prerequisite: ENGL $102^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

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

## COMM 247 - Photojournalism

Photojournalism upholds the professional standards specific to newspaper photography and the recording of news events visually. Students will be introduced to basic photography skills and required to shoot assignments according to print standards on deadline. The course includes issues related to the specialization of shooting sports, spot news, features and special essays. Technical aspects of digital photography and printing for publication are also reviewed.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

## COMM 248 - Interactive Multimedia 1

An introduction to the production of written and media-based content for a variety of web-based applications. Course topics include the use of content management systems, the basics of web design and blog creation, writing for the web, making media for the web, connecting to social media and web analytics.

## Credits: 3

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

## COMM 254 - Video Production

An introduction to video production as communication media. Emphasis on the processes and technologies of single-camera production, including: (1) operation of audio and video recording equipment, and
(2) development of techniques for composition, lighting, scriptwriting, storyboarding, directing, and editing.

## Credits: 3

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

## COMM 256 - Message Preparation

An introduction to message preparation for a variety of media and communication functions, including radio, television, video, podcasts, instructional media, social media, websites, and advertising.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Strategic Comm and Media.

## COMM 258 - Interactive Multimedia 2

An introduction to the aesthetic and technical production of basic multimedia content for a variety of applications and disciplines. Course topics include basic aesthetics of multimedia, and introduction to media coding and industry specific applications, and development of graphic, animated, and interactive media assets.

Prerequisites: COMM $235^{\text {D }}$ or COMM $201^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## COMM 263 - Mass Media and Society

An introduction to the mass media that includes an examination of the historical development, current structure, and functions of the traditional and emerging media. The course will also explore the economic, legal, and ethical issues facing the media and introduce the interaction of the media and society, culture, and the individual.

Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): Transfer Thread Completion Course

## COMM 270 - Strategic Health Communication

This course examines strategic communication in the areas of health and the healthcare system, current events and issues in health communication, and the role of media and communication technologies in reaching individuals, communities, and specialized target audiences. Topics such as diversity, crisis communication, and ethics in the context of health communication will be addressed. Students will learn how to apply persuasive strategies and health communication tactics in the development of health communication campaigns.

## Credits: 3

## COMM 290-Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## COMM 295-Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## COMM 298-Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## COMM 303-Communication and Media Ethics

This course will address the application of ethical standards, guidelines, and policies to situations related to media and to communication. This course is based on two fundamental premises: (1) we create the sort of person that we are through our actions and inactions, and (2) an ethical communicator is one who acts with integrity. This course will cover what constitutes communication ethics from various historical points of view, how recent ethical conflicts have arisen in media production and communication, and how to apply ethical judgments to issues and controversies.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 305-Broadcast Journalism

An examination of topics critical to practice of broadcast journalism, including researching, news-gathering techniques, writing, and production skills. The course will also introduce the components of the broadcasting system in America including economics, programming, regulations, and broadcast technologies.

Prerequisites: (COMM $242^{\text {D }}$ or COMM $256^{\text {D }}$ ) and COMM $110^{\text {C }}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

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

## COMM 307- Social Media

This course will provide students with a professional approach to using social media tools in their field, examining both the technological and theoretical perspectives of social media through the hands-on application of the technologies.
Prerequisite: COMM $110^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment is limited to students with a program in Communication, Comm-Graphic Design(Art Major), Communication Studies,
Communication, Environ Comm \& Heritage Interp, Advertising, Converged Journalism, Digital Media, Integrated Marketing or Public Relations.

## COMM 310-Communication Research Methods

An introduction to the principles, procedures, and tools of research used in the analysis of the communication situation, including consideration of research design and statistical analysis and the identification, control, and measurement of communication variables.

Prerequisite: COMM $110^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Every Term
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 312 - Argumentation

A study of argumentation as a decision-making process. Course focuses on theories of argument, the roles of advocates and opponents, the nature of argument building, evidence, and reasoning and argument in various contexts.

Prerequisites: COMM $200^{C}$ and COMM $110^{\circ}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 314- Interpersonal Communication

This is a theory-based course examining the process of communication in dyadic and group settings. Emphasis is placed upon (1) influences upon communication processes and resulting behavior and content and (2) the development of skills and skill assessment in both settings.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 315- Organizational Communication

A study of the communication behavior of persons in organizations. Considers the nature of organizations, communication structures in organizations, and the development of communication training in organizations.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 317- Topics in Global and Intercultural Communication

To promote effective communication with diverse audiences in an increasingly globalized world, this course develops theoretical and applied approaches to global and intercultural communication. Through readings, resources, and case studies, students will explore intercultural communication in a variety of global contexts, analyze current global communication issues, and develop the ability to design communication strategies that are specific and adapted to an audience's historical and cultural milieu.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 318 - Professional Presentation

Principles and applications of communication techniques and media for presentations and processes common to professional settings.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 332 - Case Studies in Public Relations and Integrated

## Communication

This advanced course seeks to develop critical thinking skills through the examination of audience-centered case studies. Students examine how professionals in public relations and integrated communication develop objectives that translate into communication campaigns, illustrating theoretical applications in real-life situations. The development of analytical skills, ethical guidelines, and issues of diversity in communication practice are emphasized.

Prerequisites: COMM $231^{D}$ and COMM $110^{\text {C }}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 333 - Writing for Public Relations and Integrated Marketing Communication

Course seeks to further develop the writing skills of public relations and integrated marketing communication majors. Course assignments focus on expanding students' ability to make critical decisions regarding the process of gathering necessary information, identifying objectives, and creating appropriate messages for specific target audiences.

Prerequisites: (COMM $242^{\mathrm{D}}$ or COMM $256^{\mathrm{D}}$ ) and COMM $231^{\mathrm{D}}$ and COMM $110^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 334 - Publication Production

The course continues to expose students to the in-depth study of electronic publication issues, specifically with design and layout for newspapers, annual reports and other multiple-page publications. The course covers issues related to prepares, separations, advanced topography and paper selection.
Prerequisites: (COMM $235^{\text {D }}$ or COMM $232^{\text {D }}$ ) and COMM $110^{\text {C }}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 335 - Digital Animation

An exploration of the aesthetic and technical production of animated and interactive assets for a variety of media applications. Course topics include development of raster and vector graphic elements and design and production of both simple and interactive animation for a variety of applications and disciplines.

Prerequisites: (COMM $235^{\text {D }}$ or COMM $201^{\text {D }}$ ) and COMM $110^{\text {C }}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 336 - Media Relations and Crisis Communication

This course focuses on two key areas of public relations and crisis communication. During the first half of the semester, this course will explore how the news media works and how PR practitioners establish and maintain positive relationships with the news media. This course will explain the role of the news media in message dissemination and how to effectively work with reporters. During the second half of the semester, students will build on their media relations knowledge and explore issues and crisis management - before, during and after a crisis. Students will learn common crisis response strategies to address many organizational audiences through well-known case studies. Emphasis will be placed on practical application of crisis communication theory.

Prerequisites: COMM $110^{\circ}$ and COMM $231{ }^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .

## Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.
Enrollment limited to students in the College of Business college.

## COMM 342 - Sports Journalism

Discussion of ethics and responsible sports journalism, sports information and public relations interview techniques, broadcast sports journalism. Guest lecturers in sports information, public relations, and broadcast journalism may speak on relevant topics.

Prerequisites: COMM $242^{\text {D }}$ and COMM $110^{\text {C }}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 343-Feature Journalism

Course will focus on writing feature articles for newspapers and magazines.
Prerequisites: COMM $242^{D}$ and COMM $110^{\text {C }}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 347-New-Media Journalism

An examination of new-media forms and the effects of new digital media on media industries and the practice of journalism. The course will examine the differences between traditional and new media journalism in theory and in practice and explore online writing techniques and the impact of social networking sites on the practice of journalism.

Prerequisites: (COMM $242^{\mathrm{D}}$ or COMM $248^{\mathrm{D}}$ or COMM $256^{\mathrm{D}}$ ) and COMM $110^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## COMM 348 - Advanced Journalistic Writing and Reporting

Instruction in writing and reporting techniques beyond the basic news story, focused on detailed, in-depth news-writing and news-gathering practices, including use of human and documentary sources, toward production of public affairs stories; discussions of contemporary journalistic ethics and values.

Prerequisites: COMM $242^{\text {D }}$ and COMM $110^{\text {C }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 350 - Editing for Video

This course provides students with the opportunity to expand their knowledge of video editing. Special attention is given to expanding skill sets associated with digital non-linear editing.

Prerequisites: COMM $254^{\text {D }}$ and COMM $110^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 352 - Digital Radio Production

This course introduces students to the business and production of digital radio broadcasting, including broadcast technology, producing, directing, writing, and performance for radio. Students gain experience in studio and control room operation and production roles.
Prerequisite: COMM $110^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Strategic Comm and Media.

## COMM 354 - TV Studio Production

The course covers the process and technique of multi-camera video production. Students gain experience in studio and control room operation and production roles. The course trains students to integrate video packages produced in the field for presentation in a multi-camera studio broadcast.

Prerequisite: COMM $110^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 355-TV Field Production

An advanced course in the processes and techniques of single-camera field production and editing. Students will report, film, write, and edit packages for television news.
Prerequisite: COMM $110^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 359- Interactive Multimedia 3

This course provides students the ability to move beyond the traditional models of information distribution using image, sound, motion and text. The course introduces the fundamentals of communicating through digital interfaces with an audience. Topics include digital imaging, creating effective interactive projects, models of information structure, analysis of design problems and distribution models. Theories of communication, learning, human-centered design and project evaluation are discussed.

Prerequisites: COMM $258^{\text {D }}$ and COMM $110^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 360 - Corporate Media

The application of adult training theories, communication theories, and production skills in the planning, design, and implementation of media in the corporate and institutional setting, with emphasis on media management and the use of media in training and development.

Prerequisites: (COMM $235^{\text {D }}$ or COMM $232^{\text {D }}$ ) and COMM $110^{\text {C }}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 364 - Brand Management

The main objective of this course is to provide insights on developing effective brand management strategies. This course is designed to offer important concepts, frameworks, theories, practices and skills required to create and manage profitable brands.

Prerequisites: COMM $231^{\circ}$ or MRKT $330^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.
Enrollment limited to students in the College of Business college.
COMM 365 - Sports and Esports Production
The course prepares students to broadcast sports and esports events and news. Topics covered include media production, play-by-play announcing, studio sportscasts, field reporting, pre-game and post-game analysis, social media integration, streaming, and content creation for live sports broadcasts.

Credits: 3

## COMM 370 - Health Communication Cases and Strategies

This course further develops students' strategic competencies in the area of health communication through the investigation of case studies and campaign design. Students will analyze proactive and responsive communication strategies; messaging techniques and audience segmentation; multimedia and multiplatform tactics; and media relations and crisis response. Students will utilize qualitative and quantitative research techniques to drive messaging and strategy in the creation of integrated health communication campaigns.
Prerequisite: COMM $270^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Junior 1, Junior 2,
Senior 1, Senior 2 or Sophomore 2.
Enrollment limited to students in the College of Business college.

## COMM 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.
Prerequisite: COMM $110^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
COMM 395 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 398 - Selected Topics

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

Prerequisite: COMM $110^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 401-Digital Imaging

This course continues to expose students in the use, manipulation and creation of digital images through hands-on experience with market specific imaging software. Course topics include visual aesthetics, image composition, vector graphics, typography, image scalability and file formatting.
Prerequisites: (COMM $235^{\text {C }}$ or COMM $201^{\circ}$ ) and COMM $110^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 405-Global Media

An examination of different regions of the world and their media systems. The course will explore how politics, economics and culture play a role in shaping global media structures. Both historical and contemporary perspectives on the topic are addressed, particularly as they relate to issues of democracy, cultural autonomy, political rights, social justice, media systems of different world regions, global representations in U.S. media, new technologies and developments in global technology and economic media developments.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Global Citizenship, International Business,
Sustainable International Development, Transfer Thread Completion Course, Transnational Culture
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 407-Social Media 2: Analytics and Strategies

This course will examine the concepts of social media networks and the process of collecting, analyzing, measuring, and visualizing data for organization and business. The course will emphasize on understanding the role of theories in social media analytics, and the tools that help collecting, analyzing social media data and preparing reports. As an advanced level course, students will be required to learn and apply data analytics software beside significant writing assignments, formal presentations.

Prerequisite: COMM $307^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Enrollment limited to students with a semester level of Junior 1, Junior 2,

## Senior 1 or Senior 2.

Enrollment is limited to students with a program in Communication, Information Systems, Communication Studies, Communication, Information Systems or Environ Comm \& Heritage Interp.

## COMM 410-Communication Law

Discussion of topics related to the field of mass communication (freedom of the press, libel, invasion of privacy, copyright, obscenity, regulations, ethics, and responsibility of the communicator and the agency).

## Credits: 3

Term(s) Typically Offered: Offered Every Term
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

## COMM 413-Communication Theory

A study of the significant theories of human communication that help to explain and predict the role of communication in determining the social, cultural, and political behavior of the community.

Prerequisite: COMM $110^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 415 - Persuasion

This course will familiarize students with the processes of persuasion, the relationship of persuasion to other forms of human communication, methods for studying persuasion, the theories of persuasion and ethical concerns about persuasion. The perspectives and tools developed in this course should enable the student to develop effective message strategies in work and personal situations.

Prerequisites: COMM $110^{\mathrm{D}}$ and COMM $200^{\mathrm{D}}$ and COMM $110^{\text {C }}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 419 - Propaganda: Ideology, Communication Warfare, and Social Control

The purpose of this course is to enhance the critical thinking and analytical skills of students to make them better able to cope intellectually with public argument in a world of where sound-bites and terrorism rule the day. This course addresses the ways in which various ideologies compete for global dominance by employing advocacy strategies and propaganda techniques, a process made both more complex and more consequential by rapidly advancing communication technologies. By manipulating visual imagery, propagandists often exert control over the public's perception of political, social and economic reality. Extensive use of art and video examples will be made in this course.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Thematic Thread(s): Global Citizenship, Political Arts, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 422-History of Journalism

Tracing the history of American journalism from its early English European heritage to modern times. Emphasis on people, organization, and media that have helped establish the press as an American institution.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 431-PR and IMC Campaigns Capstone

Capstone course in the PR and IMC tracks. Course provides students a thorough experience in conducting public relations and integrated marketing communication campaigns and preparing communication materials. Working in teams, students prepare and conduct the research, planning, implementation and evaluation of an actual campaign for a client.

Prerequisites: COMM $332^{D}$ and COMM $333^{C}$ and COMM $110^{\text {C }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2, Junior 1,
Junior 2, Sophomore 1 or Sophomore 2 may not enroll.

## COMM 434 - Advertising Production

Advanced production course which applies concepts of design, creative strategy and message development to the creation of advertising in a variety of mediums. Course focuses on development of consumer, public service and public relations advertising campaigns.

Prerequisites: (COMM $235^{\circ}$ or COMM $232^{\mathrm{D}}$ ) and COMM $110^{\mathrm{C}}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1
or Sophomore 2 may not enroll.

## COMM 441- Issues in Journalism

An analysis and discussion of the impact of journalism on contemporary society. Among the subjects discussed will be the evolution of journalism in a digital age, ethical concerns for modern journalists, and the impact of mobile technology on the practice of journalism.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 449 - Communication Projects

This course provides students an opportunity to investigate in-depth, approved topics in applied communication.
Prerequisite: COMM $110^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 450 - Internship

Supervised placement or research in selected private or public agencies.
Prerequisite: COMM 310 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-12
Term(s) Typically Offered: Offered Every Term
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## COMM 453 - Media Project Management

This course is intended to develop student mastery of the emerging environment of digital information through a project-based, team-based course. The course focuses on issues of team work, project management, strategy development and communication both inside and outside of the team. Other topics include budgeting, development of human capital, leadership, time management and legal issues.

Prerequisites: COMM $258^{\mathrm{D}}$ and (COMM $307^{\mathrm{D}}$ or COMM $347^{\mathrm{D}}$ ) and (COMM $359^{\text {D }}$ or COMM $401^{D}$ ) and COMM $110^{\text {C }}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 454-Live Broadcast Production

This course will teach students visual aesthetic principles and technical skills required to produce live programming and graphics for broadcast. Course topics include objective development, composition, element layering, branding, and advanced multi-camera studio and field production.

Prerequisites: (COMM $235^{\mathrm{D}}$ or COMM $201^{\mathrm{D}}$ ) and COMM $350^{\mathrm{D}}$ and COMM $354^{\text {D }}$ and COMM $110^{\text {C }}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 455 - History of Broadcasting

A focus on the history and development of radio and television broadcasting in the United States. Students will watch and listen to historical broadcasts and discuss the evolution of entertainment and news programming from the beginning of the 20th century through today.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 458- Media Criticism

A critical examination of film, television, and radio. The course focuses on the formation and application of standards for appraising media and their messages.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): Arts \& Popular Culture, Transfer Thread Completion

## Course

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

## COMM 459 - Issues in Communication Technologies

An exploration of current and emerging communication technologies including their development and regulation, as well as the social, individual and ethical impact of these technologies.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Innovation, Entrepreneurship, and Positive Change, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 464 - Advertising Campaigns Capstone

This course is a capstone course in the Advertising program. Students will demonstrate how the knowledge and skills learned in their program can be applied directly to designing and developing creative advertising campaigns. Students will be responsible for conducting research, strategic planning, writing creative briefs, planning and preparation of advertising copy and design, and campaign evaluation.

Prerequisites: COMM $228^{\mathrm{D}}$ and COMM $235^{\mathrm{D}}$ and COMM $310^{\mathrm{D}}$ and COMM $434^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Advertising.

## COMM 480 - The Communication Age

Presentation and discussion of the influences, trends, and issues that permeate the evolution toward a 'Communication Age'. Major issues and influences are examined, including significant technological developments and solutions that have been applied to communication needs and opportunities. Discussion addresses marketplace forces; humanistic, social, personal, and ethical issues; and the impact on organizations, workplace, home, education, government, and international functions. Major attention is given to the role of the impact on the individual amidst these far-reaching changes.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Arts \& Popular Culture, The Future, Revolutions, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 490-Independent Study

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 495 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 497 - Senior Capstone Seminar

The seminar is designed to assist students develop career awareness and proficiency in career/job search skills relevant to obtaining an entrylevel position in a communication-related field, or to obtain entry to graduate study. Students enrolled will participate in career development activities, including portfolio development, job seminars, establishing credential files, participating in mock and actual interviews, on-site mentoring/shadow program and public presentation of their portfolio.

Prerequisite: COMM $110^{D}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2, Junior 1, Junior 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students with department of Strategic Comm and Media.

## COMM 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.
Prerequisite: COMM $110^{C}$
${ }^{C}$ Requires minimum grade of C .

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Communication - Graphic Design, Minor (Art Majors Only)

The Minor in Communication: Graphic Design is specifically designed for Art majors who would like additional experience in digital design and production to complement their major coursework. This program provides students with the commercial and technical aspects of graphic communication and production. With courses in communication concepts, interactive multimedia, communication law, and media project management, this 21 -credit program will expand opportunities to use an art degree in new and flexible ways.

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

## Related Links

Communication - Graphic Design, Minor Program Page (https:// www.sru.edu/academics/majors-and-minors/communication-graphic-design-minor/)

Strategic Communication and Media Department Page (https:// www.sru.edu/academics/colleges-and-departments/cob/departments/ communication/)

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

## Curriculum Guide

GPA Requirement
Minor GPA: 2.0 or higher

## Minor Requirements

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

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Communication Courses |  |  |
| COMM 110 | Communication Concepts | 3 |
| COMM 235 | Introduction to Digital Design | 3 |
| COMM 258 | Interactive Multimedia 2 | 3 |
| COMM 334 | Publication Production | 3 |
| COMM 359 | Interactive Multimedia 3 | 3 |
| COMM 410 | Communication Law | 3 |
| COMM 453 | Media Project Management | $\mathbf{3}$ |
| Total Hours |  | $\mathbf{2 1}$ |

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


## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN COMMUNICATION - GRAPHIC DESIGN (13B)
This program is effective as of Fall 2010
Revision date: 10.28.2021
UCC 3.5.2019

## Communication Studies, Bachelor of

## Arts (BA)

## Program Learning Outcomes

## Communication Studies, BA

- Demonstrate knowledge and proficiency in research and analysis relevant to the communication discipline.
- Develop additional communication competencies through course selection within their degree requirements and through free electives. These additional competencies may include: Design skills, Media Production skills; Intercultural Skills, Journalistic skills, and Public Relations writing skills; or skills related to a minor program of study.
- Develop knowledge and understanding of the history, evolution, and fundamental theories of the discipline of Communication.


## Strategic Communication and Media Department, Overall

- Writing competency: Students will demonstrate the ability to write and present messages clearly and effectively.
- Context of the field: Students will understand the history, concepts, and principles of the field and critically apply these elements to current issues within the discipline.
- Career readiness: Students will demonstrate proficiency in message production required for entry-level positions in the field.
- Ethics and legal issues: Students will understand ethical and legal issues facing communicators in the 21 st century.


## Related Links

Communication Studies, BA Program Page (https://www.sru.edu/ academics/majors-and-minors/communication-studies/)

Strategic Communication and Media Department Page (https:// www.sru.edu/academics/colleges-and-departments/cob/departments/ communication/)

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

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher Overall GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Modern Language Requirement | $0-9$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 39 |
| Electives | 39 |
| All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credit | 78) | 3 |



## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete 0-9 credits | $0-9$ |  |
| Total Hours | $\mathbf{0 - 9}$ |  |

## Basic Math Requirement

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

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

## Total Hours

## Computer Competency

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

## Total Hours

0-3

## Major Requirements

- Students must earn a minimum grade of "C" in COMM 110, COMM 310, and COMM 413. At least $40 \%$ (48 hours) of the entire degree and $50 \%$ ( 20 hours) of courses in the major must consist of upper level coursework.
- Students must complete $50 \%$ of credits required for the major from a PASSHE university.
- 20 major credits must be taken at SRU or PASSHE
- 20 major credits must be taken at the 300 level or above


1 Course counts for $50 \%$ of Major and Major GPA
2 A grade of 'C' or higher must be earned in these courses

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


## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
COMMUNICATION - BA (2 14)
This program is effective as of Fall 2019.
Revision date: 10.28.21
UCC RISP 2019

## Recommended Four-year Plan

Course

Title
Hours
First Year
Fall

| COMM 110 | Communication Concepts | 3 |
| :---: | :---: | :---: |
| Communication Elective |  | 3 |
| ENGL 102 | Critical Writing | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
| INDS 101 | FYRST Seminar | 1 |
|  | Hours | 16 |
| Spring |  |  |
| COMM 200 | Civil Discourse: Theory \& Practice | 3 |
| Communication Elective |  | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Modern Language Requirement |  | 3 |
|  | Hours | 15 |
| Second Year |  |  |
| Fall |  |  |
| Communication Elective |  | 3 |
| Modern Language Requirement |  | 3 |
| SCI 101 or SCI 102 | Science of Life or Understanding the Physical World | 3 |
| Electives |  | 6 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 15 |
| Spring |  |  |
| Communication Elective |  | 3 |
| Modern Language Requirement |  | 3 |
| Humanities Inquiry |  | 3 |
| SCI 102 or SCI 101 | Understanding the Physical World or Science of Life | 3 |
| Elective |  | 3 |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| COMM 310 | Communication Research Methods | 3 |
| Communication Elective |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 6 |
| Electives |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| Communication Studies Requirement |  | 3 |
| Communication Elective |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Electives |  | 6 |
|  | Hours | 15 |
| Fourth Year |  |  |

Fall

| Communication Studies Requirement | 6 |
| :--- | ---: |
| Thematic Thread Requirement (p. 1378) | 3 |
| Electives | 6 |
| Hours | $\mathbf{1 5}$ |


| Spring |  | 3 |
| :--- | :--- | :--- |
| COMM 413 | Communication Theory | 3 |
| COMM 497 | Senior Capstone Seminar |  |



## Communication, Bachelor of Science (BS) - Concentration in Advertising <br> Program Learning Outcomes

## Communication - Advertising, BS

- Develop knowledge of the history, concepts and principles of advertising and critically apply these concepts to current advertising issues and challenges.
- Develop the technical and professional skills required for entry-level positions in advertising. Advertising students will:
- Incorporate the skills of needs assessment, strategic campaign development, and evaluation for advertising projects and campaigns.
- Develop multimedia writing skills to effectively produce advertising messages across platforms.
- Develop professional skills related to resume, portfolio development and interviewing to obtain an entry-level position in the advertising field.
- Understand the ethical and legal issues facing contemporary advertising professionals. Advertising students will demonstrate knowledge of:
- Ethical codes applicable to advertising;
- First Amendment issues, libel, privacy, copyright and other legal and ethical issues relevant to advertising; and
- Current government regulations affecting the development and distribution of advertising messages.


## Strategic Communication and Media Department, Overall

- Writing competency: Students will demonstrate the ability to write and present messages clearly and effectively.
- Context of the field: Students will understand the history, concepts, and principles of the field and critically apply these elements to current issues within the discipline.
- Career readiness: Students will demonstrate proficiency in message production required for entry-level positions in the field.
- Ethics and legal issues: Students will understand ethical and legal issues facing communicators in the 21 st century.


## Related Links

Communication - Advertising, BS Program Page (https://www.sru.edu/ academics/majors-and-minors/communication-advertising/)

Strategic Communication and Media Department Page (https:// www.sru.edu/academics/colleges-and-departments/cob/departments/ communication/)

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

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| CodeTitle <br> Rock Studies Requirement | Hours |
| :--- | ---: |
| Other Basic Requirements | 42 |
| Computer Competency | $0-3$ |
| Major Requirements | $0-3$ |
| Electives | 54 |

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


## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :--- | :--- | ---: |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy | 15 |
| Subtotal |  |  |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) | 3 |  |

Humanities Inquiry
Select 3 Credits (p. 1378)

Social Science Inquiry
Select 3 Credits (p. 1378) 3

Natural Sciences Inquiry
SCI 101 Science of Life 3
Physical Sciences Inquiry


## Basic Math Requirement

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

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra | $\mathbf{0 - 3}$ |
| Total Hours |  |  |

## Computer Competency

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

## Major Requirements

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

| Code | Title | Hours |
| :--- | :--- | ---: |
| Core Requirements |  |  |
| COMM 110 | Communication Concepts $^{1,2}$ | 3 |
| COMM 263 | Mass Media and Society $^{1}$ | 3 |
| COMM 310 $^{10}$ | Communication Research Methods $^{1,2}$ | 3 |
| COMM 410 | Communication Law $^{1,2}$ | 3 |
| COMM 497 | Senior Capstone Seminar $^{1,2}$ | 3 |
| Subtotal |  | 15 |


| Advertising Requirements |  |  |
| :--- | :--- | :--- |
| COMM 115 | Visual Literacy ${ }^{1}$ | 3 |
| COMM 228 | Principles of Creative Advertising ${ }^{1}$ | 3 |
| COMM 235 | Introduction to Digital Design ${ }^{1}$ | 3 |
| COMM 256 $^{1}$ | Message Preparation $^{1}$ | 3 |
| MRKT 230 | Principles of Marketing | 3 |
| MRKT 334 | Advertising Management ${ }^{1}$ | 3 |
| COMM 434 | Advertising Production ${ }^{1}$ | 3 |



| COMM 450 | Internship | 3 |
| :---: | :---: | :---: |
| Elective |  | 3 |
|  | Hours | 15 |
|  | Total Hours** | 121 |
| 2 Work with your Academic Adviser Thread by the end of your fall se year. Click here (https://forms.o ResponsePage.aspx?id=ul1Vhjs VJnD6rixkdMh1UNEFHMUNHO declare a thread. |  |  |
| * Student | uraged to take |  |
| ** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year. |  |  |

Major Code: 2118
Concentration Code: ADVR
Revised: 08.03.2021

## Communication, Bachelor of Science (BS) - Concentration in Converged Journalism

## Program Learning Outcomes

## Communication - Converged Journalism, BS

- Demonstrate the ability to write all elements of a basic news story following AP professional journalistic style with proper content, grammar, style, and editing components.
- Employ new media technologies in reporting.
- Employ advanced reporting and investigating skills.


## Strategic Communication and Media Department, Overall

- Writing competency: Students will demonstrate the ability to write and present messages clearly and effectively.
- Context of the field: Students will understand the history, concepts, and principles of the field and critically apply these elements to current issues within the discipline.
- Career readiness: Students will demonstrate proficiency in message production required for entry-level positions in the field.
- Ethics and legal issues: Students will understand ethical and legal issues facing communicators in the 21 st century.


## Related Links

Communication - Converged Journalism, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/communication-convergedjournalism/)

> Strategic Communication and Media Department Page (https:// www.sru.edu/academics/colleges-and-departments/cob/departments/ communication/)

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

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major/Concentration Requirements | 57 |
| Electives | 20 |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Sciences Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Sciences Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |
| Thematic Thread |  |  |
| Select 12 Credits (p. 1378) ${ }^{2}$ |  | 12 |
| Total Hours |  | 42 |
| Course offe subject. | multiple subjects; cannot take cour | major |

2 From at least 3 Categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |

PE 202 Technology for Wellness

Total Hours

## 0-3

## Major Requirements

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

| Code <br> Core Requirements | Title | Hours |
| :--- | :--- | ---: |
| COMM 110 | Communication Concepts ${ }^{1,2}$ | 3 |
| COMM 263 | Mass Media and Society $^{1}$ | 3 |
| COMM 310 | Communication Research Methods $^{1,2}$ | 3 |
| COMM 410 | Communication Law $^{1,2}$ | 3 |
| COMM 497 | Senior Capstone Seminar $^{1}$ | 3 |
| Subtotal |  | 15 |


| Journalism Requirements |  |  |
| :---: | :---: | :---: |
| COMM 235 | Introduction to Digital Design ${ }^{1}$ | 3 |
| or COMM 248 | Interactive Multimedia 1 |  |
| COMM 242 | Journalistic Writing ${ }^{1,2}$ | 3 |
| COMM 247 | Photojournalism ${ }^{1}$ | 3 |
| COMM 347 | New-Media Journalism ${ }^{1}$ | 3 |
| COMM 348 | Advanced Journalistic Writing and Reporting ${ }^{1}$ | 3 |
| COMM 354 | TV Studio Production ${ }^{1}$ | 3 |
| COMM 355 | TV Field Production ${ }^{1}$ | 3 |
| COMM 450 | Internship ${ }^{1}$ | 3-12 |
| Subtotal |  | 24-33 |
| Journalism Electives |  |  |
| Select 6 courses | east two must be at the 400 level) | 18 |

COMM 235 Introduction to Digital Design ${ }^{1}$ COMM $248 \quad$ Interactive Multimedia $1^{1}$


## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
COMMUNICATION - BS (2118)
Concentration in Converged Journalism (CVJR)
This program is effective as of Fall 2019.
Revised 10.28.2021
UCC 3.5.2019

## Recommended Four-Year Plan

Course Title Hours

First Year
Fall

| SUBJ 139 | University Seminar $^{1}{ }^{1}$ | 3 |
| :--- | :--- | ---: |
| ENGL 102 | Critical Writing | 3 |
| COMM 110 | Communication Concepts (SSI) | 3 |
| COMM 263 | Mass Media and Society | 3 |
| INDS 101 | FYRST Seminar | 1 |
| Creative \& Aesthetic | Inquiry (p. 1378) | 3 |
| Hours |  |  |
| Spring |  | $\mathbf{1 6}$ |
| Select one of the following: |  |  |
| COMM 200 |  | Civil Discourse: Theory \& Practice |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| ENGL 104 | Critical Reading | 3 |


| COMM 235 <br> or COMM 248 | Introduction to Digital Design or Interactive Multimedia 1 | 3 |
| :---: | :---: | :---: |
| MATH 117 | Quantitative Reasoning | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
|  | Hours | 15 |
| Second Year |  |  |
| Fall |  |  |
| COMM 242 | Journalistic Writing | 3 |
| SCI 101 | Science of Life | 3 |
| Converged Journalism Elective |  | 3 |
| Electives |  | 6 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 15 |
| Spring |  |  |
| COMM 247 | Photojournalism (S) | 3 |
| SCI 102 | Understanding the Physical World | 3 |
| Converged Journalism Elective |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Electives |  | 3 |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| COMM 310 | Communication Research Methods | 3 |
| COMM 347 | New-Media Journalism | 3 |
| Converged Journalism Elective |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Elective |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| COMM 355 | TV Field Production | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Converged Journalism Elective |  | 3 |
| Electives |  | 6 |
|  | Hours | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| COMM 410 | Communication Law | 3 |
| COMM 354 | TV Studio Production | 3 |
| Converged Journalism Elective |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 6 |
| Elective |  |  |
|  | Hours | 15 |
| Spring |  |  |
| COMM 497 | Senior Capstone Seminar | 3 |
| COMM 348 | Advanced Journalistic Writing and Reporting | 3 |
| COMM 450 | Internship | 3 |
| Converged Journalism Elective |  | 3 |
| Electives |  | 3 |
|  | Hours | 15 |
|  | Total Hours** | 121 |

1 Course offered in multiple subjects; cannot take course in first major subject.

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

2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/ ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UIdNTi4u)to declare a thread.

Major Code: 2118
Concentration Code: CVJR
Revised: 10-2019
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Communication, Bachelor of Science (BS) - Concentration in Digital Media Production

## Program Learning Outcomes

## Communication - Digital Media Production, BS

- Develop written skills in the visual, audio, and digital platforms to design effective messages.
- Develop production skills in the visual, audio, and digital platforms to design effective messages.
- Incorporate the design skills of needs assessment, message design, and evaluation when developing, producing, and evaluating a media project.


## Strategic Communication and Media Department, Overall

- Writing competency: Students will demonstrate the ability to write and present messages clearly and effectively.
- Context of the field: Students will understand the history, concepts, and principles of the field and critically apply these elements to current issues within the discipline.
- Career readiness: Students will demonstrate proficiency in message production required for entry-level positions in the field.
- Ethics and legal issues: Students will understand ethical and legal issues facing communicators in the 21 st century.


## Related Links

Communication - Digital Media Production, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/communication-digital-media-production/)

Strategic Communication and Media Department Page (https:// www.sru.edu/academics/colleges-and-departments/cob/departments/ communication/)

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

## Curriculum Guide <br> GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Title | Hours |
| :--- | ---: |
| Code | 42 |
| Rock Studies Requirements | $0-3$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | 51 |
| Major/Concentration Requirements | 26 |
| Electives |  |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |
| Subtotal |  |


| Integrated Inquiry |
| :--- |
| Creative and Aesthetic Inquiry |
| Select 3 Credits (p. 1378) |

Humanities Inquiry
Select 3 Credits (p. 1378) 3

Social Science Inquiry
Select 3 Credits (p. 1378) 3
Natural Sciences Inquiry
SCI $101 \quad$ Science of Life

| Physical Sciences Inquiry |
| :--- |
| SCI $102 \quad 3$ |

Subtotal 15

## Thematic Thread

| Select 12 Credits $(\mathrm{p} .1378)^{2}$ | 12 |
| :--- | :--- |

## Total Hours

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

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

| Code | Title |
| :--- | ---: |
| Complete one of the following: | Hours |
|  | $0-3$ |


| Meet required minimum SAT or ACT math score OR |  |  |
| :--- | :--- | :---: |
| ESAP 110 | Beginning Algebra |  |
| Total Hours | $\mathbf{0 - 3}$ |  |

## Computer Competency

Code Title Hours

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

## Major/Concentration Requirements

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Core Requirements |  |  |
| COMM 110 | Communication Concepts ${ }^{1,2}$ | 3 |
| COMM 263 | Mass Media and Society ${ }^{1}$ | 3 |
| COMM 310 | Communication Research Methods ${ }^{1,2}$ | 3 |
| COMM 410 | Communication Law ${ }^{1,2}$ | 3 |
| COMM 497 | Senior Capstone Seminar ${ }^{1}$ | 3 |
| Subtotal |  | 15 |


| Digital Media Fundamentals |  |  |
| :--- | :--- | ---: |
| COMM 235 | Introduction to Digital Design ${ }^{1}$ | 3 |
| COMM 248 | Interactive Multimedia 1 ${ }^{1}$ | 3 |
| COMM 254 | Video Production $^{1}$ | 3 |
| COMM 256 | Message Preparation $^{1}$ | 3 |
| Subtotal |  | 12 |

Emphasis
Select Emphasis from the following: 15

Multimedia Emphasis (p. 170)
Television Production Emphasis (p. 170)

## Digital Media Electives

Select 2 of the following (at least one course must be 300 level or 6 higher):

| COMM 205 | Audio Production $^{1}$ |
| :--- | :--- |
| COMM 231 | Introduction to Public Relations and IMC $^{1}$ |
| COMM 247 | Photojournalism $^{1}$ |
| COMM 258 | Interactive Multimedia 2 $^{1}$ |
| COMM 307 | Social Media $^{1}$ |


| COMM 334 | Publication Production $^{1}$ |
| :--- | :--- |
| COMM 335 | Digital Animation $^{1}$ |
| COMM 347 | New-Media Journalism $^{1}$ |
| COMM 350 | Editing for Video $^{1}$ |
| COMM 352 | Digital Radio Production $^{1}$ |
| COMM 354 | TV Studio Production $^{1}$ |
| COMM 355 | TV Field Production $^{0}$ |
| COMM 401 | Digital Imaging $^{1}$ |
| COMM 434 | Advertising Production $^{1}$ |
| COMM 459 | Issues in Communication Technologies $^{1}$ |
| COMM 480 | The Communication Age $^{1}$ |


| Subtotal |  | 21 |
| :--- | ---: | ---: |
| Internship |  |  |
| COMM 450 | Internship (3-12 credits) ${ }^{1}$ | 3 |
| Total Hours |  | $\mathbf{5 1}$ |

1 Course counts for $50 \%$ of Major requirements and Major GPA
2 A grade of ' $C$ ' or higher must be earned in these courses

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

| Multimedia Emphasis |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| COMM 258 | Interactive Multimedia $2^{1}$ | 3 |
| COMM 307 | Social Media ${ }^{1}$ | 3 |
| or COMM 347 | New-Media Journalism |  |
| COMM 359 | Interactive Multimedia $3{ }^{1}$ | 3 |
| COMM 401 | Digital Imaging ${ }^{1}$ | 3 |
| COMM 453 | Media Project Management ${ }^{1}$ | 3 |

1 Course counts for $50 \%$ of Major requirements and Major GPA

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


## Television Production Emphasis

| Code | Title | Hours |
| :--- | :--- | ---: |
| COMM 205 | Audio Production $^{1}$ | 3 |
| COMM 350 | Editing for Video $^{1}$ | 3 |
| COMM 354 | TV Studio Production $^{1}$ | 3 |
| COMM 355 | TV Field Production $^{1}$ | 3 |
| COMM 454 | Live Broadcast Production $^{1}$ | 3 |

1 Course counts for $50 \%$ of Major requirements and Major GPA

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


## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
COMMUNICATION - BS (2118)
Concentration in Digital Media Production (DIGM)
This program is effective as of Fall 2019.
Revised 10.28.2021
UCC 03.30.2021

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| COMM 110 | Communication Concepts (SSI) | 3 |
| COMM 263 | Mass Media and Society | 3 |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar | 1 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
|  | Hours | 16 |
| Spring |  |  |
| COMM 235 | Introduction to Digital Design | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Humanities Inquiry (p. 1378) |  | 3 |
|  | Hours | 15 |
| Second Year |  |  |
| Fall |  |  |
| COMM 248 | Interactive Multimedia 1 | 3 |
| COMM 254 | Video Production | 3 |
| SCI 101 | Science of Life | 3 |
| Electives |  | 6 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 15 |
| Spring |  |  |
| COMM 256 | Message Preparation | 3 |
| SCI 102 | Understanding the Physical World | 3 |
| Digital Media Emphasis Course |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Electives |  | 3 |
|  | Hours | 15 |

## Third Year

Fall
COMM $310 \quad$ Communication Research Methods 3
Digital Media Emphasis Course 3
Thematic Thread Requirement (p. 1378) 3

| Electives | 6 |
| :---: | :---: |
| Hours | 15 |
| Spring |  |
| Digital Media Emphasis Course | 3 |
| Thematic Thread Requirement (p. 1378) | 3 |
| Digital Media Elective | 3 |
| Electives | 6 |
| Hours | 15 |
| Fourth Year |  |
| Fall |  |
| COMM 410 Communication Law | 3 |
| Digital Media Emphasis Course | 3 |
| Thematic Thread Requirement (p. 1378) | 3 |
| Electives | 6 |
| Hours | 15 |
| Spring |  |
| COMM 497 Senior Capstone Seminar | 3 |
| COMM 450 Internship | 3 |
| $\begin{array}{cc}\text { COMM 453 } & \text { Media Project Management } \\ \text { or COMM 454 } & \text { or Live Broadcast Production }\end{array}$ | 3 |
| Digital Media Elective | 3 |
| Electives | 3 |
| Hours | 15 |
| Total Hours** | 121 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/
ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UldNTi4u)to declare a thread.

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

Major Code: 2118
Concentration Code: DIGM
Revised: 10-2019
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Communication, Bachelor of Science (BS) - Concentration in Health Communication

Health is a top concern for local, national, and global populations and the healthcare industry is growing. Slippery Rock University's Health Communication degree gives students the opportunity to place themselves at the forefront of health communication. Earning a Bachelor's in Health Communication demonstrates not only that graduates understand the nature and complexity of the healthcare
industry, but also that they possess the hands-on skills necessary to communicate effectively within this industry.

## Why Choose Health Communication?

One of the few Health Communication programs in the Greater Pittsburgh Region, students graduate not only with a firm understanding of the evergrowing healthcare industry, but also the skills and training necessary to prepare, craft, and deliver effective messages within the healthcare context. Career options include digital and social media content generation, public relations and integrated marketing, advertising, and more.

While majoring in Health Communication, you will have the opportunity to participate in a host of relevant student organizations and complete internships. Upon graduation, students have a portfolio of work that demonstrates a wide range of skills that are relevant to the healthcare industry, including but not limited to: social and digital media content creation, publication production, and research and analytics.

## What Will You Learn?

Working with professors with experience in their fields, the Health Communication Degree provides you with coursework centered on the health industry, as well as applied coursework in public relations, marketing, and advertising. When you choose to major in Health Communication, you benefit from a cutting-edge and modern interdisciplinary program with provides you with the skills and abilities necessary for a fruitful career as a communication professional in the healthcare industry.

## Careers In Health Communication

It is expected that the healthcare industry will continue to grow. As such, a major benefit of majoring in Health Communication is the plethora of opportunities available to you after graduating. The program's internship opportunities, in combination with the Department of Strategic Communication and Media's vast alumni network make the Health Communication program at SRU a great choice for students as they consider their future careers.

## Clubs \& Organizations

Rock PRSSA
Lambda Pi Eta

## Related Links

Communication: Health Communication, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/communication-healthcommunication/)

Strategic Communication and Media Department Page (https:// www.sru.edu/academics/colleges-and-departments/cob/departments/ strategic-communication-and-media/)

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

## CURRICULUM GUIDE

## GPA REQUIREMENT

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## SUMMARY*

| Title | Hours |
| :--- | ---: |
| Code | 42 |
| Rock Studies Requirements | $0-3$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | 51 |
| Major/Concentration Requirements | 27 |
| Electives |  |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

## ROCK STUDIES REQUIREMENTS

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar $^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |

Select one of the following: 3

| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |


| Subtotal | 15 |
| :--- | :--- |


| Integrated Inquiry |
| :--- |
| Creative and Aesthetic Inquiry |

Select 3 Credits (p. 1378) 3
Humanities Inquiry
Select 3 Credits (p. 1378) 3
Social Science Inquiry
Select 3 Credits (p. 1378) $3010 \mid$

| Natural Sciences Inquiry |
| :--- | :--- |
| SCI $101 \quad$ Science of Life |

Physical Sciences Inquiry
SCI $102 \quad$ Understanding the Physical World
Subtotal 15
Thematic Thread
Select 12 Credits $\left(\right.$ p. 1378) ${ }^{2}$
12

## Total Hours

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

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

| Code Title | Hours |
| :--- | ---: |
| Complete one of the following: | $0-3$ |
| Meet required minimum SAT or ACT math score OR |  |

ESAP 110
Beginning Algebra

## Total Hours

## Computer Competency

| Code | Title | Hours |
| :--- | :--- | ---: |
| Demonstrate "computer competency" by one of the following: | $0-3$ |  |
| Pass Computer Competency Exam OR |  |  |

## MAJOR/CONCENTRATION REQUIREMENTS

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Core Requirements |  |  |
| COMM 110 | Communication Concepts ${ }^{1,2}$ | 3 |
| COMM 263 | Mass Media and Society ${ }^{1}$ | 3 |
| COMM 310 | Communication Research Methods ${ }^{1,2}$ | 3 |
| COMM 410 | Communication Law ${ }^{1,2}$ | 3 |
| COMM 497 | Senior Capstone Seminar ${ }^{1,2}$ | 3 |
| Subtotal |  | 15 |

Health Communication Requirements
COMM 231 Introduction to Public Relations and IMC 3
COMM 242 Journalistic Writing 3
or COMM 256 Message Preparation
COMM 270 Strategic Health Communication 3
HCAM 230 US Healthcare Systems 3
HCAM 300 Healthcare Systems: Global Perspectives 3
and Analysis
COMM $303 \quad$ Communication and Media Ethics 3
or HCAM 275 Health Care Legal \& Ethical Foundations
or PHIL 325 Medical/Health Care Ethics
COMM 333 Writing for Public Relations and Integrated 3 Marketing Communication
COMM $370 \quad$ Health Communication Cases and 3

|  | Strategies |
| :--- | :--- | :--- |
| COMM 431 | PR and IMC Campaigns Capstone |

COMM 450 Internship 3

Subtotal

## Electives

Select 6 credits from the following (at lease one upper-division 6 course is required):

| COMM 228 | Principles of Creative Advertising |
| :--- | :--- |
| COMM 235 | Introduction to Digital Design |
| COMM 248 | Interactive Multimedia 1 |
| COMM 307 | Social Media |
| COMM 315 | Organizational Communication |


| COMM 336 | Media Relations and Crisis Communication |
| :--- | :--- |
| COMM 364 | Brand Management |
| COMM 407 | Social Media 2: Analytics and Strategies |
| COMM 415 | Persuasion |
| ENGL 327 | Healthcare Writing |
| HCAM 335 | Current Topics in Health Care |
| HLTH 311 | International Health |
| MRKT 230 | Principles of Marketing |
| Subtotal |  |
| Total Hours |  |

1 Course counts for $50 \%$ of Major requirements and Major GPA
2 A grade of ' C ' or higher must be earned in these courses

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


## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
COMMUNICATION - BS (2118)
Concentration in Health Communication (HECO)
This program is effective as of Summer 2021
Revised 07.14.2021
UCC 03.16.21
RECOMMENDED FOUR-YEAR PLAN

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| COMM 263 | Mass Media and Society | 3 |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar | 1 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| Social Science Inquiry (p. 1378) |  | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
|  | Hours | 16 |
| Spring |  |  |
| COMM 200 | Civil Discourse: Theory \& Practice | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| COMM 231 | Introduction to Public Relations and IMC | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
|  | Hours | 15 |


| Second Year |  |  |
| :---: | :---: | :---: |
| Fall |  |  |
| COMM 242 <br> or COMM 256 | Journalistic Writing or Message Preparation | 3 |
| HCAM 230 | US Healthcare Systems | 3 |
| SCI 101 | Science of Life | 3 |
| Electives |  | 6 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 15 |
| Spring |  |  |
| COMM 270 | Strategic Health Communication | 3 |
| SCI 102 | Understanding the Physical World | 3 |
| Health Communication Elective |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Elective |  | 3 |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| COMM 310 | Communication Research Methods | 3 |
| HCAM 300 | Healthcare Systems: Global Perspectives and Analysis | 3 |
| Health Communication Elective |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Elective |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| COMM 333 | Writing for Public Relations and Integrated Marketing Communication | 3 |
| COMM 303 or HCAM 275 | Communication and Media Ethics or Health Care Legal \& Ethical Foundations | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Electives |  | 6 |
|  | Hours | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| COMM 370 | Health Communication Cases and Strategies | 3 |
| COMM 333 | Writing for Public Relations and Integrated Marketing Communication | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Electives |  | 6 |
|  | Hours | 15 |
| Spring |  |  |
| COMM 410 | Communication Law | 3 |
| COMM 431 | PR and IMC Campaigns Capstone | 3 |
| COMM 450 | Internship | 3 |
| COMM 497 | Senior Capstone Seminar | 3 |
| Elective |  | 3 |
|  | Hours | 15 |
|  | Total Hours** | 121 |

[^6]courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 2118
Concentration Code: HECO
Revised: 10.04.2021

## Communication, Bachelor of Science (BS) - Concentration in Integrated Marketing Communication <br> Program Learning Outcomes <br> Communication - Integrated Marketing Communication, BS

- Produce appropriately targeted media materials in a variety of formats.
- Understand the role of public relations, advertising, and other promotional marketing tools in the integrated marketing communication mix.
- Demonstrate the ability to develop a research-based strategic integrated marketing communication plan tailored to a designated consumer profile.


## Strategic Communication and Media Department, Overall

- Writing competency: Students will demonstrate the ability to write and present messages clearly and effectively.
- Context of the field: Students will understand the history, concepts, and principles of the field and critically apply these elements to current issues within the discipline.
- Career readiness: Students will demonstrate proficiency in message production required for entry-level positions in the field.
- Ethics and legal issues: Students will understand ethical and legal issues facing communicators in the 21 st century.


## Related Links

Communication - Integrated Marketing Communication, BS Program Page (https://www.sru.edu/academics/majors-and-minors/communication-integrated-marketing/)

Strategic Communication and Media Department Page (https:// www.sru.edu/academics/colleges-and-departments/cob/departments/ communication/)

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

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Code | Title | Hours |
| :---: | :---: | :---: |
| Rock Studies Requirements |  | 42 |
| Other Basic Requirements |  | 0-3 |
| Computer Competency |  | 0-3 |
| Major/Concentration Requirements |  | 57 |
| Electives |  | 20 |
| * All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. |  |  |
| Rock Studies Requirements |  |  |
| Code The Rock | Title | Hours |
|  |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Sciences Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Sciences Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |
| Thematic Thread |  |  |
| Select 12 Credits (p.1378) ${ }^{2}$ |  | 12 |
| Total Hours |  | 42 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 Categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

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

| Code Title | Hours |
| :--- | ---: |
| Complete one of the following: | $0-3$ |
| Meet required minimum SAT or ACT math score OR |  |

ESAP 110
Beginning Algebra

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

## Major/Concentration Requirements

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

| Code | Title | Hours |
| :--- | :--- | ---: |
| Core Requirements |  |  |
| COMM 110 | Communication Concepts $^{1,2}$ | 3 |
| COMM 263 | Mass Media and Society $^{1}$ | 3 |
| COMM 310 | Communication Research Methods $^{1,2}$ | 3 |
| COMM 410 | Communication Law $^{1,2}$ | 3 |
| COMM 497 | Senior Capstone Seminar $^{1,2}$ | 3 |
| Subtotal |  | 15 |

## IMC Requirements

| COMM 231 | Introduction to Public Relations and IMC ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| COMM 256 | Message Preparation ${ }^{1}$ | 3 |
| COMM 307 | Social Media | 3 |
| COMM 332 | Case Studies in Public Relations and Integrated Communication ${ }^{1}$ | 3 |
| COMM 333 | Writing for Public Relations and Integrated Marketing Communication ${ }^{1,2}$ | 3 |
| MRKT 230 | Principles of Marketing | 3 |
| MRKT 333 | Consumer Behavior ${ }^{1}$ | 3 |
| MRKT 334 | Advertising Management ${ }^{1}$ | 3 |
| COMM 364 | Brand Management ${ }^{1}$ | 3 |
| COMM 407 | Social Media 2: Analytics and Strategies ${ }^{1}$ | 3 |
| COMM 431 | PR and IMC Campaigns Capstone ${ }^{1}$ | 3 |
| Subtotal |  | 33 |
| Electives |  |  |
| Select six credits from the following: |  | 6 |
| COMM 228 | Principles of Creative Advertising ${ }^{1}$ |  |
| COMM 235 | Introduction to Digital Design ${ }^{1}$ |  |
| COMM 248 | Interactive Multimedia $1{ }^{1}$ |  |
| COMM 254 | Video Production ${ }^{1}$ |  |
| COMM 334 | Publication Production ${ }^{1}$ |  |
| MRKT 338 | E-Commerce ${ }^{1}$ |  |
| COMM 347 | New-Media Journalism ${ }^{1}$ |  |
| COMM 405 | Global Media ${ }^{1}$ |  |
| COMM 434 | Advertising Production ${ }^{1}$ |  |


| COMM 459 |  | Issues in Communication Technologies ${ }^{1}$ |
| :--- | :--- | ---: |
| Subtotal |  | 6 |
| Internship |  |  |
| COMM 450 <br> or MRKT 450 | Internship $^{1}$ | 3 |

Total Hours 57

1 Course counts for $50 \%$ of Major requirements and Major GPA
2 A grade of ' $C$ ' or higher must be earned in these courses

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


## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
COMMUNICATION - BS (2118)
Concentration in Integrated Marketing (IMRK)
This program is effective as of Fall 2020
Revised 10.28.2021
UCC 03.05.20

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| COMM 110 | Communication Concepts (SSI) | 3 |
| COMM 263 | Mass Media and Society | 3 |
| Creative and Aesthetic Inquiry |  | 3 |
| INDS 101 | FYRST Seminar | 1 |
|  | Hours | 16 |
| Spring |  |  |
| COMM 200 | Civil Discourse: Theory \& Practice | 3 |
| ENGL 104 | Critical Reading | 3 |
| COMM 231 | Introduction to Public Relations and IMC | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Humanities Inquiry |  | 3 |
|  | Hours | 15 |
| Second Year |  |  |
| Fall |  |  |
| COMM 256 | Message Preparation | 3 |
| $\begin{aligned} & \text { SCI } 101 \\ & \quad \text { or SCI } 102 \end{aligned}$ | Science of Life or Understanding the Physical World | 3 |
| IMC Elective |  | 3 |



[^7]Major Code: 2118
Concentration Code: IMRK
Revised: 08.27.20
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Communication, Bachelor of Science (BS) - Concentration in Public Relations

## Program Learning Outcomes

## Communication - Public Relations, BS

- Produce written communication tactics to communicate with various publics.
- Employ social media, multimedia and graphic design technologies to communicate with publics.
- Demonstrate the ability to develop a research-based strategic communication plan tailored to a specific target public.


## Strategic Communication and Media Department, Overall

- Writing competency: Students will demonstrate the ability to write and present messages clearly and effectively.
- Context of the field: Students will understand the history, concepts, and principles of the field and critically apply these elements to current issues within the discipline.
- Career readiness: Students will demonstrate proficiency in message production required for entry-level positions in the field.
- Ethics and legal issues: Students will understand ethical and legal issues facing communicators in the 21 st century.


## Related Links

Communication - Public Relations, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/communication-publicrelations/)

Strategic Communication and Media Department Page (https:// www.sru.edu/academics/colleges-and-departments/cob/departments/ communication/)

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

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirements | $0-3$ |


| Computer Competency | $0-3$ |
| :--- | ---: |
| Major/Concentration Requirements | 54 |
| Electives | 23 |

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


## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |
| :---: | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |

Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378)

## Humanities Inquiry

Select 3 Credits (p. 1378) 3

| Social Science Inquiry |  |
| :--- | :--- |
| Select 3 Credits (p. 1378) |  |

Natural Sciences Inquiry
SCI $101 \quad$ Science of Life
Physical Sciences Inquiry
SCI $102 \quad 3$

| Subtotal | 15 |
| :--- | :--- |

## Thematic Thread

| Select 12 Credits $(\mathrm{p} .1378)^{2}$ | 12 |
| :--- | :--- |
| Total Hours | 42 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 Categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

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

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra | $\mathbf{0 - 3}$ |
| Total Hours |  |  |

## Computer Competency

| Code | Title | Hours |
| :---: | :---: | :---: |
| Demonstrate "computer competency" by one of the following: |  | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one institution: | ollowing at SRU or another post-secondary |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |
| Major/Concentration Requirements |  |  |
| - 27 major credits must be taken at SRU or PASSHE |  |  |
| - 27 major credits must be taken at the 300 level or above |  |  |


| Code | Title | Hours |
| :--- | :--- | ---: |
| Communication Core Requirements |  |  |
| COMM 110 | Communication Concepts ${ }^{1,2}$ | 3 |
| COMM 263 | Mass Media and Society $^{1}$ | 3 |
| COMM 310 | Communication Research Methods $^{1,2}$ | 3 |
| COMM 410 | Communication Law $^{1,2}$ | 3 |
| COMM 497 | Senior Capstone Seminar $^{1}$ | 3 |
| Subtotal |  | 15 |

## Public Relations Requirements

| COMM 231 | Introduction to Public Relations and IMC ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| COMM 242 | Journalistic Writing ${ }^{1,2}$ | 3 |
| COMM 307 | Social Media ${ }^{1}$ | 3 |
| COMM 317 | Topics in Global and Intercultural Communication | 3 |
| COMM 332 | Case Studies in Public Relations and Integrated Communication ${ }^{1}$ | 3 |
| COMM 333 | Writing for Public Relations and Integrated Marketing Communication ${ }^{1,2}$ | 3 |
| COMM 431 | PR and IMC Campaigns Capstone ${ }^{1}$ | 3 |
| COMM 450 | Internship ${ }^{1}$ | 3 |
| Subtotal |  | 24 |

Message Production Tactics
Select three courses of the following (at least one course must be 9
300 level or higher)

| COMM 235 | Introduction to Digital Design $^{1}$ |
| :--- | :--- |
| COMM 247 | Photojournalism $^{1}$ |
| COMM 248 | Interactive Multimedia 1 $^{1}$ |
| COMM 254 | Video Production $^{1}$ |
| COMM 256 | Message Preparation $^{1}$ |
| COMM 258 | Interactive Multimedia 2 $^{1}$ |
| COMM 334 | Publication Production $^{1}$ |
| COMM 347 | New-Media Journalism $^{1}$ |
| COMM 401 | Digital Imaging |
| COMM 434 | Advertising Production |
| PR Professional Practice |  |
| Select two classes from the following: |  |

COMM $228 \quad$ Principles of Creative Advertising

| COMM 270 | Strategic Health Communication |
| :--- | :--- |
| COMM 312 | Argumentation |
| COMM 315 | Organizational Communication |
| COMM 318 | Professional Presentation |
| COMM 336 | Media Relations and Crisis Communication |
| COMM 370 | Health Communication Cases and <br> Strategies |
| COMM 407 | Social Media 2: Analytics and Strategies |
| COMM 415 | Persuasion |
| HEMT 112 | Introduction to HEMT |
| HEMT 210 | Contemporary Travel and Tourism |
| MGMT 351 | Organizational Behavior |
| MGMT 354 | Human Resources Management |
| MRKT 230 | Principles of Marketing |
| PCRM 204 | Environmental Communication |
| or COMM 204 | Environmental Communication |
| PCRM 347 | Interpretive Methods and Programming |
| SPMT 194 | Introduction to Sport Management |
| SPMT 301 | The Fan Experience |

Total Hours
1 Course counts for 50\% of Major and Major GPA
2 A grade of ' $C$ ' or higher must be earned in these courses

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


## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
COMMUNICATION - BS (2118)
Concentration in Public Relations (PUBR)
This program is effective as of Summer 2022
Revision date: 06.03.2022
UCC 03.01. 2022
Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | :---: |
| First Year |  |  |
| Fall | University Seminar ${ }^{1}$ | 3 |
| SUBJ 139 | Critical Writing $^{\text {ENGL 102 }}$ | Communication Concepts (SSI) |
| COMM 110 | Mass Media and Society | 3 |
| COMM 263 | 3 |  |
| Creative and Aesthetic Inquiry | 3 |  |


| INDS 101 | FYRST Seminar | 1 |
| :---: | :---: | :---: |
|  | Hours | 16 |
| Spring |  |  |
| COMM 200 | Civil Discourse: Theory \& Practice | 3 |
| ENGL 104 | Critical Reading | 3 |
| COMM 231 | Introduction to Public Relations and IMC | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Humanities Inquiry |  | 3 |
|  | Hours | 15 |
| Second Year |  |  |
| Fall |  |  |
| COMM 235 | Introduction to Digital Design | 3 |
| Message Production \& Preparation Elective |  | 3 |
| Natural Sciences Inquiry |  | 3 |
| Electives |  | 6 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 15 |
| Spring |  |  |
| COMM 242 | Journalistic Writing | 3 |
| Message Production \& Preparation Elective |  | 3 |
| Physical Sciences Inquiry |  | 3 |
| Thematic Thread Elective |  | 3 |
| Elective |  | 3 |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| COMM 310 | Communication Research Methods | 3 |
| COMM 332 | Case Studies in Public Relations and Integrated Communication | 3 |
| Required Business Course |  | 3 |
| Thematic Thread Elective |  | 3 |
| Elective |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| COMM 307 | Social Media | 3 |
| COMM 333 | Writing for Public Relations and Integrated Marketing Communication | 3 |
| Thematic Thread Elective |  | 3 |
| Electives |  | 6 |
|  | Hours | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| COMM 410 | Communication Law | 3 |
| COMM 312 or COMM 415 | Argumentation or Persuasion | 3 |
| Thematic Thread Elective |  | 3 |
| Electives |  | 6 |
|  | Hours | 15 |
| Spring |  |  |
| COMM 497 | Senior Capstone Seminar | 3 |
| COMM 431 | PR and IMC Campaigns Capstone | 3 |
| Electives |  | 6 |



Major Code: 2118
Concentration Code: PUBR
Revised: 10-2019
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Communication, Minor

The Minor in Communication gives students access to courses in communication theory, strategic communication, and media production. It is the perfect complement to other Slippery Rock University programs of study. Students majoring in sports management, park and resource management, and business are just some of those who find a second home in the Department of Strategic Communication and Media.

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

## Related Links

Communication, Minor Program Page (https://www.sru.edu/academics/ majors-and-minors/communication-studies/)

Strategic Communication and Media Department Page (https:// www.sru.edu/academics/colleges-and-departments/cob/departments/ communication/)

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

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.0 or higher

## Minor Requirements

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Communication Courses |  |  |
| COMM 110 | Communication Concepts ${ }^{1}$ | 3 |
| Required Communication Diversity Course |  |  |
| Select one of the following: |  | 3 |
| COMM 217 | Intercultural Communication |  |
| COMM 405 | Global Media |  |
| Required Research Course |  |  |
| Select one of the following: |  | 3 |
| COMM 310 | Communication Research Methods ${ }^{1}$ |  |
| HIST 205 | The Historian's Craft |  |
| HLTH 406 | Program Planning and Evaluation |  |
| MRKT 430 | Marketing Research |  |
| POLS 310 | Research Methods |  |
| PSYC 232 | Psychological Science II: Statistical Applications |  |
| SEFE 370 | Educational Measurements, Assessment and Evaluation |  |
| SOWK 318 | Research Methods |  |
| SPMT 499 | Sport Management Research Methods |  |
| Electives |  |  |
| Communication Elective (300 or 400 level) |  | 3 |
| Communication Elective (any level) |  | 3 |
| Communication Elective (any level) |  | 3 |
| Total Hours |  | 18 |

1 Must have a " $C$ " or better in this course.

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


## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN COMMUNICATION (13A)
This program is effective as of Summer 2021
Revised 05.27.21
UCC: 03.16.2021

## Global and Intercultural Communication, Certificate

Please click on "Curriculum Guide" to see certificate requirements.
As issues of diversity and cross-cultural exchanges become a larger part of our personal and professional interactions, there is an increasing need to expand our knowledge and understanding of global communication
practices. The Certificate in Global and Intercultural Communication will help students in all majors become ethical and inclusive communicators in the workplace and beyond.

The certificate consists of 12 credits with 6-9 credits in communication and $3-6$ credits in selected courses from the fields of marketing, political science, history, cultural studies, or languages to complement students' professional aspirations or other academic interests.

The Certificate in Global and Intercultural Communication is available to students in all majors.

## The Certificate in Global and Intercultural Communication is available to students in all majorsRelated Links

Global and Intercultural Communication, certificate Page
Strategic Communication and Media Department Page (https:// www.sru.edu/academics/colleges-and-departments/cob/departments/ strategic-communication-and-media/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)
CURRICULUM GUIDE
GPA REQUIREMENT
Overall GPA: 2.0 or higher

## CERTIFICATE REQUIREMENTS

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required |  |  |
| Choose two or three courses (6-9 credits): |  | 6-9 |
| COMM 217 | Intercultural Communication |  |
| COMM 317 | Topics in Global and Intercultural Communication |  |
| COMM 405 | Global Media |  |
| Subtotal |  | 6-9 |
| Electives |  |  |
| Choose one or two courses (3-6 credits): |  | 3-6 |
| ARAB XXX | Any Arabic Course |  |
| CHIN XXX | Any Chinese Course |  |
| FREN XXX | Any French Course |  |
| HIST 153 | Contemporary World History |  |
| HIST 462 | The Contemporary Middle East |  |
| HIST 463 | Israel-History, State and Society |  |
| JAPN XXX | Any Japanese Course |  |
| KORN XXX | Any Korean Course |  |
| MRKT 303 | Issues in Global Business |  |
| MRKT 437 | International Marketing |  |
| PHIL 140 | World Religions |  |
| POLS 103 | International Relations |  |
| POLS 220 | Foreign Policy |  |
| SPAN XXX | Any Spanish Course |  |
| Subtotal |  | 3-6 |

Total Hours

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


## ADDITIONAL CERTIFICATE REQUIREMENT

Students must complete at least 12 credit hours from SRU

## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
Certificate in Global and Intercultural Communication (2GIC)
Effective Summer 2021
Revised 11.04.2021
UCC 03.30.2021

## College of Education

## Dean's Office Staff

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## Departments

- Counseling \& Development (p. 181)
- Elementary Education/Early Childhood Education (p. 183)
- Physical and Health Education (p. 200)
- Secondary Education/Foundations of Education (p. 225)
- Special Education (p. 255)


## Teacher Education Information

The following link takes you to the Four Phases of Teacher Education (https://www.sru.edu/academics/colleges-and-departments/coe/ four-phases-of-teacher-education/) page, which provides procedures and requirements for such things as Admissions to Candidacy (including testing, GPA, and clearance requirements), Application for Field Experiences and Student Teaching, and application for PA Teacher Certification

## Counseling \& Development

| Chair | Secretary | Location | Department <br> Phone |
| :--- | :--- | :--- | :--- |
| Dr. Molly | TBD | 114 Carruth- | 724-738-2035 |
| Mistretta |  | Rizza Hall |  |

Department Web Site URL (https://www.sru.edu/academics/colleges-and-departments/coe/departments/counseling-and-development/)

## The Rock Difference

The Department of Counseling and Development trains practitioners to deliver quality services to clients and students and to be reflective, ethical and competent in serving their diverse community. Department programs include Clinical Mental Health Counseling, Student Affairs in Higher Education, College Counseling and School Counseling. Our students are prepared according to professionally accepted standards and, where appropriate, for licensure / certification in their field of study.

The Student Counseling Center is also part of the Department of Counseling and Development. For information regarding the Student Counseling Center see the Student Counseling Center link.

## Faculty

Christopher Cubero
Associate Professor
Counseling \& Development
Ph.D., East Carolina University
M.S., East Carolina University
B.S., Penn State University

## Jennifer Culver

Assistant Professor
Counseling \& Development
Ph.D., University of Missouri
M.A., Indiana Wesleyan University
B.A., The College of Wooster

## Natalie Drozda

Assistant Professor
Counseling \& Development
Ph.D., Duquesne University
M.A., Slippery Rock University
B.A., University of Illinois

## Alison DuBois

Instructor
Counseling \& Development
Ph.D., Duquesne University
M.E.D., Westminster College
B.A., John Carroll University

## Jane Hale

Associate Professor
Counseling \& Development
Ph.D., Duquesne University
M.S., Youngstown State University
B.A., Westminster College

## Michael Ignelzi

Professor
Counseling \& Development
Ed.D., Harvard University
M.A., Ohio State University
B.A., University of California at Riverside

Stacy Jacob
Associate Professor
Counseling \& Development
Ph.D., Indiana University
M.A., University of New Orleans
B.A., Austin College

John Mathe
Assistant Professor
Counseling \& Development
Ph.D., Duquesne University
M.A., Slippery Rock University
B.S., Robert Morris University

## Kenneth Messina

Associate Professor
Counseling \& Development
Ph.D., Duquesne University
M.A., Slippery Rock University of PA
B.A., Waynesburg College

## Molly Mistretta

Assistant Professor
Counseling \& Development
Ph.D., University of Pittsburgh
M.S., Indiana University
B.A., Westminster College

Melissa Nard-Mitchell
Associate Professor
Counseling \& Development
D.Psy., Nova Southeastern University
M.S., Nova Southeastern University
B.A., Washington and Jefferson College

## Jodi Sindlinger

Assistant Professor
Counseling \& Development
Ph.D., Duquesne University
M.A., Slippery Rock University of PA
B.A., Pennsylvania State University

## Margaret Spierto

nstructor
Counseling \& Development
M.A., Slippery Rock University
B.S., Geneva College

Maranda Stack
nstructor

## Counseling \& Development

M.S., Chatham University
B.A., Westminster College

## Donald Strano

Assistant Professor
Counseling \& Development
Ed.D., Texas Tech University
M.Ed., Texas Tech University
B.A., Pennsylvania State University

## Courses

## CDEV 139 - University Seminar

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

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## CDEV 190-Experimental

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

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## CDEV 195 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## CDEV 198 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CDEV 201 - Interpersonal and Group Dynamics

Interpersonal behavior in small groups, with attention to group structure, individual factors, communication, and techniques. Treatment of leadership, group pressures, the effect of the group on personality, and group aims.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## CDEV 248 - Human Development and Education

A study of the various stages of physical, intellectual, and emotional development, from pre-school age through adolescence, with reference to the effects upon the learning and educational process.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): 21 st Century Healthcare, Education, Fighting
Social Problems, Healthy Body, Mind \& Environment, Transfer Thread Completion Course, Well-Being of Children and Youth, Who Do We Think We Are

## CDEV 249 - Child Development

A study of the various stages of development from conception to adolescence. Attention is directed to the physical, emotional, intellectual and social development of the child.

## Credits: 3

Term(s) Typically Offered: Offered as Needed

## CDEV 250 - Adolescent Psychology

A study of the physical, mental and emotional development during the changes from childhood and the influence on attitudes and behavior of the age group in relation to the theories. Psychological principles are applied to the problems of family, community and school adjustment, as well as to the development of the persons.

## Credits: 3

Term(s) Typically Offered: Offered as Needed

## CDEV 251 - Mental Health in America

What is mental health? How does American society view mental illness? What systems are there to support people who struggle with mental health concerns? Do these systems work? How and why does someone get diagnosed? This course will explore all these questions and more as students will explore mental health in the context of American society past and present with implications for the future. Current issues and trends in mental health and wellness will be explored including the current mental health system in America, advocacy for mental health issues and treatment, stigma in society related to mental health, how issues of diversity impact mental health and treatment, and how the topic of mental health impacts individuals and society.

## Credits: 3

Thematic Thread(s): 21 st Century Healthcare, Building a Healthy Society, Body and Self, Demystifying Crime \& Justice, Education, Gender and Diversity, Transfer Thread Completion Course, Well-Being of Children and Youth

## CDEV 290 - Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CDEV 295 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## CDEV 298 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CDEV 390-Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CDEV 395 - Undergraduate Workshops

Special topics of interest to undergraduates and selected community members. A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CDEV 398 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CDEV 490 - Independent Study

A program of independent work con-ducted by a student who has demonstrated academic proficiency. Prerequisite: Permission of the instructor, advisor, departmental chairperson, and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings.Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CDEV 495 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CDEV 498 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Elementary Education/Early Childhood Education

| Chair | Secretary | Location | Department <br> Phone |
| :--- | :--- | :--- | :--- |
| Dr. Michelle | Debbie Reep | 104 McKay <br> Education | $724-738-2042$ |
| Amodei |  | Building |  |

Department Web Site URL (https://www.sru.edu/academics/colleges-and-departments/coe/departments/elementary-education-/-earlychildhood/)
Department Fact Sheet URL (https://www.sru.edu/documents/programs/ factsheets/undergraduate/eled-fs.pdf)

## The Rock Difference

The Department of Elementary/Early Childhood Education's mission statement is aligned with and reflective of the College mission, but is designed to specify the particular goals of the program. The goal of the Elementary Education/Early Childhood Department is to equip our graduates to meet the professional challenges of classrooms and school communities for the 21 st century.

The Department of Elementary Education/Early Childhood offers an undergraduate certification program in Early Childhood Education (PK-4). Prospective early childhood teachers take balanced course work that provides a broad educational experience. Included are liberal studies courses as well as both professional and elementary/ early childhood education courses. Students (in this certification area) are required to complete field observation hours within course context with young children in a diverse setting. This early experience is followed by numerous field experiences in early childhood and elementary classrooms at the sophomore and junior year as well as student teaching during the senior year. Students are offered the opportunity to complete part of their student teaching in an international or urban setting. The primary objective of the elementary/early childhood education program is to develop competent, caring and effective state-of-the-art teachers, prepared to teach each child to high standards.

## Multiple Certification Programs

While not required, it is strongly recommended that students complete a second area of certification, a minor, or an area of concentration in addition to elementary education. Our students have completed additional certifications in early childhood education, special education, environmental education and modern languages. Students have also minored in many areas including dance, history, math and Spanish. Students seeking multiple certifications should declare their intent as early as possible in their academic career and recognize that this may require additional credits beyond those required for the baccalaureate degree. Students seeking multiple certifications may expect to complete student teaching experiences in each of the certification areas. We also
offer a Letter of Completion for teaching online and an international teaching track. Specific requirements for additional certification, minors, and areas of concentration are available from advisers and the Department of Elementary Education/Early Childhood office, room 104 McKay Education Building. Students are encouraged to work closely with their academic adviser in choosing and declaring these other options.

## Post-Baccalaureate Programs

Persons possessing a bachelor's degree may apply for admission to the post-baccalaureate program leading to early childhood education certification. This program is designed for those who have completed degree requirements in a non-education major or who desire a second certification after graduation.

The post-baccalaureate program includes up to 80 credits of coursework for non-licensed applications, with an accelerated program for middle-level or special education certified applicants and a required practicum. The practicum must be completed in an elementary/early childhood classroom under the supervision of a university faculty member, even if the student is certified in another area.

## Faculty

Monique Alexander
Associate Professor
Elementary Ed/Early Childhood
Ph.D., Pennsylvania State University
M.Ed., Teacher's College of Columbia University
B.A., Bucknell University

## Michelle Amodei

Associate Professor
Elementary Ed/Early Childhood
Ed.D., Indiana University of Pennsylvania
M.S., Duquesne University
B.S., Indiana University of Pennsylvania

## Richard Cavett

Instructor
Elementary Ed/Early Childhood

## Carmine Decarlo

Instructor
Elementary Ed/Early Childhood
Ph.D., Pennsylvania State University
M.S., Edinboro University
B.A., Mercyhurst College

## Nicole Fuchs

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M.A., University of Pittsburgh
B.S., University of Pittsburgh

## Rose Heilman-Houser

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M.A., Indiana University of Pennsylvania
B.A., Indiana University of Pennsylvania

## Sara Isacco

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Elementary Ed/Early Childhood
M.Ed., Slippery Rock University
B.S., Slippery Rock University

## Laura Kelley

Associate Professor
Elementary Ed/Early Childhood
M.A., Marian University
B.A., DePauw University

## Elizabeth LaGamba

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Elementary Ed/Early Childhood
Ed.D., University of Pittsburgh
M.Ed., Slippery Rock University
B.A., John Carroll University

## Frances McAleer

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M.Ed., Temple University
B.S.Ed., West Chester University

## Enoh Nkana

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Ph.D., Andrews University
M.Ed., Southern Adventist University
B.A., Southern Adventist University

## Diane Papa

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B.S., Slippery Rock University

Stephen Parks
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M.Ed., University of Pittsburgh
B.S., University of Pittsburgh

## James Preston

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M.Ed., Indiana University of Pennsylvania
B.Ed., Indiana University of Pennsylvania

## Robert Snyder

Professor
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Ph.D., University of Pittsburgh
M.Ed., Slippery Rock University
B.S., Slippery Rock University

## Laura Strong

Instructor
Elementary Ed/Early Childhood
D.Ed., Indiana University
M.A., Indiana University
B.A., Cameron University

## Sara Tours

Assistant Professor
Elementary Ed/Early Childhood

Ph.D., Florida State University
M.S., Florida State University
B.S., Florida State University

## Mary Walsh

Associate Professor
Elementary Ed/Early Childhood
Ph.D., University of Pittsburgh
M.Ed., University of Pittsburgh
B.A., University of Pittsburgh

## Deborah Wells

Professor
Elementary Ed/Early Childhood
Ph.D., Arizona State University
M.Ed., Auburn University
B.S., Auburn University
B.A., Auburn University

## HyeRyung Won

Assistant Professor
Elementary Ed/Early Childhood

## Linda Zane

Professor
Elementary Ed/Early Childhood
Ed.D., Duquesne University
M.A., University of Pittsburgh
B.S., University of Pittsburgh

## Programs

All first-year students who enter SRU in the Summer and Fall terms of 2019 and after will follow Rock Studies. Students who entered SRU before Spring 2019 will follow Liberal Studies. All new transfer students beginning Summer 2019 and after will follow Liberal Studies. We anticipate that transfer students will begin to enter under Rock Studies during the Summer/Fall term of 2021.

## Majors

- Early Childhood Education (PK-4), Bachelor of Science in Education (BSED) (p. 193)
- Early Childhood Education (PK-4), Bachelor of Science in Education (BSED) - Concentration in International Education (p. 196)
- Early Childhood Education (PK-4)/Special Education (PK-12), Bachelor of Science in Education (BSED) (p. 261)
- Early Childhood Education (PK-4)/Special Education (PK-12), Bachelor of Science in Education (BSED) - Concentration in International Education (p. 265)


## Minors

- Global Education, Minor (p. 199)


## Courses

## ELEC 100 - Early Childhood Education Theory \& Practice

This course is designed to introduce students to early childhood education with emphasis on historical and contemporary perspectives, theories, practice and current trends and developments. Early childhood environments for children from birth through nine years of age will be studies and various curricula materials will be reviewed. Examination of the student's personal qualities in relationship to expectations of the field is addressed throughout the course (COE assessment of dispositions). Students will be exposed to children within a variety of early childhood settings via videotaped observations of children and classrooms.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Education, Transfer Thread Completion Course

## ELEC 139 - University Seminar

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

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## ELEC 190-Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
ELEC 195 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## Credits: 1-6

Term(s) Typically Offered: Offered as Needed

## ELEC 198 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ELEC 200-Child Development Typical

This course will provide a critical overview of key aspects of child development (physical, psychosocial, and cognitive) from theories and research that span conception to the early school years (birth to age 9). Important contexts that shape children's development will also be a major focus of this course, such as family, school, community, socioeconomic, and policy influences.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Transfer Thread Completion Course, Well-Being of Children and Youth

## ELEC 230 - Field-Based Child Development Typical

Candidates will connect theory to practice in this course. Both typical and atypical child development will be studied in-depth through observations in a variety of education and education-related settings for children birth through grade four.

Prerequisites: ELEC $100^{\text {D }}$ and ELEC $200^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Corequisite(s): ELEC 237 and ELEC 281
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1 or Freshman 2 may not enroll.
Enrollment limited to students in the College of Education college.
ELEC 237 - ELL Strategies and Practice for Early Childhood Education This course will focus on the development of competencies and skills needed to effectively teach students whose first language is not English so that teacher candidates can accommodate and adapt instruction and assessments for Pre-K through Grade 4 English Language Learners (ELLs) In addition, this course is designed to provide pre-service early childhood educators with the scientific study of psycholinguistic phenomena in the study of language acquisition, to understand development of typical and atypical oral language in young children from birth to age 9, and to understand cultural and familial influences on language and literacy.

Prerequisites: ELEC $100^{\mathrm{D}}$ and ELEC $200^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Corequisite(s): ELEC 230 and ELEC 281
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1 or Freshman 2 may not enroll.

## ELEC 238 - Literacy Practices for the Emergent Learner, PK-1

Through a blend of theory and practice, this course explores researchbased instruction for the emergent literacy learner (PreK-grade 1), including the relationship between language development and literacy, instructional activities to help children become competent users of oral language, reading and writing processes, creation of a literate environment, and cultural and familial influences on language and literacy.

Prerequisites: ELEC $100^{\mathrm{D}}$ and ELEC $200^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Corequisite(s): ELEC 285
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

ELEC 281 - Family and Community Diversity and Partnerships
This course is designed to acquaint the teacher candidate in early childhood education to the theories, practices, skills, and knowledge of home, school, and community relationships, building towards home and school partnerships. The focus of this course is developing a thorough understanding of diverse contexts and ethnicities that helps educators of young children strengthen the bonds between home, school and community.

Prerequisites: ELEC $100^{\mathrm{D}}$ and ELEC $200^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Corequisite(s): ELEC 230 and ELEC 237
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
ELEC 285 - Integrating Creative Expression through the Arts
This course will identify basic elements, principals, related concepts, and vocabulary of the creative and performing arts. The creative arts exist as vehicles through which we can communicate the very essence of expressive language. Students will be introduced to various media, lesson planning, and ways of integrating the arts into planning academic and multicultural curricula for PreK-4 classrooms. This course will serve as a foundation for integrating arts across the curriculum.

Prerequisites: ELEC $100^{\mathrm{D}}$ and ELEC $200^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Corequisite(s): ELEC 238
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## ELEC 290 - Experimental

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

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## ELEC 295 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## ELEC 298-Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ELEC 301 - Math/Science Teaching Lab

Provides students with a myriad of opportunities to: identify and develop basic teaching skills, design and implement math and science lessons for peers and school-aged children, and reflect/analyze lessons in light of science and math education research findings. Throughout the course, candidates will have the opportunity to actually experience classroom teaching when possible.

Prerequisites: ELEC $281^{\text {D }}$ and (ELEC $288^{\text {D }}$ or ELEC $304^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$.
Corequisite(s): ELEC 342
Credits: 1
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## ELEC 306 - Early Childhood Education I

Research, history, philosophy, current trends and observations with emphasis on the nature and nurture of the young child from birth through third grade.

Prerequisites: ELEC 200 (may be taken concurrently) ${ }^{\text {D }}$ and ELEC $248^{* D}$ and CDEV 342 (may be taken concurrently) ${ }^{\mathrm{D}}$ (may be taken concurrently).
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ELEC 308 - Folk Literature and Storytelling

Combines a study of traditional literature with practice in the best methods of presenting it orally. Oral presentations include a preschool story hour, folk tale, and myth or literary fairy tale. The course also emphasizes the importance of puppetry in education and recreation.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ELEC 311 - Mathematics \& Literacy Teaching Lab Pre K-4

This course provides teacher education candidates with an opportunity to observe, assist, and teach mathematics and literacy lessons in a pre-school or early childhood grade level setting. Through this lab, candidates identify and develop basic teaching skills, design and implement mathematics and literacy lessons for PK-Grade 4 children, and reflect and analyze on lessons taught, based on assessment data, research and philosophies examined concurrently in the mathematics and literacy methods courses. Candidates will also develop an appreciation for the many tasks teachers perform daily.

Corequisite(s): ELEC 316
Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER
CANDIDACY attribute.

## ELEC 316 - Developmental Formal and Informal Assessments

A study of assessment for children from birth to Grade 4. Both formal and informal instruments will be discussed with the emphasis on tools that can be used by teachers of young children to inform developmentally appropriate instruction and practices on a daily basis. Considerations in choosing, administering, and reporting results of assessments will also be addressed.

Corequisite(s): ELEC 330
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

ELEC 317 - Child and Family Development in Early Childhood
This course is a theoretical, in-depth examination of physical, intellectual, social-emotional, language and family development from birth through age 8 , which builds upon previous Human Development courses. Development is viewed as occurring within a family and a culture, not in isolation. Emphasis is placed upon the connections between the theoretical and the practical.

Prerequisites: CDEV $248^{\text {D }}$ and ELEC $306^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ELEC 320 - Elementary Field Experience

Candidates enroll as part of the Professional Block in Elementary Education. This course involves an in-depth teaching experience in an elementary classroom in which opportunities are provided for the application of content knowledge, pedagogical skills, and the assessment of children's learning. Grading P/NC/Fail.

Prerequisites: ELEC $301^{\mathrm{P}}$ and ELEC $342^{\mathrm{D}}$ and ELEC $362^{\mathrm{D}}$
${ }^{P}$ Requires minimum grade of $P$.
${ }^{D}$ Requires minimum grade of $D$.
Corequisite(s): ELEC 332
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

ELEC 324 - Methods for Teaching English as a Second Language and Bilingual Education
A course designed to acquaint the prospective teacher at any level with the methodology used to teach English to native speakers of other languages and to acquaint students with the specialized procedures used when teaching in bilingual classrooms (any two languages) on any level.

Prerequisites: ELEC $200^{\text {D }}$ and (CDEV $248^{\text {D }}$ or CDEV $342^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ELEC 325 - Children's Literature

This course introduces the children's literature: the history, the authors and illustrators, and the readers. A major focus is on diversity in books for children and how different cultures, experiences, time periods and characters are represented, or excluded. Emphasis is placed on critical analysis and discussion of books and illustrations, with a focus on elements of literature and art. Children as readers is also a focus, exploring ways that literature is used in classrooms and families.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Early Childhood Ed (PK-4), Early Child/Spec Ed(PK-4)PK-8) or Early Childhood Education.

## ELEC 327 - Social/Cultural Studies in Early Childhood Education

This course is a multi-dimensional methods course which integrates background knowledge from the social sciences, natural sciences, and the humanities and fine arts. It focuses on an experiential approach to facilitating young children's growth and development, with an emphasis on human relationships. A multi-cultural perspective is fostered.
Prerequisites: (ELEC $306^{\mathrm{D}}$ or ELEC $396^{\mathrm{D}}$ ) and CDEV $248^{\mathrm{D}}$ and ELEC $200^{\mathrm{D}}$ and SEFE $342^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Corequisite(s): ELEC 397
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ELEC 328 - Curriculum and Assessment in ESL Education

This course prepares students seeking Pennsylvania certification in English as a second language (K-12) with key concepts related to curriculum development and assessment for students learning English as a second language. Topics include meeting ESL curriculum standards, novel and accurate assessment procedures, culturally biased testing, assessment suitability criteria, and culturally appropriate testing situations. The course investigates assessment within the context of ESL curriculum design, implementation, and program evaluation. Finally, students will come to terms with the process of evaluating language minority students in relation to diagnosis, placement, formal and informal assessment, exiting, and monitoring of student progress.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

ELEC 330-Literacy Practices for the Developing Learner, Grades 2-4 Candidates will acquire a thorough understanding of literacy development (ages 5-9) as revealed in learning and motivation theories. Candidates will be prepared to use a variety of instructional strategies and materials selectively, appropriately, and flexibly. Candidates will be prepared to use multiple strategies for developing students" word/ concept knowledge and word analysis skills in addition to understanding how word meaning and fluency support comprehension. Candidates will be able to teach multiple comprehension strategies that support readers in constructing meaning from text, both literary and informational, and in monitoring their comprehension. Candidates will gain strategies for infusing writing and the conventions of writing into literacy learning. Candidates will acquire appropriate assessment techniques to support responsive instructional decision making and reflection. Competencies and skills needed to effectively support students whose first language is not English will be central to this course.

Corequisite(s): ELEC 340
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## ELEC 332 - The Teaching of Elementary Reading

Candidates will be introduced, through theory and practice, to a variety of strategies for teaching elementary reading. Candidates will become aware of ways to assess reading progress and ways to support children as they develop as readers. Candidates will also become familiar with materials used in the classroom to support literacy.
Prerequisites: ELEC $301^{\mathrm{P}}$ and ELEC $342^{\mathrm{D}}$ and ELEC $362^{\mathrm{D}}$
${ }^{P}$ Requires minimum grade of $P$.
${ }^{D}$ Requires minimum grade of $D$.
Corequisite(s): ELEC 320
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## ELEC 340 - Mathematics Methods and Strategies for PRE K - 4 Teachers

This course is designed to provide pre-service teachers with the pedagogy and materials necessary for teaching early childhood mathematics. This course addresses development and instruction in play-based and problem-based mathematics in pre-K to grade 4 settings. Included are methods, materials, and research findings related to teaching of mathematics. Questions that provide the structure for this course are: What is the nature of mathematics (what is mathematics and what does it mean to do mathematics)? How do children learn mathematics? How do we as teachers help children learn mathematics?

Corequisite(s): SPED 350
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.
Enrollment limited to students in the College of Education college.

## ELEC 342 - The Teaching of Elementary Mathematics

The various processes and operations needed to effectively teach mathematics in the elementary school are carefully analyzed. Candidates recognize and can address the mathematical concepts and the potential misconceptions and misunderstandings of these concepts by schoolaged children.

Prerequisites: MATH $210^{\mathrm{D}}$ and MATH $310^{\mathrm{D}}$ and SEFE 270 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Corequisite(s): ELEC 362
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## ELEC 347 - Modern Primary Programs

A survey of philosophy, techniques and methodology used in educating children through continuous progress in an ungraded primary school.

Prerequisites: ELEC $306^{\text {D }}$ or ELEC $396^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ELEC 348 - Leadership, Advocacy \& Program Development

This course will focus on leadership, advocacy and program development for teacher candidates preparing to work with children Pre-K to Grade 4. Focus will be on the design, development, and evaluation of early childhood programs, including theory, paradigms and models, policy in the program development process, and the use of technology in program development. In addition, this course will include theory, research and practice in early childhood as a foundation for leadership in the field and advocacy on behalf of young children, families, communities, and the early childhood profession. An examination of current issues in the field and strategies for articulating positions and for working toward change will also be addressed.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## ELEC 352 - The Teaching of Language Arts

Candidates will be introduced, through theory and practice, to a variety of strategies for teaching elementary language arts. They will become familiar with the six components of language arts: reading, writing, speaking, listening, visually representing, and viewing. Candidates will learn strategies for teaching these components and integrating them into the classroom curriculum. Candidates will also become familiar with assessment tools for language arts.
Prerequisites: ELEC $301^{\mathrm{P}}$ and ELEC $342^{\mathrm{D}}$ and ELEC $362^{\mathrm{D}}$
${ }^{P}$ Requires minimum grade of $P$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## ELEC 362 - The Teaching of Elementary Science

Candidates will learn numerous strategies which engage students in the science inquiry process by connecting scientific understanding and contemporary teaching and assessment practices. Locating and adapting appropriate activity-based science lessons are important components of this course.

Corequisite(s): ELEC 301
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## ELEC 372 - The Teaching of Elementary Social Studies

Candidates in this course will explore the social studies curriculum, including its organization; analyze methods of teaching, objectives, and materials: and discuss evaluation/assessment techniques. Study focuses on best practice classroom applications and the relationship between instruction and student learning outcome. Field experiences included.

Prerequisites: ELEC $301^{P}$ and ELEC $342^{\text {D }}$ and ELEC $362^{\text {D }}$
${ }^{P}$ Requires minimum grade of $P$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## ELEC 382 - Literacy Assessment

A study of literacy assessment techniques designed to support the elementary teacher in designing a supportive literacy environment and effective literacy instruction for all students.

Prerequisites: ELEC $332^{\mathrm{D}}$ and SEFE $200^{\mathrm{D}}$ and CDEV $248^{\mathrm{D}}$ and CDEV $342^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ELEC 385 - Creativity

An interdisciplinary approach to child-centered teaching through creative instructional materials, drama, music, and a variety of art media.

Prerequisites: SEFE 200 (may be taken concurrently) ${ }^{\text {D }}$ and (SEFE 248 (may be taken concurrently) ${ }^{\text {D }}$ or CDEV $248^{\text {D }}$ ) and (SEFE 342 (may be taken concurrently) ${ }^{\text {D }}$ or CDEV $342^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ELEC 390 - Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ELEC 395 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ELEC 397 - Early Childhood Education II

Curriculum, materials, audio-visual and other aids and their implementation in various early childhood learning situations with full articulation of such programs with the primary grades.

Prerequisites: (ELEC $306^{\mathrm{D}}$ or ELEC $396^{\mathrm{D}}$ ) and CDEV $248^{\mathrm{D}}$ and SEFE $342^{\mathrm{D}}$ and SEFE $200^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Corequisite(s): ELEC 327
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ELEC 398 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ELEC 405 - Overview of Global Education \& Issues

The course focuses on international education and developing awareness and skills needed to teach in a culturally responsive classroom
Educational systems from various countries will be compared and contrasted. The Programme for International Student Assessment (PISA) will be explored to determine the possible pros and cons of this assessment approach.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): Education, Transfer Thread Completion Course Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students in a B.S. in Education, Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Music or Bachelor of Science degrees.

ELEC 407 - Math and Science in Early Childhood Learning
Students will apply theories of child development to the implementation of math and science in the early childhood curriculum. Using a constructivist approach, students will plan and implement activities designed to enhance cognitive development in these areas. Students will become aware of available materials for teaching and assessment.

Prerequisites: (ELEC $327^{\text {D }}$ or ELEC $278^{\text {D }}$ ) and (ELEC $337^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ELEC 410 - Culture and Politics of American Education

Public education (Pre-K-12) in the United States is one of the most important civic debates in our society. Everyone has attended school and everyone seems to have an opinion about what counts as a quality education. The problem of how to provide an education to the youth of this country requires thoughtful decisions-informed by scholarly research, multiple viewpoints and ethical perspectives. This course will provide students the opportunity to explore the cultural, political and legal issues facing public education today.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Education, Transfer Thread Completion Course Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## ELEC 415 - Early Science and Math

Students will apply theories of child development to the implementation of math and sciencein the early childhood curriculum. Using a constructivist approach, students will plan and implement activities designed to enhance cognitive development in these areas. Students will become aware of available materials for teaching and assessment.

Credits: 4
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

## ELEC 420 - Early Childhood Field Experience

Candidates enroll as part of the Professional Block in Early childhood Education. This course involves an in-depth teaching experience in an early childhood setting in which opportunities are provided for the application of content knowledge, pedagogical skills, and the assessment of children's learning.

Prerequisites: ELEC $330^{\mathrm{D}}$ and ELEC $340^{\mathrm{D}}$ and ELEC $311^{\mathrm{P}}$ and ELEC $316^{\mathrm{D}}$ and (SPED $325^{\text {D }}$ or SPED $350^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
${ }^{P}$ Requires minimum grade of $P$.
Corequisite(s): ELEC 480
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute

## ELEC 427 - Early Intervention

This course will examine atypical development from birth through age eight. Legal rights of children and families will be explored. Student will study the interventions necessary to assist the young child and their families adjust and adapt to development difficulties. A field component is included.

Prerequisites: ELEC $327^{\mathrm{D}}$ and (ELEC $337^{\mathrm{D}}$ or ELEC $278^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ELEC 437 - Assessment in Early Childhood

This course is an overview of the role of assessment at the preschool and primary grade levels as integral to curriculum and instructional decision-making. Content will focus on informal assessment measures recommended for early childhood classroom teachers. A field experience gives students the opportunity to apply a variety of assessment measures with young children.

Prerequisites: ELEC $427^{\mathrm{D}}$ and (ELEC $447^{\mathrm{D}}$ or ELEC $420^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ELEC 440 - ECE Curriculum Integration: Theory into Practice

Development and implementation of an integrated program of all content areas across the learning standards Pre-K through Grade 4, through the integration of play-based, experience-based, and project-based teaching. Selection and development of materials and resources based on assessment data that meet the needs of culturally and linguistically diverse learners is stressed.

Prerequisites: ELEC $311^{\mathrm{D}}$ and ELEC $330^{\mathrm{D}}$ and ELEC $340^{\mathrm{D}}$ and ELEC $316^{\mathrm{D}}$ and SPED $325^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

ELEC 445 - Administration of Child Care Programs
Students are introduced in a practical manner to the procedures required to organize, license, and administer a child care program (including preschool and elementary aged children). This course involves a field experience of 5 hours.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ELEC 450 - Internship: Early Childhood

This course is a supervised off-campus, full-time work experience in a certified Early Childhood Education program. Students attend seminars and complete additional assignments made by supervisors. Open only to Elementary Education: Early Learning and Development students.

Prerequisites: ELEC $447^{\mathrm{D}}$ or ELEC $420^{\mathrm{D}}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 1-12
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ELEC 455 - Student Teaching: Early Childhood

Under the guidance of a cooperating teacher and university supervisor, candidates engage in teaching assignments on a full-time basis in specified school districts and/or early childhood agencies and attend scheduled seminars. Student teaching requires a partnership between the university and cooperating school districts and agencies. It is considered the culminating experience and the most beneficial teacher preparation course. It is a transition between pre-service and in-service teaching. Must meet all requirements to enroll in student teaching, including, but not limited to, required Praxis exams, grade point average, clearances, required courses and field experiences.

Credits: 1-12
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER
CANDIDACY attribute.

## ELEC 460 - Instructional Strategies for Science and Technology

 This course is designed to introduce the teaching techniques and strategies used by science educators to make science teaching, meaningful, motivating, and plausible for PK-4 students. In addition, the most common curriculum units and supplements are introduced, explored, and examined for their appropriateness in the early childhood environment and the relationship to the PDE science standards. Emphasis is placed on how to collect and learn about scientific concepts in order to develop the skills necessary to teach coherent centers and/ or lessons and choose instructional techniques that will most effectively help children learn. Lastly, confidence in teaching science is established as participants devise, employ, and assess science lessons presented to peers and young children.Prerequisites: ELEC $311^{\mathrm{D}}$ and ELEC $330^{\mathrm{D}}$ and ELEC $340^{\mathrm{D}}$ and ELEC $316^{\mathrm{D}}$ and (SPED $325^{\mathrm{D}}$ or SPED $350^{\mathrm{D}}$ )
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Corequisite(s): ELEC 470
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER
CANDIDACY attribute.

## ELEC 470 - Social Studies \& Citizenship

Teacher candidates in this course will explore the social studies curriculum, including its organization; analyze methods of teaching, objectives, and materials; discuss evaluation/assessment techniques and citizenship development for PK-4 learners. Study focuses on best practice classroom applications and the relationship between instruction and student learning outcome.

Prerequisites: ELEC $311^{\mathrm{D}}$ and ELEC $330^{\mathrm{D}}$ and ELEC $340^{\mathrm{D}}$ and ELEC $316^{\mathrm{D}}$ and (SPED $325^{\text {D }}$ or SPED $350^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
Corequisite(s): SPED 360
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## ELEC 475 - International Student Teaching: Early Childhood

Under the guidance of a cooperating teacher and university supervisor, candidates engage in teaching assignments on a full-time basis in specified school districts and/or early childhood agencies and attend scheduled seminars. Student teaching requires a partnership between the university and cooperating school districts and agencies. It is considered the culminating experience and the most beneficial teacher preparation course. It is a transition between pre-service and inservice teaching. This course is specially designed for those students participating in the international student teaching experience.

Credits: 1-12
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment limited to students in a B.S. in Education degree.
Enrollment limited to students with the ACCEPTANCE - TEACHER
CANDIDACY attribute.
Enrollment limited to students in the College of Education college.

ELEC 480-Assessment for Differentiation of Literacy Instruction
The purpose of this course is to provide teacher candidates with information and experiences that will enable them to utilize formal and informal methods for assessing children"s reading ability and materials for improving decoding, fluency, vocabulary, comprehension and motivation. $\tilde{A}, \hat{A}$ This course we explore the various roles of assessment in education and will look at a variety of data sets to draw conclusions about how they might impact class- or school-level decision making. Ã,Â This course will also provide teacher candidates with information to differentiate their teaching to meet the needs of all learners.

Prerequisites: ELEC $238^{\mathrm{D}}$ and ELEC $330^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Corequisite(s): ELEC 460
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## ELEC 490 - Independent Study

A program of independent work conducted by a student who has demonstrated academic proficiency, with prior approval of the student's advisor and departmental chairperson. Prerequisite: Permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## ELEC 495 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ELEC 498- Selected Topics

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

Prerequisites: SEFE $200^{\mathrm{D}}$ and CDEV $248^{\mathrm{D}}$ and CDEV $342^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Early Childhood Education (PK-4), Bachelor of Science in Education (BSED)

All candidates completing this program and student teaching are eligible to receive Pennsylvania certification after achieving a passing or qualifying score on Pennsylvania Department of Education required exam(s). If you are interested in teaching in another state, please contact the Department of Education in that state.

## Related Links

Early Childhood Education, BSED Program Page (https://www.sru.edu/ academics/majors-and-minors/early-childhood-education/)

Elementary Education/ Early Childhood Education Department Page (https://www.sru.edu/academics/colleges-and-departments/coe/ departments/elementary-education-/-early-childhood/)

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

## Curriculum Guide

## GPA Requirement

GPA must be 2.8 or higher for Teacher Candidacy.
A 3.0 GPA and passing subject area assessment (PECT) or a 2.8 GPA and a qualifying passing subject area assessment (PECT) score (as determined by PDE) is required for certification.

## Summary*

Code Title Hours

Rock Studies Requirements 42
Other Basic Requirements 0-3
Computer Competency 0-3
Major Requirements 70


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

Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 210 | Elementary Mathematics I | 3 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :--- | :--- | ---: |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy | 15 |
| Subtotal |  |  |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry | 3 |  |
| Select 3 Credits (p. 1378) |  |  |


| Humanities Inquiry |  |
| :---: | :---: |
| Select 3 Credits (p. 1378) | 3 |
| Social Science Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Natural Sciences Inquiry |  |
| SCI 101 Science of Life | 3 |
| Physical Sciences Inquiry |  |
| SCI 102 Understanding the Physical World | 3 |
| Subtotal | 15 |
| Additional Rock Studies Requirements (12 credits) |  |
| MATH 310 Elementary Mathematics II | 3 |
| PE 243 <br> Educational Movement in Health \& Wellness | 3 |
| or DANC 223 Creative Dance for Children |  |
| SOWK 105 Human Diversity | 3 |
| SPED 121 Overview of Special Education | 3 |
| Total Hours | 42 |

1 Course offered in multiple subjects; cannot take course in first major subject.

## Basic Math Requirement

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

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra | $\mathbf{0 - 3}$ |
| Total Hours |  |  |

## Computer Competency

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

## Major Requirements

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

| Code | Title | Hours |
| :--- | :--- | ---: |
| Early Childhood Education Courses |  |  |
| (Prior to Admittance into Teacher Candidacy Program) |  |  |
| ELEC 100 |  <br> Practice 1 | 3 |
| ELEC 200 | Child Development Typical $^{1}$ | 3 |



| ELEC 340 | Mathematics Methods and Strategies for PRE K-4 Teachers | 3 |
| :---: | :---: | :---: |
| ELEC 348 | Leadership, Advocacy \& Program Development | 3 |
| ELEC 420 | Early Childhood Field Experience | 3 |
| ELEC 455 | Student Teaching: Early Childhood | 12 |
| ELEC 460 | Instructional Strategies for Science and Technology | 3 |
| ELEC 470 | Social Studies \& Citizenship | 3 |
| ELEC 480 | Assessment for Differentiation of Literacy Instruction | 3 |
| PE 243 | Educational Movement in Health \& Wellness | 3 |
| or DANC 223 | Creative Dance for Children |  |
| SPED 121 | Overview of Special Education | 3 |
| SPED 350 | Universal Intervention | 3 |
| SPED 360 | Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners | 3 |

EARLY CHILDHOOD EDUCATION - BSED (1100)
Pre K-4 Certification
This program is effective as of Fall 2021.
Revised 07.08.20201
UCC 03.02.2021

## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| ELEC 100 | Early Childhood Education Theory \& Practice | 3 |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar * | 1 |
| SCI 101 | Science of Life | 3 |
| SPED 121 | Overview of Special Education | 3 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
|  | Hours | 16 |
| Spring |  |  |
| ELEC 200 | Child Development Typical | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 210 | Elementary Mathematics I | 3 |
| SCI 102 | Understanding the Physical World | 3 |


| Creative \& Aesthetic Inquiry (p. 1378) | 3 |
| :---: | ---: |
| Hours | $\mathbf{1 5}$ |

## Second Year

Fall


Spring

## Early Literacy Block

Select one of the following: 3

| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :---: | :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |  |

Social Science Inquiry (p. 1378) 3

| Third Year |  |  |
| :--- | :--- | ---: |
| Fall |  | 3 |
| SOWK 105 | Human Diversity | 9 |
| Free Elective |  | 3 |
| ELEC 348 | Leadership, Advocacy \& Program <br> Development |  |
|  |  |  |


|  | Hours | 15 |
| :---: | :---: | :---: |
| Spring |  |  |
| Block 1 |  |  |
| ELEC 311 | Mathematics \& Literacy Teaching Lab Pre K -4 | 1 |
| ELEC 316 | Developmental Formal and Informal Assessments | 3 |
| ELEC 330 | Literacy Practices for the Developing Learner, Grades 2-4 | 3 |
| ELEC 340 | Mathematics Methods and Strategies for PRE K-4 Teachers | 3 |
| SPED 350 | Universal Intervention | 3 |
| Free Elective |  | 3 |
|  | Hours | 16 |
| Fourth Year |  |  |
| Fall |  |  |
| Block 2 |  |  |
| ELEC 420 | Early Childhood Field Experience | 3 |
| ELEC 460 | Instructional Strategies for Science and Technology | 3 |


| ELEC 470 | Social Studies \& Citizenship | 3 |
| :--- | :--- | ---: |
| ELEC 480 | Assessment for Differentiation of Literacy <br> Instruction | 3 |
| SPED 360 | Targeted Instructional and Behavioral <br> Interventions for Neuro-Diverse Learners | 3 |
| Spring | Hours | $\mathbf{1 5}$ |
| ELEC 455 | Student Teaching: Early Childhood | $\mathbf{1 2}$ |
| Free Elective |  | 3 |
|  | Hours | $\mathbf{1 5}$ |
|  | Total Hours** | $\mathbf{1 2 2}$ |

1 Course offered in multiple subjects; cannot take course in first major subject

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

Major Code: 1100
Revised 01.13.2021
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Early Childhood Education (PK-4), Bachelor of Science in Education (BSED) - Concentration in International Education

All candidates completing this program and student teaching are eligible to receive Pennsylvania certification after achieving a passing or qualifying score on Pennsylvania Department of Education required exam(s). If you are interested in teaching in another state, please contact the Department of Education in that state.

The mission of the international track is to equip, inspire, and empower teacher candidates by providing them opportunities to develop their personal and professional global awareness; to deepen their understanding of culturally responsive teaching and to experience international teaching in order to be prepared for teaching in the 21 st century.

## Related Links

Early Childhood Education - International Education, BSED Program Page (https://www.sru.edu/academics/majors-and-minors/early-childhood-education-international-education/)

Elementary Education/Early Childhood Education Department Page (https://www.sru.edu/academics/colleges-and-departments/coe/ departments/elementary-education-/-early-childhood/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)
Curriculum Guide GPA Requirement
GPA must be 2.8 or higher for Teacher Candidacy.
A 3.0 GPA and passing subject area assessment (PECT) or a 2.8 GPA and a qualifying passing subject area assessment (PECT) score (as determined by PDE) is required for certification.

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 70 |
| Electives | 8 |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  | toward the 120 credit total required to graduate.

## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 210 | Elementary Mathematics I | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry - Select 3 Credits |  | 3 |
| ART 226 | Overview of World Art |  |
| DANC 100 | Dance: Art and Culture |  |
| MUSI 102 | Exploring World Music |  |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Sciences Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Sciences Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |
| Additional Rock Studies Requirements (12 credits) |  |  |
| MATH 310 | Elementary Mathematics II | 3 |
| PE 243 | Educational Movement in Health \& Wellness | 3 |
| or DANC 223 | Creative Dance for Children |  |
| SOWK 105 | Human Diversity | 3 |



Overview of Special Education 3

## Total Hours

1 Course offered in multiple subjects; cannot take course in first major subject.

## Basic Math Requirement

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Ar |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major Requirements

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Early Childhood Education Courses |  |  |
| (Prior to Admittance into Teacher Candidacy Program) |  |  |
| ELEC 100 | Early Childhood Education Theory \& Practice ${ }^{1}$ | 3 |
| ELEC 200 | Child Development Typical ${ }^{1}$ | 3 |
| PE 243 | Educational Movement in Health \& Wellness ${ }^{1}$ | 3 |
| or DANC 223 | Creative Dance for Children |  |
| SPED 121 | Overview of Special Education ${ }^{1}$ | 3 |
| Subtotal |  | 12 |
| Diversity Block ${ }^{2}$ |  |  |
| ELEC 230 | Field-Based Child Development Typical ${ }^{1}$ | 3 |
| ELEC 237 | ELL Strategies and Practice for Early Childhood Education ${ }^{1}$ | 3 |
| ELEC 281 | Family and Community Diversity and Partnerships ${ }^{1}$ | 3 |
| Subtotal |  | 9 |
| Early Literacy Block ${ }^{2}$ |  |  |
| ELEC 238 | Literacy Practices for the Emergent Learner, $\mathrm{PK}-1{ }^{1}$ | 3 |


| ELEC 285 | Integrating Creative Expression through the Arts | 3 |
| :---: | :---: | :---: |
| Subtotal |  | 6 |
| Early Childhood Major Courses |  |  |
| Must be admitted to Teacher Candidacy Program and have completed both Diversity and Literacy blocks above |  |  |
| Block 1 |  |  |
| ELEC 311 | Mathematics \& Literacy Teaching Lab Pre K $-4^{1}$ | 1 |
| ELEC 316 | Developmental Formal and Informal Assessments ${ }^{1}$ | 3 |
| ELEC 330 | Literacy Practices for the Developing Learner, Grades 2-4 | 3 |
| ELEC 340 | Mathematics Methods and Strategies for PRE K-4 Teachers ${ }^{1}$ | 3 |
| SPED 350 | Universal Intervention | 3 |
| Subtotal |  | 13 |
| Block 2 (Pre-req is Block 1) |  |  |
| ELEC 420 | Early Childhood Field Experience ${ }^{1}$ | 3 |
| ELEC 460 | Instructional Strategies for Science and Technology ${ }^{1}$ | 3 |
| ELEC 470 | Social Studies \& Citizenship ${ }^{1}$ | 3 |
| ELEC 480 | Assessment for Differentiation of Literacy Instruction ${ }^{1}$ | 3 |
| SPED 360 | Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners ${ }^{1}$ | 3 |
| Subtotal |  | 15 |
| Other Required Coursework for Graduation |  |  |
| ELEC 405 | Overview of Global Education \& Issues ${ }^{1}$ | 3 |
| ELEC 475 | International Student Teaching: Early Childhood ${ }^{1}$ | 12 |
| Subtotal |  | 15 |
| Other International Requirements |  |  |
| Must complete one (1) spring break, care break or early field in an international setting. |  |  |
| Total Hours |  | 70 |
| 1 Course counts for $50 \%$ of Major requirements but not for Major GPA <br> 2 Pre-requisite ELEC 100 \& ELEC 200. <br> * Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course. |  |  |
| Co-curricular and Experiential Learning |  |  |
| Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities: |  |  |
| 1. International study programs |  |  |
| 2. High-Impact Practice (HIP) designated classes |  |  |
| 3. Student-Faculty research and Student Leadership development |  |  |
| 4. Career Education and Development |  |  |
| 5. Internships/Field Experiences (required) |  |  |

## Important Information

## Prerequisites for Admission to Teacher Candidacy

- Grades below a "C" are not admissible.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Basic Courses Required |  |  |
| ENGL 102 | Critical Writing | 3 |
| ELEC 100 | Early Childhood Education Theory \& | 3 |
|  | Practice | 3 |
| ELEC 200 | Child Development Typical | 3 |
| ELEC 230 | Field-Based Child Development Typical | 3 |
| ENGL 104 | Critical Reading | 15 |
| Subtotal |  |  |
| Math Requirement for BS in Education | 3 |  |
| Prior to Admission to Teacher Candidacy | 3 |  |
| MATH 210 | Elementary Mathematics I | 6 |
| MATH 310 | Elementary Mathematics II | $\mathbf{2 1}$ |
| Subtotal |  |  |
| Total Hours |  |  |

## BSED Early Childhood PK-4 Grade Requirement

- Grades in each of the following courses must be "C" or better to qualify for Student Teaching and/or Graduation

| Code | Title | Hours |
| :---: | :---: | :---: |
| ELEC 100 | Early Childhood Education Theory \& Practice | 3 |
| ELEC 200 | Child Development Typical | 3 |
| ELEC 230 | Field-Based Child Development Typical | 3 |
| ELEC 237 | ELL Strategies and Practice for Early Childhood Education | 3 |
| ELEC 238 | Literacy Practices for the Emergent Learner, PK-1 | 3 |
| ELEC 281 | Family and Community Diversity and Partnerships | 3 |
| ELEC 285 | Integrating Creative Expression through the Arts | 3 |
| ELEC 311 | Mathematics \& Literacy Teaching Lab Pre K $-4$ | 1 |
| ELEC 316 | Developmental Formal and Informal Assessments | 3 |
| ELEC 330 | Literacy Practices for the Developing Learner, Grades 2-4 | 3 |
| ELEC 340 | Mathematics Methods and Strategies for PRE K-4 Teachers | 3 |
| ELEC 405 | Overview of Global Education \& Issues | 3 |
| ELEC 420 | Early Childhood Field Experience | 3 |
| ELEC 460 | Instructional Strategies for Science and Technology | 3 |
| ELEC 470 | Social Studies \& Citizenship | 3 |
| ELEC 475 | International Student Teaching: Early Childhood | 1-12 |
| ELEC 480 | Assessment for Differentiation of Literacy Instruction | 3 |
| PE 243 | Educational Movement in Health \& Wellness | 3 |


| or DANC 223 | Creative Dance for Children |  |
| :--- | :--- | :--- |
| SPED 121 | Overview of Special Education | 3 |
| SPED 350 | Universal Intervention | 3 |
| SPED 360 | Targeted Instructional and Behavioral <br> Interventions for Neuro-Diverse Learners | 3 |

## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
EARLY CHILDHOOD EDUCATION PK-4 CERTIFICATION - BSED (1100) Concentration in International Education (INTL)
This program is effective as of Fall 2021.
Revised 11.11.21
UCC 03.02.21

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| ELEC 100 | Early Childhood Education Theory \& Practice | 3 |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar* | 1 |
| SCI 101 | Science of Life | 3 |
| SPED 121 | Overview of Special Education | 3 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
|  | Hours | 16 |
| Spring |  |  |
| ELEC 200 | Child Development Typical | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 210 | Elementary Mathematics I | 3 |
| SCI 102 | Understanding the Physical World | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
|  | Hours | 15 |
| Second Year |  |  |
| Fall |  |  |
| Diversity Block |  |  |
| ELEC 230 | Field-Based Child Development Typical | 3 |
| ELEC 237 | ELL Strategies and Practice for Early Childhood Education | 3 |
| ELEC 281 | Family and Community Diversity and Partnerships | 3 |
| MATH 310 | Elementary Mathematics II | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
|  | Hours | 15 |


| Spring |  |  |
| :---: | :---: | :---: |
| Early Literacy Block |  |  |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| ELEC 238 | Literacy Practices for the Emergent Learner, PK-1 | 3 |
| ELEC 285 | Integrating Creative Expression through the Arts | 3 |
| $\begin{aligned} & \text { PE } 243 \\ & \text { or DANC } 223 \end{aligned}$ | Educational Movement in Health \& Wellness or Creative Dance for Children | 3 |
| SOWK 105 | Human Diversity | 3 |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| ELEC 348 | Leadership, Advocacy \& Program Development | 3 |
| Social Science Inquiry (p. 1378) |  | 3 |
| Minor Course or Free Electives |  | 9 |
|  | Hours | 15 |
| Spring |  |  |
| Block 1 |  |  |
| ELEC 311 | Mathematics \& Literacy Teaching Lab Pre K $-4$ | 1 |
| ELEC 316 | Developmental Formal and Informal Assessments | 3 |
| ELEC 330 | Literacy Practices for the Developing Learner, Grades 2-4 | 3 |
| ELEC 340 | Mathematics Methods and Strategies for PRE K - 4 Teachers | 3 |
| SPED 350 | Universal Intervention | 3 |
| Minor Course or Free Elective |  | 3 |
|  | Hours | 16 |
| Fourth Year |  |  |
| Fall |  |  |
| Block 2 |  |  |
| ELEC 420 | Early Childhood Field Experience | 3 |
| ELEC 460 | Instructional Strategies for Science and Technology | 3 |
| ELEC 470 | Social Studies \& Citizenship | 3 |
| ELEC 480 | Assessment for Differentiation of Literacy Instruction | 3 |
| SPED 360 | Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners | 3 |
|  | Hours | 15 |
| Spring |  |  |
| ELEC 455 | Student Teaching: Early Childhood | 12 |
| Free Elective |  | 3 |
|  | Hours | 15 |
|  | Total Hours** | 122 |

1 Course offered in multiple subjects; cannot take course in first major subject

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

Major Code: 1100
Revised 01.13.21
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Global Education, Minor

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

## Related Links

Global Education Minor, Page
Elementary Education/ Early Childhood Education Department Page (https://www.sru.edu/academics/colleges-and-departments/coe/ departments/elementary-education-/-early-childhood/)

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

## Curriculum Guide

GPA Requirement
Minor GPA: 2.0 or Higher

## Minor Requirements

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Core Courses |  |  |
| $\begin{aligned} & \text { CDEV } 248 \\ & \text { or ELEC } 200 \end{aligned}$ | Human Development and Education Child Development Typical | 3 |
| ELEC 237 | ELL Strategies and Practice for Early Childhood Education | 3 |
| or SEFE 326 | ELL Strategies and Practice |  |
| Subtotal |  | 6 |
| Electives |  |  |
| Select four of the following: |  | 12 |
| SPED 353 | Teaching in an Area of High Need |  |
| SPAN 110 | Spanish for Educators |  |
| ELEC 405 | Overview of Global Education \& Issues |  |
| SEFE 420 | American Education in the Twenty-First Century: A Comparative Perspective |  |
| MODL 3XX/4XX | Any Modern Language Course at 300 level or higher ${ }^{1}$ |  |
| Subtotal |  | 12 |
| Total Hours |  | 18 |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.
1

Any Modern Language Course at 300 level or higher.

## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN GLOBAL EDUCATION (11A)
This program is effective as of Fall 2020.
Revised 09.02.20
UCC 04.21.20

## Physical and Health Education

$\left.\begin{array}{lll}\text { Chair } & \text { Secretary } & \text { Location }\end{array} \begin{array}{l}\text { Department } \\ \text { Phone }\end{array}\right\}$

Department Web Site URL (http://www.sru.edu/academics/colleges-and-departments/coe/departments/physical-and-health-education/)

Physical Activity and Fitness Management Fact Sheet URL (https:// www.sru.edu/documents/programs/factsheets/undergraduate/PAFMFS.pdf)
School Wellness Education Fact Sheet URL (https://www.sru.edu/ documents/programs/factsheets/undergraduate/phe-fs.pdf)

## Vision for the future--What our students will do

Graduates of the SRU Physical and Health Education Department will be leaders who educate and empower individuals to be physically active and healthy and who advocate the benefits associated with a healthy lifestyle.

## Mission-Current-Day to Day-What we do

Prepare graduates who are passionate about health, physical activity and fitness, to promote lifelong physical activity, cognitive function, and overall physical wellness.

## The Rock Difference

The Department of Physical and Health Education offers a major degree program in Health and Physical Education. The two tracks are:

- School Wellness Education - Teacher Certification Program that prepares students to teach both health and physical education in grades K-12
- Physical Activity and Fitness Management that prepare students to teach, lead and manage physical activity and fitness in community and commercial settings

Statistics project the employment of health and wellness educators will grow faster than the average for all occupations for the foreseeable
future. These careers continue to grow as a direct result of healthcare costs and increasing need for awareness of disease prevention and health promotion. This results in the need for Aquatic Professionals - Adapted Physical Activity Professionals - Outdoor Professionals - and Coaching Education Professionals.

## Faculty

## Tyler Cathcart

Instructor
Physical and Health Education

## Gary Clark

Assistant Professor
Physical and Health Education
Ph.D., University of Pittsburgh
M.S., Western Kentucky University
B.S., Lock Haven University

## Wendy Fagan

Instructor
Physical and Health Education
M.S., Texas Woman's University
B.S., Indiana University

## Hannah Holl

Associate Professor
Physical and Health Education
Ed.D., Indiana University of Pennsylvania
M.Ed., Indiana University of Pennsylvania
B.S., Lock Haven University

## Ethan Hull

Associate Professor
Physical and Health Education
Ph.D., University of Pittsburgh
M.S., University of Pittsburgh
M.Ed., East Stroudsburg University
B.S. University of Pittsburgh

## Dallas Jackson

Associate Professor
Physical and Health Education
Ph.D., Texas Woman's University
M.S., Texas Woman's University
B.S., University of North Texas

## Istvan Kovacs

Associate Professor
Physical and Health Education
Ph.D., Eotvos Lorand University (Budapest)
M.S., Hungarian University of Physical Education
B.S., Hungarian University of Physical Education

## Joanne Leight

Professor
Physical and Health Education
Ed.D., Duquesne University
M.S., Slippery Rock University
B.S., Slippery Rock University

Wenhao Liu
Professor
Physical and Health Education

Ph.D., University of Georgia
M.A., University of Northern Iowa
B.Ed., Wuhan Institute of Physical Education (China)

## Randall Nichols

Professor
Physical and Health Education
Ed.D., West Virginia University
M.Ed., Slippery Rock University
B.S., Slippery Rock University

## Robert Ogoreuc

Assistant Professor
Physical and Health Education
M.Ed., Slippery Rock University
B.S., Indiana University of Pennsylvania

## Jeffrey Smith

Assistant Professor
Physical and Health Education
M.S., Slippery Rock University
B.S., Slippery Rock University

## Traci Zillifro

Professor
Physical and Health Education
Ph.D., Pennsylvania State University
M.A., Edinboro State University
B.S., Kent State University

## Programs

All first-year students who enter SRU in the Summer and Fall terms of 2019 and after will follow Rock Studies. Students who entered SRU before Spring 2019 will follow Liberal Studies. All new transfer students beginning Summer 2019 and after will follow Liberal Studies. We anticipate that transfer students will begin to enter under Rock Studies during the Summer/Fall term of 2021.

## Majors

- Health and Physical Education, Bachelor of Science in Education (BSED) - Concentration in Physical Activity and Fitness Management (p. 215)
- Health and Physical Education, Bachelor of Science in Education (BSED) - Concentration in Physical Activity and Fitness Management / Pre-Athletic Training (SRU) (3+2) (p. 218)
- Health and Physical Education, Bachelor of Science in Education (BSED) - Concentration in Physical Activity and Fitness Management / Pre-Occupational Therapy (SRU) (3+3) (p. 218)
- Health and Physical Education, Bachelor of Science in Education (BSED) - Concentration in School Wellness Education (p. 219)


## Minors

- Adapted Physical Activity, Minor (p. 213)
- Adventure Fitness, Minor (p. 213)
- Aquatics, Minor (p. 214)
- Physical Education - Coaching, Minor (p. 223)


## Certificates

- Living Well, Certificate (p. 222)
- Teaching Health and Physical Education On-line, Certificate (p. 223)


## Courses

## PE 106-Gymnastics Fundamentals

This course is based on the study of PreK-12 developmentally appropriate gymnastics, with the recognition of individual and group uniqueness, acknowledging and valuing diversity. An emphasis will be placed on an educational gymnastics approach, utilizing movement concepts appropriate for teaching children body awareness and body control. Students will also learn skill progressions, spotting techniques, and biomechanical principles involved in a variety of gymnastic skills performed on traditional and non-traditional gymnastics equipment.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Enrollment is limited to students with a major in School Wellness
Education, Health-Physical Educ Teaching or Health and Physical Education.

## PE 107 - Aquatic Fundamentals

This course is designed to provide the student with an overview of a variety of aquatic activities. Consideration is given to basic swimming strokes, starts and turns, small craft safety, skin diving, elementary non-swimming rescue techniques, diving progressions from the deck, springboard diving, synchronized swimming, water polo, personal fitness, and aquatic games. This is a Theory and Technique Course (open to Physical Education majors or Aquatics minors only).

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Enrollment is limited to students with a program in School Wellness Education, Health-Physical Educ Teaching, Health and Physical Education or Aquatics.

## PE 113-Golf

This course is designed to introduce the student to all phases of golf through application of the skills used in these activities. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1
Term(s) Typically Offered: Offered as Needed

## PE 114-Orienteering

This course is designed to teach the fundamental skills for traveling in the outdoors by map and compass in unfamiliar territory, and to introduce the sport of orienteering. The sport involves competitive cross country hiking/running on a set course as accurately and quickly as possible. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1
Term(s) Typically Offered: Offered as Needed

## PE 115 - Yoga and Well-Being

Yoga and Well-Being is an experiential and theoretical course that will introduce the student to the practice and examination of Yoga. The course will cover the practice of yoga postures (asanas), the use of controlled breathing (ujjayi) the engagement of body locks (bandhas), the study of yoga's historic background and the benefits of meditation and relations techniques. Additionally it will examine postures from an anatomical perspective providing the student with a comprehensive examination of proper alignment and correct positioning of the body in order to avoid injury. The course will present the many benefits of Yoga at a physical, mental and emotional level, and its application to the needs of our society today.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Healthy Body, Mind \& Environment, Transfer Thread Completion Course

## PE 123 - Stand-Up Paddle Boarding

This introductory course is designed to explore the fundamental skills and safety concepts necessary to paddle stand-up paddle boards (SUPs) effectively. Safety procedures will be emphasized such as, selection of waterways appropriate for an individual's skill set and experience level, self-rescue and group rescue approaches. Various paddling techniques including power strokes, turning strokes and bracing with the paddle will be examined. In addition, equipment selection and care, boating regulations, trip planning and logistics, outdoor leadership, basic water reading skills, flat water navigation skills, white water classification and minimum environmental impact techniques will be addressed. An overview of the various types of stand-up paddle boards (SUP) as well as necessary safety equipment will be explored.

Credits: 2
Term(s) Typically Offered: Offered Fall Terms Odd

## PE 125 - Bicycling

This introductory course is designed to explore the fundamental skills and safety concepts necessary to participate in bicycling effectively. Cycling techniques related to both on-road and off-road will be examined. Safety procedures, bicycling control, fitness and social benefits to the rider will be emphasized. Current trends in cycling technology will be examined. Additionally, strategies to minimize environmental impact will be explored.

Credits: 2
Term(s) Typically Offered: Offered Fall Terms Even
PE 131 - Foundations of Leadership in Physical Activity
This course is designed to introduce the student majoring in Leadership in Physical Activity to the history, philosophies, professional organizations, important concepts, careers and trends in physical activity leadership.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms

## PE 133 - Tai Chi Chuan: Chinese Classical Exercise

An introduction to the Chinese Classical Exercise System inspired by the Chinese "Book of Changes. Tai Chi Chuan concentrates on relaxed movement, proper breathing and attention to posture. Any age or physical performance level may participate. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1
Term(s) Typically Offered: Offered as Needed

## PE 139 - University Seminar

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

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## PE 140 - Downhill Snow Skiing I

This course students to acquire a basic knowledge and appreciation of skiing as a sport and as a life-time leisure activity. Safety procedures and skiing etiquette also are discussed. Instruction takes place at Peek N' Peak Ski Resort. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1
Term(s) Typically Offered: Offered as Needed

## PE 141 - Personal Physical Fitness

This course provides students the opportunity for individual assessment and exercise programs to improve and/or maintain physical fitness and weight control. Principles involved with the maintenance of physical fitness, weight control, diets, and the aging process will be provided through lecture. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1
Term(s) Typically Offered: Offered as Needed
PE 146 - Beginning Swimming
This course is designed to provide the novice or non-swimmer with the opportunity to learn elementary back stroke, water safety skills, diving and adjustment to water. This is a Wellness and Lifetime Activity Course (offered to all students).

## Credits: 1

Term(s) Typically Offered: Offered as Needed

## PE 149 - Tennis

This course teaches basic fundamentals. The rules, regulations, and history of tennis also will be covered, along with strategies of the single and double games. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1
Term(s) Typically Offered: Offered as Needed

## PE 152 - Principles of School Wellness I

This course is an orientation to the art and the science of teaching physical education at the K-12 levels. Framed within the Collaborative Approach to Learning and Health: Whole School, Whole Community, Whole Child, students will study this latest collaborative approach to learning and health which is reflective of a local community and anchored in schools. Required school observations in diverse settings will provide students with the experience to observe and reflect upon class climate, responsibilities for fostering a positive learning environment and high quality teaching. The study of health trends in youth will envelop the latest model of how schools are promoting a comprehensive schoolbased physical activity model and the role physical education teacher play in it. Schools central to professional development including a writing assessment, resume development and starting a professional portfolio are used as artifacts of reflective practice at this initial state of teacher education. This is a Theory course (open to Physical Education majors only).

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment is limited to students with a major in School Wellness
Education, Health-Physical Educ Teaching or Health and Physical Education.

## PE 166 - Coaching Practicum

The coaching practicum is designed to provide the student with a realistic experience at a level and in a setting similar to that in which he/ she wishes to obtain employment. The practicum experience is a 50hour learning opportunity in which the student assists in all phases of the operation of an athletic program. The student may not be the head coach, unless a direct supervisor is present. The student may not be a current participating athlete on the team. The student may not work with the same team twice. Each experience must be at a different level if working with the same sport. A minimum of two different sports must be included in the practicum experiences. (For example: HS baseball, Little League baseball, HS football). Each student must complete a contract with the athletic program and submit the contract to the coaching practicum coordinator (University supervisor) for approval. The coordinator will then contact the athletic program for verification of the learning experience, dates of the experiences and details of evaluation procedures.

Prerequisites: PE $106^{\mathrm{D}}$ and (PE $171^{\mathrm{D}}$ or PE $356^{\mathrm{D}}$ ) and PE $175^{\mathrm{D}}$ and PE $177^{\mathrm{D}}$ and (PE $260^{\mathrm{D}}$ or PE $242^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Spring \& Summer Terms

## PE 175 - Teaching of Track and Field

Emphasizes track and field skill acquisition along with identification of appropriate teaching methods associated with these activities. This is a Theory and Technique Course (open to Physical Education majors only).

Credits: 1
Term(s) Typically Offered: Offered as Needed

## PE 177 - Teaching of Self-Defense/Lacrosse

The course deals with the skills, knowledge, and attributes needed for self-defense and lacrosse. This course also emphasizes the teaching, coaching, officiating, and physical skill development of men's and women's lacrosse. This is a Theory and Technique Course (open to Physical Education majors only).

Credits: 1
Term(s) Typically Offered: Offered as Needed

## PE 181 - Adventures in Backpacking

This course teaches the basic knowledge and skills of backpacking travel in a temperate environment. Techniques such as how to use and to carry a backpack, hiking skills including route selection and trail negotiation with a pack, map, and compass techniques, knowledge and care of backpacking equipment, planning backpacking trips, and environmentally sound backpacking skills will be covered. The course includes a mandatory weekend trip to put skills to practical use. This is a Wellness and Lifetime Activity Course (offered to all students).

## Credits: 1

Term(s) Typically Offered: Offered as Needed

## PE 182 - Introduction to Rock Climbing

This course introduces students to the fundamental skills of top rope rock climbing. Beginning skills in belaying, static climbing, rappelling, prussiking, artificial wall climbing safety considerations and minimal environmental approaches will be covered. The student will be introduced to various teaching methodologies and classroom management approaches specific to rock climbing community and commercial settings.

Credits: 2
Term(s) Typically Offered: Offered Fall Terms

## PE 184 - Adventure Games

This course is designed to provide physical activity and direct experience in adventure challenges requiring self-discipline, willingness to try, and personal commitment. Coursework includes physical fitness and flexibility exercises, aerobic games, cooperative games and nongames, group initiatives, trust activities, and challenge course low and high elements involving perceived physical and psychological risk and challenges. This is a Wellness and Lifetime Activity Course (offered to all students).

## Credits: 1

Term(s) Typically Offered: Offered as Needed

## PE 186 - Cross Country Skiing and Snowshoeing

This introductory course is designed to explore the fundamental skills and safety concepts necessary to participate in cross country skiing and snowshoeing effectively. The physical and cognitive benefits of outdoor aerobic activities will be addressed. Safety approaches to cold weather activities will be explored. Various skiing and snowshoeing techniques including diagonal stride, kick concept, double poling, descending/ ascending, striding, turning and walking/running will be examined. In addition, equipment selection and care, trip planning and logistics, and minimum environmental impact techniques will be addressed.

## Credits: 2

Term(s) Typically Offered: Offered Spring Terms

## PE 187 - Flat-water Canoe Tripping

This course teaches the basic skills and concepts of flat-water canoe camping, such as how to enter and to exit a canoe, tandem paddling techniques, canoe safety, and canoe portaging. Students will also learn basic canoe camping skills, including food planning, how to use camping equipment, and minimum impact camping techniques. Students will participate in a mandatory weekend canoe camping experience to put learned skills to practical use. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1
Term(s) Typically Offered: Offered as Needed

## PE 188 - Sailing

This course offers students an opportunity to develop skills, to learn techniques, and to achieve personal satisfaction in beginning sailing. The course also involves the knowledge and application of the rules of water safety to the sport of sailing. This class is designed for beginners. At its conclusion students will be able to enjoy sailing as a lifetime recreational sport. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1
Term(s) Typically Offered: Offered as Needed

## PE 189-Basic Canoeing

Instruction focuses on the fundamental skills and concepts needed to operate a canoe effectively. Furthermore, the student will be introduced to various teaching methodologies and classroom management approaches for teaching in non-traditional settings. Safety procedures will be emphasized including self-rescue and group rescue approaches. Various paddling techniques including power strokes, turning strokes and bracing with the paddle will be examined. In addition, equipment selection and care, boating regulations, trip planning and logistics, outdoor leadership, basic water reading skills, white water clarification and minimum environmental impact techniques will be addressed. An overview of the various types of and safety equipment will be explored.

Credits: 2
Term(s) Typically Offered: Offered as Needed

## PE 190 - Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## PE 191 - Foundations of School Wellness

This course is designed to introduce the student to the historical, philosophical, cultural and sociological influences that have shaped the profession of teaching health and physical education. A foundational perspective will be taken to clarify the related disciplines, history and current issues of health and physical education and of education, from the ancient cultures to the 21 st century. Including the framework involved in the Whole School, whole child, whole Community (WSCC) Model, the Comprehensive School Physical Activity Program (CSPAP) and the Health Optimizing Physical Education (HOPE) Model.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Enrollment is limited to students with a major in School Wellness Education, Health-Physical Educ Teaching or Health and Physical Education.

PE 192 - Diversity Issues in Physical Education
This course will explore differences among students within a variety of physical education settings. Students will learn about other people and explore how others view participation in physical activity and exercise. This course will help students become sensitive to and appreciate the diversity of others, thus, demonstrating responsible social behaviors that will enable them to interact in a positive manner with diverse groups within the physical education enrichment. This is a Theory and Technique Course.

Credits: 2
Term(s) Typically Offered: Offered as Needed
Enrollment is limited to students with a major in School Wellness Education, Health-Physical Educ Teaching or Health and Physical Education.

## PE 195 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## PE 198 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## PE 202-Technology for Wellness

This course is designed to provide the student with an overview of the various types of technology that can be utilized in the area of wellness and fitness. The purpose of this course is to familiarize and enhance students' technology skills to support instruction in various education, wellness and fitness settings. the course includes personal computer use in creating materials to enhance instruction, promotion and assessment. Also included are other emerging technologies, in addition to various internet options. A portion of the course will be conducted using SRU's Learning Management System.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms

## PE 227 - Introduction to Adapted Physical Activity

Develop an understanding of disabilities and apply that knowledge in the application of active-living, community-based physical activity programs.

## Credits: 3

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

## PE 230-Teaching and Coaching of Track \& Field

This course is designed to introduce the student to the teaching and coaching aspects of track \& field. Skill acquisition, strength and conditioning methods, teaching and coaching skills and historical perspectives of track \& field will be studies. Emphasis will be placed on planning and applying developmentally appropriate activities for all learners.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms, Offerings Vary

## PE 231-Strategies for Teaching Physical Activity

This course is designed to teach evidence-based educational methods and adult learning strategies to equip the student to educate individuals throughout the lifespan through: 1) a basic understanding of learning and developmental theories; 2) communication techniques; 3) positive behavior management; 4) environmental modifications; and 5) group engagement strategies.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms

## PE 232 - Physical Activity and Wellbeing in Society

This course discusses patterns of social behavior as they relate to physical activity and well-being. Students will examine why physical activity behaviors have changed over time, and the effects these changes have had on human and society. Students will analyze physical activity trends and initiatives throughout the world and using a social-ecological approach will design a solution for how communities, businesses, schools and workplaces can re-engineer physical activity back into society.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms

## PE 236 - Introduction to Kayaking

This introductory course is designed to explore the fundamental skill and safety concepts necessary to paddle a kayak effectively. Safety procedures will be emphasized such as entering and exiting the kayak, the bow rescue, the Eskimo roll, as well as self-rescue and group-rescue approaches. Various paddling techniques including power strokes, turning strokes, and bracing with the paddle will be examined. In addition, equipment selection and care, boating regulations, tripping planning and logistics, outdoor leadership, basic water reading skills, white water classification and minimum environmental impact techniques will be addressed. An overview of the various types of kayaks and kayaking, such as whitewater kayaks, sit-on-top kayaks, and touring kayaks, as well as necessary safety equipment, will be explored.

Credits: 2
Term(s) Typically Offered: Offered Spring Terms

## PE 237 - Emergency Medical Response

This course is designed to provide the student with the knowledge and skills necessary to work as an emergency medical responder (EMR) to help sustain life, reduce pain and minimize the consequences of injury or sudden illness until more advanced medical help takes over. The course content meets or exceeds the current Emergency Medical Services Educational Standards for Emergency Medical Responders and current NATA Education Competencies.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
PE 238-Applied Principles of Exercise
This course will provide students with an understanding of applied exercise principles associated with both health and skill related fitness, topics will include: warm up and cool down protocols, exercise frequency, intensity, type and time (FITT) principles, overload, progression, specificity, regularity and individuality (Basic Training Principles) and target heart-rate.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms

## PE 240 - Downhill Snow Skiing II

Advanced techniques of downhill skiing are presented. Instruction takes place at Peek N' Peak Resort. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1
Term(s) Typically Offered: Offered as Needed

## PE 241 - Outdoor Pursuits

This course is designed to introduce the student to the varied but interrelated topics of outdoor pursuits, adventure programming, experiential education, group problem-solving, and cooperative games philosophy. The course will provide physical activity, direct experience, and leadership techniques in adventure challenges which require elfdiscipline, a willingness to try, and personal commitment. This is a Theory and Technique Course.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Healthy Body, Mind \& Environment, Transfer Thread Completion Course

## PE 242 - Physical Health and Fitness Education

This course is designed to provide knowledge of evidence based benefits associated with regular physical activity along with knowledge to develop, organize, administer and assess age appropriate physical activity and fitness programs for children, adolescents and adults.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms

## PE 243 - Educational Movement in Health \& Wellness

This course helps students achieve individual competency in applying educational gymnastics, fundamental movement, educational/ multicultural games and educational/creative dance to learn Laban's educational movement concepts through the use of cooperative learning, problem solving and guided discovery. Students construct developmentally appropriate interdisciplinary standards-based expressive movement experiences that show meaningful application to children's learning inclusive of children with special needs and English language learners. Content will also address health and wellness concepts central to grades PreK-4 as it relates to educational movement. Students will reflect (metacognition) upon their educational movement experiences including but not limited to individual competency, diversity, critical thinking, core subject integration and differentiating instruction.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Education, Transfer Thread Completion Course

## PE 250 - Equine Assisted Activities

An introduction to equine assisted activities including basic safety skills, lesson preparation, benefits for individuals with disabilities, tack/equine selection, and certification procedures. Students will gain practical experience through riding horses and assisting individuals with disabilities during lessons.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## PE 253 - Principles of School Wellness II

This course is an orientation to the art and the science of teaching physical and health at the K - 12 levels. Framed within the National Standards \& Grade Level Outcomes for K-12 Physical Education (SHAPE America, 2014) pre-service teacher candidates will study curriculum models, grade level outcomes, class organization, management and safety techniques, developmentally appropriate communication techniques, health and wellness integration strategies infused in lessons, locating and using professional resources for planning and teaching, lesson plan writing, a spectrum of direct and indirect teaching styles, systematic observation tools, teaching and post-lesson reflecting. Skills central to professional development include lesson plan writing, class organization and management documentation, systematic observation of teaching, post-lesson reflecting. Pre-service teacher candidates will build on the professional portfolio started in PE 152 using artifacts.

Prerequisites: PE $152^{\circ}$ and PE $383^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2.
Enrollment is limited to students with a program in School Wellness Education.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## PE 258 - Social \& Emotional Wellness

This course is designed to examine topics relating to psychosocial health \& wellness of school aged youth as a part of a comprehensive approach to school wellness. Future educators will learn now to address topics such as respect and appreciation for all persons, bullying, conflict resolution, stress reduction, suicide prevention, depression, anxiety and high-risk behavior with K-12 students.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms

## PE 262 - Adapted Aquatics

Develop knowledge base in the study of disability through discussion and practical experiences as it relates to aquatic programming.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms

## PE 263 - Lifeguarding

The lifeguarding course is designed to provide lifeguard candidates with skills and knowledge necessary to keep patrons of aquatic facilities safe in and around water. This course includes techniques with aquaticspecific first aid and cardiopulmonary resuscitation (CPR) training, Automated External Defibrillation, Oxygen Administration and training in specific water environments. Offered to all students.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
PE 266 - Disability Sport in the $\mathbf{2 1}$ st Century: A Global Perspective
This course is designed to introduce the students to the study of Disability Sport across the world. Students will study the history, current movement, and future developments of Disability Sport in an ever changing and emerging field of sport for persons with disabilities.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## PE 268 - Contemporary Topics in Health

This course is designed to introduce students to current issues in health and wellness and provide opportunities for students to assess health needs in school and community settings. In this course, students will identify programs and initiatives that promote healthy living and improve well-being based on the health needs of society.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## PE 270-Psychological and Sociological Bases of Sport

This course provides students with an understanding of the relationships between sport and various psychological and sociological factors. This is a Theory and Technique Course.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Enrollment is limited to students with a major in School Wellness Education, Health-Physical Educ Teaching, PE-Physical Activ\&Fitness Mgmt, Health and Physical Education or Athletic Training.

## PE 272 - Enhancing Fitness through Running and Walking

This course is designed to teach students how to personally perform and to lead others in aerobic physical activities using indoor and outdoor settings. This course focuses on leading fitness enhancing activities through running, trail-running, Nordic walking, community walking and hiking. These activities are designed to improve aerobic fitness, manage weight and promote healthy lifestyles. The settings include roadways, trails and community common areas. Course content centers on individual and group health and fitness, and strategies for conveying this information.

Credits: 2
Term(s) Typically Offered: Offered as Needed

## PE 274-Assessment Strategies in Physical Education

This course content is designed to give the student an understanding of assessment techniques used in physical education. Students will learn the various techniques used for assessing as applied in the public school setting. Students will have the opportunity to use several of the computer applications related to physical education. This is a Theory and Technique Course.

Prerequisite: PE $152^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Enrollment is limited to students with a major in School Wellness Education, Health-Physical Educ Teaching or Health and Physical Education.

## PE 275 - Women in Sport

This course emphasizes the problems, processes and patterns of sport involvement of women in utilizing an historical, sociological, psychological and biological approach. The focus is primarily on women in the United States, although the sport participation of women in other cultures is also examined. This is a Theory and Technique Course (open to Physical Education majors only).

## Credits: 3

Term(s) Typically Offered: Offered as Needed

## PE 276 - Skate-Based Action Sports

This course explores the fundamental skills and safety concepts necessary to engage in skate-based action sports effectively. Safety procedures such as, choosing locations and terrain appropriate for an individual's skill set and experience level are emphasized. Skatebased learning progressions address various skating techniques including proper stance, effective stopping, efficient pushing, turning, carving, sliding, core-specific land paddling strokes and bracing with the paddle. In addition, equipment selection and care, safety equipment requirements, regulations, trip planning and logistics, outdoor adventure leadership, and minimum environmental impact techniques are examined. There is an overview of the various types of skateboards longboards/land paddling boards and in-line skates as well as necessary safety equipment.

Credits: 2
Term(s) Typically Offered: Offered Spring Terms

## PE 289 - Advanced Canoeing

This course teaches students the advanced skills and techniques of canoeing. Safety instruction is emphasized. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1
Term(s) Typically Offered: Offered as Needed

## PE 290 - Experimental

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

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## PE 295 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## PE 298 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## PE 301-Sports Officiating

This diverse class is designed to provide the student with an overview of the techniques required for officiating various sports. The official's role and rules of the game(s) will be presented, and opportunities will be provided for practical officiating experience. This will be followed by comprehensive analysis of the student's officiating style, knowledge of the rules and professionalism.

## Credits: 3

Term(s) Typically Offered: Offered Summer Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 302 - Foundations of Online Teaching and Learning

The course is designed to provide learners opportunities to understand the foundations of distance education. Students will be able to demonstrate competencies and skills to apply instructional strategies to develop curriculum that meets the needs of distant learners. In addition, students will be able to use various assessment methods to evaluate student learning through distance education.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2, Junior 1, Junior 2, Sophomore 1 or Sophomore 2 may not enroll.

## PE 303 - Using Educational Technology to Enhance Learning

This course is designed to provide students with the knowledge and skills necessary to effectively use educational technology to enhance learning in both a traditional face-to-face classroom and also through distance or cyber education.

Credits: 3
Term(s) Typically Offered: Offered Winter Terms
Students with a semester level of Freshman 1, Freshman 2, Junior 1,
Junior 2, Sophomore 1 or Sophomore 2 may not enroll.

## PE 304 - Teaching Physical Education through Distance Education

This course is designed to provide students with the knowledge and skills necessary to effectively teach physical education through distance or cyber education.
Prerequisites: PE $302^{C}$ and PE $303^{C}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2, Junior 1, Junior 2, Sophomore 1 or Sophomore 2 may not enroll.

## PE 305-Teaching Health Education through Distance Education

This course is designed to provide students with the knowledge and skills necessary to effectively teach health education through distance or cyber education.

Prerequisites: PE $302^{C}$ and PE $303^{C}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2, Junior 1, Junior 2, Sophomore 1 or Sophomore 2 may not enroll.

## PE 306 - Conditioning for Athletic Performance

This course is designed to engage and immerse students in the theory and application of power and speed training as well as athletic motor skill development. Students will study the relationships among biomotor abilities and apply training principles and methods associated with the development of power-based athletic skills. Students will design and apply daily-, short- and long-term training programs for coaching athletes who seek improved athletic performance.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

PE 310 - Elementary School Wellness Skills and Fitness Activities
This course is designed to engage and immerse the student in the Society for Health and Physical Education (SHAPE) elementary grade level standards for health and physical education knowledge and skills. along with these standards this course will engage students in developmentally appropriate activities and lesson plan concepts that will ensure the teacher candidates understand the developmental progression of fundamental motor skills, their application to higher level movement, fitness and rhythmics. Teacher candidates will develop knowledge to create physically literate elementary aged learners who are prepared to lead a healthy active and well life.

Prerequisites: PE $152^{\text {C }}$ and PE $383^{C}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

PE 311 - Middle School Wellness Skills and Fitness Activities
This course is designed to engage and immerse the teacher candidate in the Society for Health and Physical Education (SHAPE) middle school grade level standards for health and physical education knowledge and skills. Along with these standards this course will engage teacher candidates in developmentally appropriate activities and lesson plan concepts that will ensure that they understand how to develop physical skills and knowledge to create physically literate middle school aged learners are prepared to lead a healthy active and well life.

Prerequisite: PE $310^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## PE 312 - Secondary School Wellness Skills and Fitness Activities

This course is designed to engage and immerse the teacher candidate in the Society for Health and Physical Education (SHAPE) high school grade level standards for health and physical education knowledge and skills. Along with these standards this course will engage teacher candidates in developmentally appropriate activities and lesson plan concepts that will ensure that they understand how to develop specialized health optimizing physical activity and knowledge to create physically literate high school aged learners who are prepared to be healthy and active adults and college or career ready.
Prerequisite: PE $310^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER
CANDIDACY attribute.

## PE 328-School Nutrition and Wellness

This course will provide students with information about the K-12 school nutrition environment and school nutrition services as defined by the Society of Health and Physical Educators (SHAPE America). Students will learn strategies for teaching K -12 students to reach and maintain a healthy weight as well as strategies for modeling healthy dietary behaviors and providing opportunities for healthy eating in schools. The role of the collaboration between school wellness educators, food service personnel, School Nurses and Registered Dietitians for improving students' nutrition and wellness will be discussed. This course is designed to provide the student with an understanding of the fundamental aspects of nutrition concepts and how they are applied to the K-12 settings.

Prerequisite: PE $268^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## PE 331 - Evidence-Based Physical Activity

This course is designed to introduce students in current theories, models and successful interventions used in physical activity promotion including: factors/barriers influencing physical activity among children/ adolescents and adults. The focus of the course is on the acquisition of evidence-based practices that lead to appropriate assessment strategies, implementation models and evaluative techniques.

Prerequisites: PE $131^{\mathrm{D}}$ and PE $231^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## PE 332 - Administration and Management of Physical Activity

This course is designed to teach students how to ethically administered, manage and evaluate physical activity programs in the community with respect to managing operations, developing and managing financial resources and managing human resources.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## PE 334 - Applied Methodologies in Adventure

This course is designed to teach evidence-based educational methods and learning strategies to equip the student to educate individuals in a variety of adventure throughout the lifespan through variety of adventure activities. A number of pertinent topics specific to adventure education will be addressed including, foundational knowledge, self-awareness and professional conduct, decision making and judgment, experiential teaching and facilitation, environmental stewardship, adventure program management, adventure safety and risk management, inclusive learning, and technical ability.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in School Wellness Education, Health-Physical Educ Teaching, Health and Physical Education or Adventure Fitness.

PE 335 - Science of the Mind-Body Connection
This course will introduce students to a variety of fitness activities such as yoga, Pilates along with other physical activities associated with nature all with a mind and body connection and associated with stress management and overall health-related fitness. this course will explore the interconnectedness of the mind and body in relation to quality of life and prevention of chronic disease.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Healthy Body, Mind \& Environment, Mind \& Brain, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 338 - Teaching and Leading Group Exercise

This course provides opportunities for practical skills and instruction to prepare the student to teach and lead various large group fitness activities involving children, adolescents and adults. Emphasis is placed on design, developmental appropriateness, safety and modifications for divers populations who are apparently healthy.

Prerequisite: PE $238^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 342-Wellness through Movement

This course is designed to provide the student with scientifically based knowledge concerning the benefits of physical activity along with the consequences associated with a lack of physical activity both on a personal and societal level. Students will participate in application of physical activity training, health-related fitness assessments and lifestyle modification activities.

Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): 21 st Century Healthcare, Body and Self, Education, Food, Wellness \& Environment Across Cultures, Healthy Body, Mind \&
Environment, Transfer Thread Completion Course, Well-Being of Children and Youth
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 345 - Teaching and Coaching of Water Polo

This course is designed to introduce the student to the teaching and coaching aspects of water polo. Skill acquisition, strategy and tactics, strength and conditioning, teaching and coaching skills for water polo will be studies. Emphasis will be placed on planning and applying developmentally appropriate activities for all learners.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 348 - Aquatic Leadership

This course is designed to prepare students for leadership responsibilities in the field of aquatics. Program development, facility operation, risk management, and staff management will be included in this course.

Credits: 2
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 349 - Skin and Scuba Diving

This course provides students with the opportunity to learn a wide variety of skin and scuba diving skills, including rescue techniques. In addition, emphasis will be placed upon the following: 1) selection, care, and use of diving equipment, 2) physical and biological aspects of various diving environments, 3 ) first aid as applied to scuba diving, including cardio-pulmonary resuscitation, and 4) aspects of physics, physiology, and medicine related to the diver's performance in the water. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 352 - Secondary Physical Education Teaching Methods

Designed as a third level pedagogy class. This course offers "in-depth continuation of the study and application of effective teaching and learning in the secondary physical education classroom. This is a Theory and Technique Course (open to Physical Education majors only).

Prerequisite: PE $274^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in School Wellness Education, Health-Physical Educ Teaching or Health and Physical Education.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

PE 353 - Adapted Physical Activity and Health Through the Lifespan
This course is designed to investigate the concept of transition across the lifespan with regard to health promotion and physical activity for individuals with disabilities. Students will develop and implement appropriate physical activity programs for specific developmental lifespan stages.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 356 - Net/Wall Activities and Games

This course is designed to introduce the student to games and skills associated with a variety of racquet activities and games, which will include tennis, badminton, racquetball, volleyball, and table tennis. Emphasis will be placed on planning and applying developmentally appropriate activities for all learners. This is a Theory and Technique Course (open to Physical Education majors only).

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 357 - Territory Activities and Games

This course is designed to introduce the student to the games and skills associated with a variety of territory activities and games, which will include flag football, basketball, hockey and soccer. Emphasis will be placed on planning and applying developmentally appropriate activities for all learners.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 358 - Lifetime/Leisure Activities and Games

This course is designed to introduce the student to the games and skills associated with a variety of target activities including, but not limited to, golf, bowling, and archery. Emphasis will be placed on planning and applying developmentally appropriate activities for diverse learners. This is a Theory and Technique Course (open to Physical Education majors only)

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 359 - Striking/Fielding Activities and Games

This course is designed to introduce the student to the games and skills associated with a variety of striking/fielding activities, which will include softball, cricket, and rounders. Emphasis will be placed on planning and applying developmentally appropriate activities for all learners. This is a Theory and Technique Course (open to Physical Education majors only).

Credits: 2
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

PE 360 - Anatomical and Physiological Basis of Physical Activity/Lab
This course is designed to provide the basic anatomical and physiological principles that have direct application to physical activity movement and health for populations. Weekly laboratory sessions will provide practical application experiences to illustrate the theoretical knowledge base.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 362 - School Health Education Methods

The course focuses on Health Education curriculum design and developmentally appropriate instructional techniques that can be utilized for health promotion in school settings. Course included universally accepted pedagogical strategies with opportunities to observe and practice these strategies with K-12 health education content.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students in the BSED1 151 program.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## PE 363 - Lifeguarding Instructor

The purpose of the Lifeguarding Instructor course is to train instructor candidates to teach lifeguard training, first aid, lifeguard management, CPR for the professional rescuer, AED essentials, oxygen administration for the professional rescuer, preventing disease transmission, community water safety, and basic water rescue. The training in this instructor course prepares instructor candidates by developing their understanding of how to use course materials, how to conduct training sessions, and how to evaluate participants" progress.

Credits: 3
Term(s) Typically Offered: Offered Summer Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 364-Biomechanics of Individuals with Disabilities

A study of human movement patterns with emphasis on the development of efficient movement for special populations. Efficient movement patterns will be based on anatomical, mechanical, and physiological principles.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Body and Self, Transfer Thread Completion Course Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 369 - Philosophy and Psychology of Coaching

This course emphasizes the relationships involved in the association of the coach with the administration, student body, players, press and community. This is a Theory and Technique Course.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

PE 378 - Teaching and Leading of Strength and Resistance Training This course is designed to provide practical knowledge to prepare students to teach, lead and effectively design individualized weight training and/or a muscular fitness programs. Students will apply principles of resistance training in a hands-on setting with specific emphasis on techniques, strength and endurance training, safety procedures, equipment and individualized programming.

Prerequisite: PE 238 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 379 - Fitness Management

This course provides the knowledge base to effectively design, promote, manage and assess health related fitness programs in a variety of community and commercial facilities. A wide range of teaching, leading and managing practices associated directly with health fitness facilities will be reviewed.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 383 - Motor Development and Learning

This course introduces the student to the factors influencing the changes in the development and learning of motor skills from infancy to adolescence. Practical laboratory activities are utilized to illustrate basic concepts of motor development and motor learning. This is a Theory and Technique Course (open to Physical Education majors only).

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1 or Freshman 2 may not enroll.
Enrollment is limited to students with a major in School Wellness
Education or Health-Physical Educ Teaching.

## PE 390 - Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 393 - Nutrition for Physical Activity, Exercise, and Health

Students in this course will study nutrition guidelines and standards for physical activity, exercise, and health. This course will cover metabolism, macro and micronutrients, energy expenditure, and fluid and electrolyte requirements. Current trends and claims of diets and supplements will be evaluated, and nutrition differences between individuals and athletes will be discussed.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Food, Wellness \& Environment Across Cultures, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 395 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 398 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## PE 420 - Field Experience

This course is designed to provide students with experiences which allow them to apply their knowledge and skills in a practical worksite situation. This is a Theory and Technique Course (open to Physical Education majors only).

Corequisite(s): PE 042
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 430 - Living Well

This course, which is the capstone course for the Living Well program is designed to engage and immerse the student in evidence-based literature related to living well while building self-evaluation and motivation strategies. Content areas emphasized will be physical activity, nutrition/ dietary guidelines and stress. This course will also engage students in experiential education opportunities and reflection on these experiences. These experiences will be anchored by co-curricular opportunities provided on campus through the Aebersold Recreation Center, Aramark Nutrition Services, the Slippery Rock University Health Center and the Slippery Rock University Leadership office.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## PE 446 - Water Safety Instruction

The purpose of this instructor course is to train instructor candidates to teach American Red Cross Swimming and Water Safety courses. It is a certification course for American Red Cross Water Safety Instructor (WSI).

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 450 - Internship

Supervised placement or research in selected private or public agencies.
Prerequisites: PE $131^{\mathrm{D}}$ and PE $231^{\mathrm{D}}$ and PE $202^{\mathrm{D}}$ and PE $331^{\mathrm{D}}$ and PE $332^{D}$ and PE $473^{D}$ and PE $242^{D}$ and PE $360^{D}$ and PE $268^{D}$ and PE $335^{D}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-12
Term(s) Typically Offered: Offered Fall, Spring, \& Summer

## PE 452 - Elementary Strategies for School Wellness

This professional methods course will provide the preservice teacher candidate with knowledge and skills to effectively contribute to a culture of school wellness through a high quality physical and health education program. Students will develop best-practice planning, teaching and assessment strategies and apply them in a semester-long field experience involving grades $\mathrm{K}-6$. this will also include designing initiatives from leading comprehensive school wellness programs.

Prerequisites: PE $253^{\mathrm{D}}$ and PE $310^{\mathrm{D}}$ and PE $328^{\mathrm{D}}$ and PE $383^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 6
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in School Wellness
Education, Health-Physical Educ Teaching or Health and Physical

## Education.

Enrollment limited to students with the ACCEPTANCE - TEACHER
CANDIDACY attribute.
PE 455 - Student Teaching - Physical Education
Under the guidance of a cooperating teacher and university supervisor, students in this course engage in two eight- week assignments on a fulltime basis in specified school districts and attend scheduled seminars.
Additional assignments required. This is a Theory and Technique Course (open to Physical Education majors only).

Prerequisite: PE $452^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 12
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in School Wellness
Education, Health-Physical Educ Teaching or Health and Physical
Education.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## PE 460 - Program Design in Adapted Physical Activity

Develops competencies in the implementation of developmentally appropriate activities for children and adults with disabilities in the school and through transitional programs conducted within the community.

Prerequisite: PE $227^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 462 - Secondary Strategies in School Wellness

This professional methods course will provide the preservice teacher candidate with knowledge and skills to teach and lead school wellness education at the middle and high school levels. Strategies for facilitating lessons and activities that promote lifelong physical activity and overall wellness will be employed; and the teacher candidate will work collaboratively with a public school mentor teacher under the supervision of the university professor(s) to implement these strategies in schools.

Prerequisites: PE $268^{D}$ and PE $253^{D}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 6
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in School Wellness
Education, Health-Physical Educ Teaching or Health and Physical

## Education.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

PE 468 - Senior Seminar in Physical and Health Education Teacher Education
This course is designed to provide a capstone overview of the organization, management and application of physical education and health instructional and extra-class programs. Content focuses on current issues and trends in the discipline. This is a Theory and Technique Course (open to Physical Education majors only).

Prerequisite: PE $352^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 2
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in School Wellness
Education, Health-Physical Educ Teaching or Health and Physical Education.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## PE 472 - School Wellness Assessment and Promotion

Provide teacher candidates with conceptual tools to analyze healthrelated behaviors of school-aged learners and the social, cultural and environmental context in which they occur. This course will apply theories drawn from public health, psychology and sociology to the process of planning and evaluating wellness instruction in schools that assists learners in developing and maintaining healthy behaviors. The process of collecting, tracking and analyzing health-related data will be included in the course as well as current applications, programs and tools that can be used to track and improve health behaviors.

Prerequisite: PE $253^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Corequisite(s): PE 462
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

PE 473 - Professionalism, Advocacy and Leadership in Physical Activity This course is designed to actively involve the learner in an advanced study of physical activity. The course is conducted in seminar format and the students will study the application of the principles, methods, organization and administration of individualized physical activity programs and the development of professional, advocacy and leadership qualities and skills.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Leadership Development, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

PE 485 - Fundraising/Grant Writing in Adapted Physical Activity This course is designed to develop competencies in fund raising strategies utilizing grant writing skills geared toward corporations and charitable foundations. Students will study the specific skills needed to develop a funding concept, preparation of the proposal, and the establishment of relationships with potential donors.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students with department of Special Education or Physical and Health Education.

PE 490 - Independent Study
With the approval of the students' advisors and departmental chairperson, students may pursue an individual project in physical education especially suited to meet the students' needs. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 495 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## PE 498 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Adapted Physical Activity, Minor

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

## Related Links

Adapted Physical Activity, Minor Program Page (https://www.sru.edu/ academics/majors-and-minors/adapted-physical-activity-minor/)

Physical and Health Education Department Page (https://www.sru.edu/ academics/colleges-and-departments/coe/departments/physical-and-health-education/)

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

## Curriculum Guide

GPA Requirement
Minor GPA: 2.0 or higher

## Minor Requirements

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| PE 227 | Introduction to Adapted Physical Activity | 3 |
| PE 262 | Adapted Aquatics | 3 |
| PE 266 | Disability Sport in the 21 st Century: A Global Perspective | 3 |
| PE 353 | Adapted Physical Activity and Health Through the Lifespan | 3 |
| PE 460 | Program Design in Adapted Physical Activity | 3 |
| PE 473 | Professionalism, Advocacy and Leadership in Physical Activity | 3 |

Total Hours

## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN ADAPTED PHYSICAL ACTIVITY (61B)
This program is effective as of Fall 2013.
Revised 10.28.2021

## Adventure Fitness, Minor

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

## Related Links

Adventure Fitness, Minor Program Page (https://www.sru.edu/ academics/majors-and-minors/adventure-fitness-minor/)

Physical and Health Education Department Page (https://www.sru.edu/ academics/colleges-and-departments/coe/departments/physical-and-health-education/)

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

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (an upper division course includes any 3 credit course that requires a prerequisite)
- A minor shall be no fewer than 18 credits.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Adventure Fitness Required Courses |  |  |
| PE 241 | Outdoor Pursuits | 3 |
| PE 342 | Wellness through Movement | 3 |
| PE 332 | Administration and Management of <br>  <br> Physical Activity | 3 |
| PE 334 | Applied Methodologies in Adventure | 3 |

Adventure Fitness Elective Classes
Select six credits of the following:

| PE 123 | Stand-Up Paddle Boarding |
| :---: | :--- |
| PE 125 | Bicycling |
| PE 182 | Introduction to Rock Climbing |
| PE 186 | Cross Country Skiing and Snowshoeing |
| PE 236 | Introduction to Kayaking |
| PE 272 | Enhancing Fitness through Running and <br>  <br> PE 276 |
| PE 349 | Skate-Based Action Sports |
| Total Hours | Skin and Scuba Diving |

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


## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN ADVENTURE FITNESS (61F)
This program is effective as of Fall 2018.
Revised 04.09.2020

## Aquatics, Minor

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

## Related Links

Aquatics, Minor Program Page (https://www.sru.edu/academics/majors-and-minors/aquatics-minor/)

Physical and Health Education Department Page (https://www.sru.edu/ academics/colleges-and-departments/coe/departments/physical-and-health-education/)

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

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.0 or higher

## Minor Requirements

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Aquatic Core |  |  |
| PE 107 | Aquatic Fundamentals | 3 |
| PE 262 | Adapted Aquatics | 3 |
| PE 263 | Lifeguarding | 3 |
| PE 348 | Aquatic Leadership | 2 |
| Aquatic Instructor Courses |  |  |
| PE 363 | Lifeguarding Instructor | 3 |
| PE 446 | Water Safety Instruction | 3 |
| Aquatic Electives |  |  |
| Select two | owing courses: | 2-6 |
| PE 123 | Stand-Up Paddle Boarding |  |
| PE 187 | Flat-water Canoe Tripping |  |
| PE 189 | Basic Canoeing |  |
| PE 236 | Introduction to Kayaking |  |
| PE 237 | Emergency Medical Response |  |
| PE 345 | Teaching and Coaching of Water Polo |  |
| PE 349 | Skin and Scuba Diving |  |
| Total Hours |  | 19-23 |

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


## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN AQUATICS (61D)
This program is effective as of Fall 2018.
Revised 11.09.2021

> Health and Physical Education, Bachelor of Science in Education (BSED) - Concentration in Physical Activity and Fitness Management

The Physical Education - Physical Activity and Fitness Management concentration will prepare professionals to plan, implement, and evaluate physical activity programs in corporate, community, and non-profit settings. The physical activity and fitness management concentration has intellectual value in academia while addressing emerging regional and national employment trends, student interests and preferences, and community need. The uniqueness of this track centers around a personnel preparation core combined with students preferred choice of two of five well-established and emerging specialty areas.

## Program Learning Outcomes

- Instructional Excellence: Develop Physical Activity and Fitness Managers who educate and empower individuals to lead active healthy lifestyles.
- Physical Health and Wellness Competency: Develop Physical Activity and Fitness Managers who prepare individuals for an active lifestyle through purposeful movement and healthy nutrition.
- Social, Emotional and Cognitive Wellness: Develop Physical Activity and Fitness Managers who prepare individuals with strategies to improve cognition, manage stress and positively interact with others.
- Physical Activity Management in Community and Commercial Settings: Prepare Physical Activity and Fitness Managers to coordinate and lead comprehensive wellness programs that promote health literacy and physical activity in Community and Commercial Settings.
- Professional Advocate and Leader: Develop professionals who model and value health and advocate for quality health and wellness in schools and communities.


## Related Links

Health and Physical Education - Physical Activity and Fitness Management, BSED Program Page (https://www.sru.edu/academics/ majors-and-minors/physical-activity-and-fitness-management/)

> Physical and Health Education Department Page (https://www.sru.edu/ academics/colleges-and-departments/coe/departments/physical-and-health-education/)

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

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major/Concentration Requirements | 60 |
| Electives | 18 |

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


## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Sciences Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Sciences Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |
| Thematic Thread |  |  |
| Select 12 Credi | 1378) ${ }^{2}$ | 12 |

Total Hours 42

1 Course offered in multiple subjects; cannot take course in first major subject.

2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one | following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |

PE 202 Technology for Wellness
Total Hours
0-3

## Major/Concentration Requirements

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Core Courses |  |  |
| PE 131 | Foundations of Leadership in Physical Activity ${ }^{1}$ | 3 |
| PE 202 | Technology for Wellness ${ }^{1}$ | 3 |
| PE 231 | Strategies for Teaching Physical Activity ${ }^{1}$ | 3 |
| PE 331 | Evidence-Based Physical Activity ${ }^{1}$ | 3 |
| PE 332 | Administration and Management of Physical Activity ${ }^{1}$ | 3 |
| PE 450 | Internship ${ }^{1}$ | 6 |
| PE 473 | Professionalism, Advocacy and Leadership in Physical Activity ${ }^{1}$ | 3 |

Subtotal 24

## Fitness/Health Courses

| PE 242 | Physical Health and Fitness Education ${ }^{1}$ |
| :---: | :---: |
| PE 268 | Contemporary Topics in Health ${ }^{1}$ |
| PE 335 | Science of the Mind-Body Connection ${ }^{1}$ |
| PE 360 | Anatomical and Physiological Basis of Physical Activity/Lab ${ }^{1}$ |

## Blocks

Select two of the following blocks A, B, C, D or E

## Block A: Adapted Physical Activity

PE 227 Introduction to Adapted Physical Activity ${ }^{1}$

| PE 353 | Adapted Physical Activity and Health Through the Lifespan ${ }^{1}$ |
| :---: | :---: |
| PE 460 | Program Design in Adapted Physical Activity ${ }^{1}$ |
| Select three credits from the following: |  |
| PE 262 | Adapted Aquatics |
| PE 266 | Disability Sport in the 21 st Century: A Global Perspective |
| Block B: Aquatics |  |
| PE 107 | Aquatic Fundamentals (Required) ${ }^{1}$ |
| PE 348 | Aquatic Leadership (Required) ${ }^{1}$ |
| PE 446 | Water Safety Instruction ${ }^{1}$ |
| Select four credits from the following: |  |
| PE 123 | Stand-Up Paddle Boarding ${ }^{1}$ |
| PE 189 | Basic Canoeing ${ }^{1}$ |
| PE 236 | Introduction to Kayaking ${ }^{1}$ |
| PE 237 | Emergency Medical Response ${ }^{1}$ |
| PE 262 | Adapted Aquatics ${ }^{1}$ |
| PE 263 | Lifeguarding ${ }^{1}$ |
| PE 345 | Teaching and Coaching of Water Polo ${ }^{1}$ |
| PE 349 | Skin and Scuba Diving ${ }^{1}$ |
| PE 363 | Lifeguarding Instructor ${ }^{1}$ |
| Block C: Outdoor Adventure Fitness |  |
| PE 241 | Outdoor Pursuits ${ }^{1}$ |
| PE 334 | Applied Methodologies in Adventure ${ }^{1}$ |
| Select six credits from the following: |  |
| PE 123 | Stand-Up Paddle Boarding ${ }^{1}$ |
| PE 125 | Bicycling ${ }^{1}$ |
| PE 182 | Introduction to Rock Climbing ${ }^{1}$ |
| PE 186 | Cross Country Skiing and Snowshoeing ${ }^{1}$ |
| PE 236 | Introduction to Kayaking ${ }^{1}$ |
| PE 272 | Enhancing Fitness through Running and Walking ${ }^{1}$ |
| PE 276 | Skate-Based Action Sports ${ }^{1}$ |
| PE 349 | Skin and Scuba Diving ${ }^{1}$ |
| Block D: Coaching Education |  |
| PE 270 | Psychological and Sociological Bases of Sport (Required) ${ }^{1}$ |
| PE 306 | Conditioning for Athletic Performance (Required) ${ }^{1}$ |
| PE 369 | Philosophy and Psychology of Coaching (Required) ${ }^{1}$ |
| Select three credits of the following: |  |
| PE 230 | Teaching and Coaching of Track \& Field ${ }^{1}$ |
| PE 237 | Emergency Medical Response ${ }^{1}$ |
| PE 238 | Applied Principles of Exercise ${ }^{1}$ |
| PE 266 | Disability Sport in the 21 st Century: A Global Perspective ${ }^{1}$ |
| PE 301 | Sports Officiating ${ }^{1}$ |
| PE 338 | Teaching and Leading Group Exercise ${ }^{1}$ |
| PE 356 | Net/Wall Activities and Games ${ }^{1}$ |
| PE 358 | Lifetime/Leisure Activities and Games ${ }^{1}$ |
| PE 378 | Teaching and Leading of Strength and Resistance Training |


| PE 393 | Nutrition for Physical Activity, Exercise, and <br> Health |
| :---: | :--- | :--- |
| Block E: Fitness | Applied Principles of Exercise ${ }^{1}$ | | PE 238 | Nutrition for Physical Activity, Exercise, and <br> Health |
| :---: | :--- |
| PE 393 | Teaching and Leading Group Exercise |
| Select six credits from the following: |  |
| PE 338 | Teaching and Leading of Strength and <br> Resistance Training |
| PE 378 | Fitness Management ${ }^{1}$ |

1 Course counts for $50 \%$ of Major requirements and Major GPA

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


## Co-curricular and Experiential Learning

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

1. International study programs (short-term, semester, and year-long)
2. Student-faculty research
3. Student leadership development
4. Service-learning classes
5. Career education and development
6. Internship
7. Volunteering

## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
Health and Physical Education - BSED (1158)
Concentration in Physical Activity and Fitness Management (PAFM) This program is effective as of Spring 2020.
Revised 10.29.2021
UCC 02.18.20

## Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall |  |  |
| PE 131 | Foundations of Leadership in Physical | 3 |


| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar | 1 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
|  | Hours | 16 |
| Spring |  |  |
| PE 231 | Strategies for Teaching Physical Activity | 3 |
| PE 242 | Physical Health and Fitness Education | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
|  | Hours | 15 |

## Second Year

Fall

| PE 202 | Technology for Wellness | 3 |
| :---: | :---: | :---: |
| SCI 101 | Science of Life | 3 |
| PAFM Specialty Area |  | 3 |
| PAFM Specialty Area |  | 3 |
| Social Science Inquiry (p. 1378) |  | 3 |
| Elective/Minor |  | 3 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 18 |
| Spring |  |  |
| PE 331 | Evidence-Based Physical Activity | 3 |
| PE 268 | Contemporary Topics in Health | 3 |
| SCI 102 | Understanding the Physical World | 3 |
| PAFM Specialty Area |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Elective/Minor |  | 3 |
|  | Hours | 18 |

Third Year
Fall

| PE 332 | Administration and Management of <br> Physical Activity | 3 |
| :--- | :--- | :---: |
| PE 360 | Anatomical and Physiological Basis of <br> Physical Activity/Lab | 3 |

PAFM Specialty Area 3
Thematic Thread Requirement (p. 1378) 3
Elective/Minor 3

| Elective/Minor | 3 |
| :--- | ---: |
|  | $\mathbf{H o u r s}$ |

Spring
PE 335 Science of the Mind-Body Connection 3
PAFM Specialty Area 3
PAFM Specialty Area 3
Thematic Thread Requirement (p. 1378) 3
Elective/Minor 3

218 Health and Physical Education, Bachelor of Science in Education (BSED) - Concentration in Physical Activity and Fitness Management / PreAthletic Training (SRU) (3+2)

| Elective/Minor | Hours | 3 |
| :--- | :--- | ---: |
|  |  | 18 |
| Fourth Year |  |  |
| Fall | Professionalism, Advocacy and Leadership <br> in Physical Activity | 3 |
| PE 473 |  | 3 |
| PAFM Specialty Area | 3 |  |
| PAFM Specialty Area | 3 |  |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| Elective/Minor |  | $\mathbf{1 5}$ |
|  | Hours | $\mathbf{3 - 1 2}$ |
| Spring | Internship | $\mathbf{6 - 1 2}$ |
| PE 450 | Hours | $\mathbf{1 2 4 - 1 3 0}$ |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 Work with your Academic Adviser to declare a Thematic
Thread by the end of your fall semester in your second
year. Click here (https://forms.office.com/Pages/
ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UldNTi4u)to declare a thread.

Major Code: 1158
Concentration Code: PAFM
Revised: 01.18.2021
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

> Health and Physical Education, Bachelor of Science in Education (BSED) - Concentration in Physical Activity and Fitness Management / Pre-Athletic Training (SRU) (3+2)

## NEW SUMMER/FALL 2022

The Physical Education - Physical Activity and Fitness Management concentration will prepare professionals to plan, implement, and evaluate physical activity programs in corporate, community, and non-profit settings. The physical activity and fitness management concentration has intellectual value in academia while addressing emerging regional and national employment trends, student interests and preferences, and community need. The uniqueness of this track centers around a personnel preparation core combined with students preferred choice of two of five well-established and emerging specialty areas.

The proposed Health \& Physical Education/Physical Activity \& Fitness Management Pre-Athletic Training $3+2$ (PAFM Pre-AT $3+2$ ) program is designed to give students an opportunity to enrich their undergraduate
education with an intensive program in PAFM and facilitate their entry into the Master of Science in Athletic Training at SRU. The course work is tailored to meet the needs of the student both as an HPE/PAFM major and to prepare them for a Masters of Athletic Trainer program.

## PROGRAM LEARNING OUTCOMES

- Instructional Excellence: Develop Physical Activity and Fitness Managers who educate and empower individuals to lead active healthy lifestyles.
- Physical Health and Wellness Competency: Develop Physical Activity and Fitness Managers who prepare individuals for an active lifestyle through purposeful movement and healthy nutrition.
- Social, Emotional and Cognitive Wellness: Develop Physical Activity and Fitness Managers who prepare individuals with strategies to improve cognition, manage stress and positively interact with others.
- Physical Activity Management in Community and Commercial Settings: Prepare Physical Activity and Fitness Managers to coordinate and lead comprehensive wellness programs that promote health literacy and physical activity in Community and Commercial Settings.
- Professional Advocate and Leader: Develop professionals who model and value health and advocate for quality health and wellness in schools and communities.


## RELATED LINKS

Health and Physical Education - Physical Activity and Fitness Management, BSED / Pre-Athletic Training (SRU) (3+2) Program Page - Coming Soon

Physical and Health Education Department Page (https://www.sru.edu/ academics/colleges-and-departments/coe/departments/physical-and-health-education/)

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

> Health and Physical Education, Bachelor of Science in Education (BSED) - Concentration in Physical Activity and Fitness Management / Pre-Occupational Therapy (SRU) (3+3)

## NEW SUMMER/FALL 2022

The Physical Education - Physical Activity and Fitness Management concentration will prepare professionals to plan, implement, and evaluate physical activity programs in corporate, community, and non-profit settings. The physical activity and fitness management concentration has intellectual value in academia while addressing emerging regional and national employment trends, student interests and preferences, and community need. The uniqueness of this track centers around a personnel preparation core combined with students preferred choice of two of five well-established and emerging specialty areas.

The proposed Health \& Physical Education (HPE)/Physical Activity \& Fitness Management Pre-Occupational Therapy 3+3 PAFM Pre- OT $3+3)$ program is designed to give students an opportunity to enrich
their undergraduate education with an intensive program in PAFM and facilitate their entry into the Doctor of Occupational Therapy (OT) at SRU. The course work is tailored to meet the needs of the student both as an HPE/PAFM major and to prepare them for a Doctor of Occupational Therapy program.

## PROGRAM LEARNING OUTCOMES

- Instructional Excellence: Develop Physical Activity and Fitness Managers who educate and empower individuals to lead active healthy lifestyles.
- Physical Health and Wellness Competency: Develop Physical Activity and Fitness Managers who prepare individuals for an active lifestyle through purposeful movement and healthy nutrition.
- Social, Emotional and Cognitive Wellness: Develop Physical Activity and Fitness Managers who prepare individuals with strategies to improve cognition, manage stress and positively interact with others.
- Physical Activity Management in Community and Commercial Settings: Prepare Physical Activity and Fitness Managers to coordinate and lead comprehensive wellness programs that promote health literacy and physical activity in Community and Commercial Settings.
- Professional Advocate and Leader: Develop professionals who model and value health and advocate for quality health and wellness in schools and communities.


## RELATED LINKS

Health and Physical Education - Physical Activity and Fitness Management, BSED / Pre-Occupational Therapy (SRU) (3+3) Program Page - Coming Soon

Physical and Health Education Department Page (https://www.sru.edu/ academics/colleges-and-departments/coe/departments/physical-and-health-education/)

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

## Health and Physical Education, Bachelor of Science in Education (BSED) - Concentration in School Wellness Education

Slippery Rock University's Health and Physical Teacher Education program prepares you to help students maintain healthy lifestyles both at school and outside the classroom. Do you want to inspire young people to learn healthy habits that decrease their chances of long-term health problems? Are you passionate about motivating children to start lifelong behaviors that lead them to healthy futures? Look no further than SRU's School Wellness Education concentration.

Majors in this program are awarded a Bachelor's in Education with a major in Health and Physical Education and a concentration in School Wellness. An educator with this degree can make all the difference in students' lives, as today's K-12 children are spending less time outside and are living increasingly sedentary lifestyles.

All candidates completing this program and student teaching are eligible to receive Pennsylvania certification after achieving a passing or qualifying score on Pennsylvania Department of Education required
exam(s). If you are interested in teaching in another state, please contact the Department of Education in that state.

## Program Learning Outcomes

- Excellent Teaching: Develop teachers who educate and empower individuals to lead active healthy lifestyles.
- Physical Health and Wellness: Develop teachers who prepare individuals for an active lifestyle through purposeful movement and healthy nutrition.
- Social, Emotional and Cognitive Wellness: Develop teachers who prepare individuals with strategies to improve cognition, manage stress and positively interact with others.
- School to Community Health and Wellness: Prepare teachers to coordinate and lead comprehensive wellness programs that promote health literacy and physical activity.
- Professional Advocate and Leader. Develop professionals who model and value health and advocate for quality health and wellness in schools and communities.


## Related Links

Health and Physical Education - School Wellness Education, BSED Program Page (https://www.sru.edu/academics/majors-and-minors/ health-and-physical-teacher-education-school-wellness-education/)

Physical and Health Education Department Page (https://www.sru.edu/ academics/colleges-and-departments/coe/departments/physical-and-health-education/)

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

## Curriculum Guide

## GPA Requirement

GPA must be 2.8 or higher for Teacher Candidacy.
A 3.0 GPA and passing subject area assessment (PECT) or a 2.8 GPA and a qualifying passing subject area assessment (PECT) score (as determined by PDE) is required for certification.

## Summary*

Code Title Hours
Rock Studies Requirements 42
$\begin{array}{ll}\text { Other Basic Requirements } & 0-3\end{array}$
$\begin{array}{ll}\text { Computer Competency } & 0-3\end{array}$
Major/Concentration Requirements 84-87
Electives 3

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


## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |



## Total Hours

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one | following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate " | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal A |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |

## Major/Concentration Requirements

- 42 major credits must be taken at SRU or PASSHE
- 42 major credits must be taken at the 300 level or above
- Six (6) Credits of Math (113 or higher) Required Prior to Admission to Teacher Candidacy: Math Requirement for BS in Education and Human Development requirements must be taken as part of, or in addition to rock studies/thematic thread for degree completion.
- STAT 152
- MATH 113, MATH 115, MATH 117, MATH 118, MATH 122, MATH 123, MATH 125, MATH 131, MATH 210, MATH 225
- CDEV 248

| Code | Title | Hours |
| :---: | :---: | :---: |
| Pillar \#1 - Teaching Excellence |  |  |
| PE 152 | Principles of School Wellness $1^{1,2}$ | 3 |
| PE 253 | Principles of School Wellness II 1,2 | 3 |
| PE 452 | Elementary Strategies for School Wellness | 6 |
| PE 462 | Secondary Strategies in School Wellness 1,2 | 6 |
| Subtotal |  | 18 |
| Pillar \#2 - Physical Health \& Wellness |  |  |
| PE 107 | Aquatic Fundamentals ${ }^{1}$ | 3 |
| PE 310 | Elementary School Wellness Skills and Fitness Activities ${ }^{1,2}$ | 3 |
| PE 311 | Middle School Wellness Skills and Fitness Activities ${ }^{1,2}$ | 3 |
| PE 312 | Secondary School Wellness Skills and Fitness Activities ${ }^{1,2}$ | 3 |
| PE 328 | School Nutrition and Wellness ${ }^{1,2}$ | 3 |
| PE 383 | Motor Development and Learning ${ }^{1}$ | 3 |
| Subtotal |  | 18 |


| Pillar \#3 - Social \& Emotional Health \& Wellness |  |  |
| :---: | :---: | :---: |
| PE 241 | Outdoor Pursuits ${ }^{1}$ | 3 |
| PE 258 | Social \& Emotional Wellness ${ }^{1}$ | 3 |
| PE 360 | Anatomical and Physiological Basis of Physical Activity/Lab ${ }^{1}$ | 3 |
| SEFE 326 | ELL Strategies and Practice ${ }^{1}$ | 3 |
| SEFE 342 | Educational Psychology for Diverse Learners ${ }^{1}$ | 3 |

Subtotal 15

Pillar \#4 - School to Community Health \& Wellness

| PE 191 | Foundations of School Wellness $^{1}$ | 3 |
| :--- | :--- | :--- |
| PE 227 | Introduction to Adapted Physical Activity $^{1}$ | 3 |
| PE 243 | Educational Movement in Health \& $^{1}$ Wellness $^{1}$ | 3 |
| PE 268 | Contemporary Topics in Health $^{1}$ | 3 |

Subtotal 12

Pillar \#5 - Professional Advocacy \& Leadership in Health \&
Wellness
PE 202 Technology for Wellness ${ }^{1} 3$

PE 472 School Wellness Assessment and 3 Promotion ${ }^{1,2}$
Professionalism, Advocacy and Leadership 3 in Physical Activity ${ }^{1}$

| PE 455 | Student Teaching - Physical Education ${ }^{1,2}$ | 12 |
| :---: | :---: | :---: |
| Subtotal |  | 21 |
| First Aid Competency |  |  |
| Select one of the following: |  | 0-3 |
| CPR and First Aid \& Safety Certifications |  |  |
| SAFE 205 First Aid and Safety |  |  |
| Total Hours |  | 84-87 |
| Course counts for $50 \%$ of Major, but not for Major GPA <br> Course must be taken in sequence within block and a 'C' or better is required. Course required for Acceptance into Teacher Candidacy. |  |  |
|  |  |  |
| Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course. |  |  |
| Recommended Electives |  |  |
| Code | Title | Hours |
| PE 115 | Yoga and Well-Being | 3 |
| PE 334 | Applied Methodologies in Adventure | 3 |
| PE 338 | Teaching and Leading Group Exercise | 3 |
| PE 378 | Teaching and Leading of Strength and Resistance Training | 3 |
| PE 446 | Water Safety Instruction | 3 |
| HLTH 316 | Human Sexuality | 3 |

## Co-curricular and Experiential Learning

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

1. International study programs (short-term, semester, and year-long)
2. Student-faculty research
3. Student leadership development
4. Service-learning classes
5. Career education and development
6. Internship
7. Volunteering

## Important Information

## Prerequisites for Admission to Teacher Candidacy <br> Code Title Hours

| Basic Courses |  | 3 |
| :--- | :--- | :--- |
| PE 152 | Principles of School Wellness I | 3 |
| ENGL 102 | Critical Writing | 3 |
| Select one of the following: |  |  |


| ENGL 104 | Critical Reading |
| :--- | :--- |
| ENGL 220 | Introduction to Literary and Cultural |

## Math Requirement

Select six credits from the following: 3

| MATH 113 | Mathematics as a Liberal Art |
| :--- | :--- |
| MATH 115 | Financial Mathematics |
| MATH 117 | Quantitative Reasoning |
| MATH 122 | Finite Mathematics with Matrices |


| MATH 123 | Introduction to Applied Calculus |
| :--- | :--- |
| MATH 125 | Precalculus |
| MATH 131 | Discrete Mathematics |
| MATH 210 | Elementary Mathematics I |
| MATH 225 | Calculus I |
| MATH 230 | Calculus II |
| MATH 235 | Foundations of Mathematical Proof |
| MATH 310 | Elementary Mathematics II |
| STAT 152 | Elementary Statistics I |
| STAT 252 | Introduction to Statistical Modeling |
| Total Hours |  |

## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
Health \& Physical Education (BSED) (1158)
Concentration in School Wellness Educ. (SWED)
This program is effective as of Fall 2019
UCC 03.05.20
Revised 08.03.2021

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| PE 107 | Aquatic Fundamentals ${ }^{1}$ | 3 |
| PE 191 | Foundations of School Wellness | 3 |
| ENGL 102 | Critical Writing ${ }^{1}$ | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| SUBJ 139 | University Seminar ${ }^{2}$ | 3 |
| INDS 101 | FYRST Seminar | 1 |
|  | Hours | 16 |


| Spring |  |  |
| :--- | :--- | ---: |
| PE 152 | Principles of School Wellness I ${ }^{1}$ | 3 |
| PE 227 | Introduction to Adapted Physical Activity | 3 |
| ENGL 104 | Critical Reading ${ }^{1}$ | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Rock Studies |  | $0-3$ |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :--- | :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy | $\mathbf{1 5 - 1 8}$ |



## Spring

| PE 455 | Student Teaching - Physical Education | 12 |
| :--- | :--- | ---: |
| Hours | $\mathbf{1 2}$ |  |
| Total Hours** | $\mathbf{1 2 4 - 1 3 3}$ |  |

Course requires a grade of $C$ or better
2 Course offered in multiple subjects; cannot take course in first major subject

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

Major Code: 1158
Concentration Code: SWED
Revised 01.18.2021
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Living Well, Certificate

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

The Living Well certificate will provide the opportunity for students at Slippery Rock University to gain knowledge in how and why to live a healthy and active life. The importance of individuals engaging in healthy lifestyles along with the consequences of those who do not has been documented in the past five years. Students will understand the impact these consequences at both individual and societal levels.

## Related Links

Living Well, Certificate Program Page (https://www.sru.edu/academics/ certificates/living-well-certificate/)

Physical and Health Education Department Page (https://www.sru.edu/ academics/colleges-and-departments/coe/departments/physical-and-health-education/)

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

## Curriculum Guide

## GPA Requirements

Certificate GPA: 2.0 or higher

## Certificate Requirements

Code Title Hours

Required Courses

| ERS 230 | Stress Management | 3 |
| :--- | :--- | :--- |
| HLTH 314 | Nutrition and Health | 3 |
| PE 342 | Wellness through Movement | 3 |
| PE 430 | Living Well | 3 |

Total Hours 12

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


## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
CERTIFICATE IN LIVING WELL (1157)
This program is effective as of Fall 2016.
Revised 07.27.2021

## Physical Education - Coaching, Minor

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

## Related Links

Coaching, Minor Program Page (https://www.sru.edu/academics/majors-and-minors/coaching-minor/)

Physical and Health Education Department Page (https://www.sru.edu/ academics/colleges-and-departments/coe/departments/physical-and-health-education/)

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

## Curriculum Guide

## GPA Requirements

Minor GPA: 2.0 or higher

## Minor Requirements

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Coaching Minor Required Courses |  |  |
| PE 270 | Psychological and Sociological Bases of Sport | 3 |
| PE 301 | Sports Officiating | 3 |
| PE 369 | Philosophy and Psychology of Coaching | 3 |
| PE 378 | Teaching and Leading of Strength and Resistance Training | 3 |
| PE 306 | Conditioning for Athletic Performance | 3 |

## Required Practicum Experience

| PE 166 | Coaching Practicum ${ }^{1}$ | 3 |
| :--- | :--- | ---: |
| Total Hours | 18 |  |
| 1 | Must be taken three times |  |
| $*$ | Some courses may require pre-requisites. Please see course |  |
|  | descriptions to determine if there are any pre-requisites for that |  |
|  | specific course. |  |

## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN COACHING (61E)
This program is effective as of Fall 2018.
Revised 8-2019

## Teaching Health and Physical Education On-line, Certificate

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

This certification is currently not available as PE 302, PE 304, and PE 305 are not offered at this time. PE 303 is available during winter session.

The Physical and Health Education Certificate in Teaching Health and Physical Education (H/PE) on-line will be offered on-line through distance education. The Certificate is designed to enhance the teacher's ability to effectively teach health and physical education through distance education and best practices. Courses will be offered winter and summer sessions.

## Related Links

Teaching Health and Physical Education Online, Certificate Program Page (https://www.sru.edu/academics/certificates/teaching-health-and-pe-online-certificate/)

Physical and Health Education Department Page (https://www.sru.edu/ academics/colleges-and-departments/coe/departments/physical-and-health-education/)

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

## Curriculum Guide

GPA Requirement
2.0 or higher certificate

Certificate Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| PE 302 | Foundations of Online Teaching and <br> Learning | 3 |
| PE 303 | Using Educational Technology to Enhance <br> Learning | 3 |
| PE 304 | Teaching Physical Education through <br> Distance Education | 3 |
| PE 305 | Teaching Health Education through <br> Distance Education | 3 |

## Total Hours

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


## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
CERTIFICATE IN TEACHING HEALTH AND PHYSICAL EDUCATION ONLINE (1154)

This program is effective as of Fall 2014.
UCC 9-27-16
Revised 10-2019

## Wellness, Minor

The Wellness Minor is a testament of your determination to live a healthy lifestyle full of energy with minimal illness or disease. Rather than following the newest trending health fad or product, we choose a global perspective from the world's healthiest people. The courses in this certificate will help broaden your perspective, manage your stress, enhance your mood, and improve every part of your health. Your wellbeing is paramount to achieving your maximum potential, so get started toward a 'new' you now.

## WHY CHOOSE THis Wellness Minor?

How long do you want to live? The average life expectancy of a United States citizen is 78 years, or about 4000 weeks, but people from the healthiest places on earth easily live into their 100s, virtually diseasefree. While many Americans may live to the age of 78 , they often suffer from preventable diseases for decades, which often begin in their 40 s and 50s. In this context, perhaps a better question to ask is "How well do you want to live?"

The Wellness Minor is designed to help you become a better version of yourself by uncovering truths about wellness so you can lead a life of the highest quality.

Still need another reason? This minor will make you more attractive to employers. When you have a high level of wellness, you take fewer sick
days, you have more energy, and you are an asset to your organization. Every employer wants someone with high energy, has their life under control, and who is happy and productive. This minor sets you apart from everyone else by showing that you are dedicated to being your best.

## WHAT WILL YOU LEARN?

You learn through doing. You learn how to manage stress, how to choose healthy nutritious foods, and how physical activity improves your wellness. The capstone class, Living Well, links the many aspects of wellness together through application so you can achieve your best self. The world of wellness will continue to grow and expand as we learn more about health and our physiology. Remember, wellness encompasses nearly every aspect of living and there is almost no limit to how this certificate will improve your wellbeing and expand your career opportunities.

## CAREER OPPORTUNITIES

After taking one or more of these classes, many students have been inspired to incorporate wellbeing in their future career and help others raise their level of health. The breadth of wellness covers fields such as physical, environmental, emotional, spiritual, intellectual, occupational, financial, and social wellness. The opportunities are vast and growing. Adding this minor to your SRU degree is an investment in your greatest asset-you.

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

## Related Links

Physical and Health Education Department Page (http://www.sru.edu/ academics/colleges-and-departments/coe/departments/physical-and-health-education/)

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

## CURRICULUM GUIDE

## GPA REQUIREMENT

Minor GPA: 2.0 or higher

## MINOR REQUIREMENTS

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Physical Wellness Requirement |  |  |
| Select one of the following: |  | 3 |
| PE 238 | Appli |  |
| PE 306 | Cond |  |
| PE 310 | Elem <br> Fitne |  |
| or PE 311 | Midd Activ |  |
| or PE 312 | Seco <br> Activ |  |
| PE 338 | Teac |  |


PE $430 \quad$ Living Well

Total Hours

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


## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN WELLNESS (61G)
This program is effective as of Summer 2021
Revised 07.15.2021
UCC 04.13.2021

## Secondary Education/Foundations of Education

| Chair | Secretary | Location | Department <br> Phone |
| :--- | :--- | :--- | :--- |
| Dr. Edwin | Germaine | 001 McKay | $724-738-2041$ |
| Christmann | Newstrom | Education <br> Building |  |

Department Web Site URL (https://www.sru.edu/academics/colleges-and-departments/coe/departments/secondary-education-/-foundations-of-education/)
Department Fact Sheet URL (https://www.sru.edu/documents/programs/ factsheets/undergraduate/sefe-fs.pdf)

## The Rock Difference

The Department of Secondary Education/Foundations of Education is committed to the development of professional educators through the careful integration of theory and practice. Moreover, it is SEFE's position that there is an inseparable fusion between teachers' professional identities and their personal identities. Teaching is a reflective process that takes place within a diverse social, economic, political, and cultural complex that mandates continual development of the teacher. Since teaching does not take place in a vacuum, it is part of our mission to provide opportunities for the total cognitive and affective development of our students so that they may become productive members of a teacher/ scholar community who will conduct research and disseminate knowledge that will enhance the education of students at all levels.

The mission of the department is to provide secondary education majors with the knowledge, and skills to succeed in today's changing classrooms. Moreover, the merging of theory with practice and the building of a solid background in foundations of education for all middle and secondary education majors are additional hallmarks.

Prospective secondary school teachers are required to take for certification, coursework in an academic discipline that is equivalent to a major in that discipline. Successful completion of a prescribed program and certification examinations are required for eligibility for certification by the Pennsylvania Department of Education.

A secondary education major is advised by a faculty member in the Department of Secondary Education/Foundations of Education. Students may choose to attain dual certification, that is, to become eligible to teach in more than one subject area. The decision to attempt this dual certification should be made as early as possible in order to facilitate scheduling. It is the responsibility of the students to understand the certification requirements and to schedule all required courses.

## Requirements for the Bachelor of Science in Education

The department uses both state and national guidelines to continually update its accredited programs. Therefore, the specific course of study and the most recent requirements leading to teacher certification in this department are available in the departmental office or from the student's adviser. See also Teacher Education Policy Manual, available in 105 McKay Education Building and on the College of Education homepage. Areas of teacher certification in secondary education at the baccalaureate level include:

- English
- French
- Social Studies - History
- Spanish

Areas of teacher certification in middle level education at the baccalaureate level include:

- English- Language Arts
- Social Studies
- Science
- Mathematics

Areas of Teacher Certification in Secondary Education at the master's level:

- Biology
- Chemistry
- Earth and Space Science
- General Science
- Mathematics
- Physics
- English
- Social Studies

Certification in these latter areas is available only at the graduate level as part of the master of education degree program. For more information about this program, including prerequisites, contact the Secondary Education/Foundations of Education office in 114 McKay Education Building.

## Faculty

Padma Anand
Professor
Secondary Ed/Foundations Ed

Ed.D., Memphis State University
M.A., Mysore University (India)
B.A., Bangalore University (India)

## Richard Busi

Instructor
Secondary Ed/Foundations Ed
Ph.D., University of Florida
M.E., Slippery Rock University
B.S., Slippery Rock University

## Edwin Christmann

## Professor

Secondary Ed/Foundations Ed
Ph.D., Old Dominion University
M.Ed., Pennsylvania State University
B.S.Ed., California University of Pennsylvania

## John Hicks

Associate Professor
Secondary Ed/Foundations Ed
Ph.D., Indiana University of Pennsylvania
M.A., University of Notre Dame
B.A., Slippery Rock University

## Jason Hilton

Professor
Secondary Ed/Foundations Ed
Ph.D., University of Pittsburgh
M.Ed., University of Pittsburgh
B.S., Edinboro University

## Mark Hogue

Assistant Professor
Secondary Ed/Foundations Ed
Ph.D., Kent State University
M.E., California University of Pennsylvannia
M.E., Slippery Rock University
B.S., Slippery Rock University

## Michael Panza

Instructor
Secondary Ed/Foundations Ed
Ed.D., Nova University
M.S., Duquesne University
M.M., Duquesne University
B.S., Duquesne University

Linda Wagner-Pine
Instructor
Secondary Ed/Foundations Ed
M.Ed., Slippery Rock University
B.Ed., Slippery Rock University

## Junko Yamamoto

Associate Professor
Secondary Ed/Foundations Ed
Ed.D. , Duquesne University
M.P.A., University of Pittsburgh
B.A., University of Japan

## Programs

All first-year students who enter SRU in the Summer and Fall terms of 2019 and after will follow Rock Studies. Students who entered SRU before Spring 2019 will follow Liberal Studies. All new transfer students beginning Summer 2019 and after will follow Liberal Studies. We anticipate that transfer students will begin to enter under Rock Studies during the Summer/Fall term of 2021.

## Majors

- Middle-Level English/Language Arts (4-8), Bachelor of Science in Education (BSED) (p. 232)
- Middle-Level Math (4-8), Bachelor of Science in Education (BSED) (p. 235)
- Middle-Level Science (4-8), Bachelor of Science in Education (BSED) (p. 238)
- Middle-Level Social Studies (4-8), Bachelor of Science in Education (BSED) (p. 241)
- Secondary Education - English (7-12), Bachelor of Science in Education (BSED) (p. 244)
- Secondary Education - French ( $\mathrm{K}-12$ ), Bachelor of Science in Education (BSED) (p. 246)
- Secondary Education - Social Studies - History (7-12), Bachelor of Science in Education (BSED) (p. 249)
- Secondary Education - Spanish (K-12), Bachelor of Science in Education (BSED) (p. 252)


## Minors

- Middle Level Education, Minor (p. 231)


## Courses

## SEFE 139-University Seminar

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

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## SEFE 190-Experimental

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

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## SEFE 195 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## SEFE 198 - Selected Topics

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

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
SEFE 200 - Introduction to Education, Teaching Methods and Field This course is designed to introduce the student to the field of education. Topics covered include: the role of the teacher, structure and organization of schooling, and current issues and concerns relating to education.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Education, Transfer Thread Completion Course

## SEFE 230 - Production and Utilization of Instructional Technology

Selection, utilization and production of instructional materials. Equipment operation via self-instruction in the Media Lab.

## Credits: 3

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

## SEFE 245 - Middle Level Learning Theory

This course provides pre-service teachers with a knowledge base of the learning theories, with a special focus on the application of the psychological learning theories to the teaching and learning of the adolescent learner.

Credits: 3
Term(s) Typically Offered: Offered as Needed Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SEFE 250 - Pre, Early, \& Adolescent Development

An analysis of the physical, social, emotional, cognitive, moral, and other developmental processes which occur during the pre-adolescent/ adolescent years, and affect his/her learning.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.
SEFE 251 - Teaching Reading in the Content Areas Grades 4-8
This course is designed to introduce the middle level teaching candidate to reading across the content areas.

Credits: 3
Term(s) Typically Offered: Offered Every Term
Enrollment is limited to students with a program in Mid Level-Engl\&Lang Arts (4-8), Mid Level-Mathematics (4-8), Mid Level-Social Studies (4-8) or Middle Level-Science (4-8).

## SEFE 280-Cultural Minorities in Education

A study of multi-cultural issues in American education with emphasis on the theory and practice relating to race, religion, ethnicity, social class, gender, age, and exceptionality.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): African-American Studies, Civil Rights \& Social Movements, Education, Fighting Social Problems, Transfer Thread Completion Course, Well-Being of Children and Youth

## SEFE 290 - Experimental

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

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## SEFE 295 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## SEFE 298 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## SEFE 300 - Middle Level Cognitive Development

This course provides pre-service teachers with a knowledge base of the various factors which affect the learning, cognition, and cognitive development of the pre-adolescent learner.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.
SEFE 311 - Teaching of Mathematics in the Middle School
Students will explore curriculum models, teaching materials, technology and best teaching practices for enhancing middle school students" mathematical understanding.

Credits: 3
Term(s) Typically Offered: Offered Every Term
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SEFE 319 - Teaching of Social Studies in Secondary Schools

The development and refinement of teaching competencies particularly related to the teaching of secondary school social studies: history, political science, economics, geography and sociology/anthropology. The course will emphasize the development of social studies in the school, teaching methodology (post and current), the unit approach to teaching social studies, media uses and preparation of media materials, teaching techniques, professional organizations, and teaching aids and materials such as computers, television and simulation programs.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SEFE 320 - Teaching of Language Arts in Secondary Schools

The development and refinement of teaching competencies particularly related to instruction in secondary school language arts, including English. The course also emphasizes English curriculum, teaching strategies and methodologies and the use of media in content presentation.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SEFE 323 - Teaching World Languages

Theory and methodology for teaching world languages throughout the K-12 curriculum.

Prerequisite: SEFE $200^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SEFE 324 - Methods for Teaching English as a Second Language and Bilingual Education

A course designed to acquaint the prospective teacher at any level with the methodology used to teach English to native speakers of other languages. Also acquaints students with the specialized procedures used when teaching in bilingual classrooms (any two languages) on any level.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## SEFE 325 - Teaching in the Middle Level Grades

Focusing on middle school teaching in grades 4 through 8, this course examines the organization, curriculum, instructional strategies, classroom management techniques, and teaching methods for working with young adolescents. Also covered are middle level guidance, exploratories, scheduling, and parent-school relations.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SEFE 326 - ELL Strategies and Practice

A course designed to acquaint the prospective teacher at any level with the methodology used to teach English Language Learners. Topics include linguistic and cultural diversity, standard-based instruction, assessment, and professionalism.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SEFE 329 - Methods of Instruction in Secondary Content Areas

This course is designed to provide prospective secondary teachers with the opportunity to design and teach lessons using basic instructional models and teaching strategies. The role of reading, writing, and oral communication in the teaching/learning of secondary content is also addressed. Following microteaching episodes, students reflect upon and analyze the teaching processes to clarify instructional values and to encourage critical inquiry.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SEFE 335 - Teaching Middle Level Social Studies

Designed for pre-service middle school teachers, focusing on grades 4 through 8, this multifaceted course compiles well-researched and essential information on social studies education. The course uses the standards recommended by the National Council for the Social Studies and the Pennsylvania Department of Education as a foundation, thoroughly discussing the core disciplines and thematic strands of social studies. The knowledge base is packed with useful information on an all-encompassing range of teaching methods and tools, including lesson planning, skills development, assessment, multiple intelligences, determining one"s personal philosophy of education, and utilizing information technology.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER
CANDIDACY attribute.

## SEFE 337 - Teaching Middle Level Language Arts

This course provides pre-service upper elementary and/or middle-level teachers, focusing on grades 4 through 8, with the relevant teaching strategies and content for English pedagogy.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SEFE 338 - Standards-Based Instruction \& Assessment in the Inclusionary Classroom

Assessment skills, extensive practice, and the application of assessment results to design effective individualized interventions are essential middle level teaching skills. Successful demonstration of these abilities is an expected outcome through the PDE 430, Pennsylvania Statewide Evaluation Form for Student Professional Knowledge and Practice. Assessment knowledge has an important role in the standards and rubrics adopted by the National Middle School Association (NMSA). The "Assessment in a Standards Aligned System" section of this document has an overview of the types of assessments used in the Pre K-12 settings and competencies for all professional education candidates.

## Credits: 3

Term(s) Typically Offered: Offered Spring \& Winter Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SEFE 342 - Educational Psychology for Diverse Learners

This course provides the knowledge-base of (behavior, social learning, cognitive, constructivist and humanistic) learning theories, as applied in the context of diverse teaching and learning environments. The content also includes the topics of assessment, evidence-based research methods, motivational theories, and classroom management skills to enable the pre-service teacher to create effective learning environments for diverse learning contexts.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SEFE 349 - Teaching of Science in the Middle School

Students will explore curriculum models, teaching materials, technology and best teaching practices for enhancing middle school students' understanding in science.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER
CANDIDACY attribute.

SEFE 370 - Educational Measurements, Assessment and Evaluation Objectives for testing and evaluation; construction and analysis of classroom tests for evaluative and diagnostic purposes; construction and application of non-test tools for assessment, including portfolios; statistical analysis of testing and measurement data; use of standardized tests in the classroom; and the use of computers.

Prerequisite: SEFE 200 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SEFE 375 - Language Across the Secondary Curriculum

An examination of the language processes and their connection to learning content in secondary school. Based on the understanding of language and learning processes, future secondary teachers learn to employ teaching strategies that both enhance learning and improve reading, writing, speaking, and listening skills. Required of all secondary majors.

Credits: 2
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SEFE 380 - History and Philosophy of Education

Critical exploration of the philosophical issues and historical antecedents that form the bases for past and current American educational practice in a multicultural society.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER
CANDIDACY attribute.

## SEFE 390 - Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SEFE 395 - Workshop

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

## Credits: 1-6

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SEFE 398-Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SEFE 401 - Education and American Activism

This course examines the connections between the American education system and social activism in the United States. This includes contrasting theories relating to the purpose of public education, historical analysis of cases in which the education system played an active role either in supporting social change or in reinforcing social order, and a critical reflection upon current education reforms in the United States.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): Education, Fighting Social Problems, Transfer Thread Completion Course
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.
SEFE 420 - American Education in the Twenty-First Century: A Comparative Perspective
American educational policies and practices are viewed within a global context. Undergraduate students, who will become parents and taxpayers, are introduced to the core social and educational institution in developed or developing societies: the school.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Education, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

SEFE 422 - Practicum in the Middle-Level Grades
Designed to give middle-level majors a pre-student teaching field experience in the middle level grades under the supervision of a University faculty member.

## Credits: 1

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SEFE 426 - Practicum in Middle-Level \& Secondary Education

Designed to give secondary education majors a pre-student teaching field experience in a secondary classroom under the supervision of a university faculty member.

## Credits: 1

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

SEFE 439 - Issues in the Diverse Secondary Content Area Classroom This course is designed to help secondary teachers apply theoretical models to classroom management and to the teaching of reading and writing in content area classrooms. Additionally, the principles of school law as they apply to classroom teachers will be examined. Finally, the course will be taken concurrently with student teaching to facilitate the integration of theory with practice.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SEFE 455 - Student Teaching - Secondary Education

Under the guidance of a cooperating teacher and university supervisor, students engage in two eight- week assignments on a full-time basis in specified school districts and attend scheduled seminars. Supervisors assign additional requirements.

Credits: 3-12
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

SEFE 456 - Student Teaching - Middle Level Grades
Under the guidance of a cooperating teacher and university supervisor, teacher candidates engage in two eight-week assignemnts on a fulltime basis in specified school districts at the middle level and also attend scheduled seminars. University supervisors assign additional requirements.

Credits: 12
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SEFE 490 - Independent Study

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

SEFE 495 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SEFE 498 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Middle Level Education, Minor

The Middle Level Education Minor prepares preservice teachers for the instruction of students in grades 4-8.

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

## Related Links

Secondary Education/Foundations of Education Department Page (https://www.sru.edu/academics/colleges-and-departments/coe/ departments/secondary-education-/-foundations-of-education/)

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

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.0 or higher

## Minor Requirements

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

| Code | Title | Hours |
| :--- | :--- | ---: |
| Young Adolescent Cognition |  |  |
| SEFE 245 | Middle Level Learning Theory | 3 |
| SEFE 300 | Middle Level Cognitive Development | 3 |
| Middle School Organization and Philosophy |  |  |
| SEFE 380 | History and Philosophy of Education | 3 |
| Middle Level Pedagogy | 3 |  |
| SEFE 251 | Teaching Reading in the Content Areas <br> Grades 4-8 | 3 |
| SEFE 325 | Teaching in the Middle Level Grades |  |
| SEFE 338 | Standards-Based Instruction \& Assessment <br> in the Inclusionary Classroom | 3 |

Total Hours

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


## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
Minor in Middle Level Education (15A)
This program is effective as of Fall 2018.
Revised 10.28.2021

## Middle-Level English/Language Arts (4-8), Bachelor of Science in Education (BSED)

All candidates completing this program and student teaching are eligible to receive Pennsylvania certification after achieving a passing or qualifying score on Pennsylvania Department of Education required exam(s). If you are interested in teaching in another state, please contact the Department of Education in that state.

## Related Links

Middle-Level Education - English/Language Arts, BSED Program Page (https://www.sru.edu/academics/majors-and-minors/middle-level-education-english-and-language-arts/)

Secondary Education/ Foundations of Education Department Page (https://www.sru.edu/academics/colleges-and-departments/coe/ departments/secondary-education-/-foundations-of-education/)

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

## Curriculum Guide

GPA Requirement
GPA must be 2.8 or higher for Teacher Candidacy.
A 3.0 GPA and passing subject area assessment (PECT) or a 2.8 GPA and a qualifying passing subject area assessment (PECT) score (as determined by PDE) is required for certification.

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 79 |

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

Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar $^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |


| STAT 152 | Elementary Statistics I | 3 |
| :---: | :---: | :---: |
| Select one of the following: 3 |  |  |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  |  |
| Humanities Inquiry |  |  |
| HIST 140 | Spotlight on the Past | 3 |
| Social Science Inquiry |  |  |
| POLS 101 | American National Government | 3 |
| Natural Sciences Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Sciences Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |
| Additional Rock Studies Requirements (12 credits) |  |  |
| SPED 121 | Overview of Special Education | 3 |
| MATH 210 | Elementary Mathematics I | 3 |
| MATH 310 | Elementary Mathematics II | 3 |
| COMM 217 | Intercultural Communication | 3 |
| Total Hours |  | 42 |
| 1 Course offered in multiple subjects; cannot take course in first major subject. |  |  |
| Basic Math Requirement |  |  |
| Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree. |  |  |
| Code | Title | Hours |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP $110 \quad$ Beginning Algebra |  |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate "computer competency" by one of the following: |  | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major Requirements

- 40 major credits must be taken at SRU or PASSHE
- 40 major credits must be taken at the 300 level or above
- All grades in Professional Education \& Specialization must be grades of "C" or above.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Middle Level Education |  |  |
| SEFE 200 | Introduction to Education, Teaching Methods and Field ${ }^{1}$ | 3 |
| SEFE 230 | Production and Utilization of Instructional Technology ${ }^{1}$ | 3 |
| SEFE 251 | Teaching Reading in the Content Areas Grades 4-8 ${ }^{1}$ | 3 |
| SEFE 300 | Middle Level Cognitive Development ${ }^{1}$ | 3 |
| SEFE 326 | ELL Strategies and Practice ${ }^{1}$ | 3 |
| SEFE 337 | Teaching Middle Level Language Arts ${ }^{1}$ | 3 |
| SEFE 338 | Standards-Based Instruction \& Assessment in the Inclusionary Classroom ${ }^{1}$ | 3 |
| SEFE 342 | Educational Psychology for Diverse Learners ${ }^{1}$ | 3 |
| SEFE 370 | Educational Measurements, Assessment and Evaluation ${ }^{1}$ | 3 |
| SEFE 380 | History and Philosophy of Education ${ }^{1}$ | 3 |
| SEFE 426 | Practicum in Middle-Level \& Secondary Education ${ }^{1}$ | 1 |
| SEFE 456 | Student Teaching - Middle Level Grades ${ }^{1,2}$ | 12 |
| SPED 121 | Overview of Special Education ${ }^{1,3}$ | 3 |
| SPED 315 | Special Education Issues in Diverse Secondary Classrooms ${ }^{1,2}$ | 3 |
| Subtotal |  | 49 |
| English Certification Specialization |  |  |
| ENGL 102 | Critical Writing ${ }^{3}$ | 3 |
| ENGL 104 | Critical Reading ${ }^{3}$ | 3 |
| COMM 217 | Intercultural Communication ${ }^{3}$ | 3 |
| Required Courses |  |  |
| COMM 263 | Mass Media and Society (Required) | 3 |
| ENGL 305 | Practicum: Teaching Writing (Required) | 3 |
| ENGL 328 | Young Adult Literature (Required) | 3 |
| Select four of the following classes: 12 |  |  |
| $\begin{aligned} & \text { ENGL } 230 \\ & \text { or ENGL } 331 \end{aligned}$ | Introduction to Linguistics and Grammar Historical Development of the English Lang |  |
| ENGL 312 | Introduction to Shakespeare |  |
| ENGL 317 or ENGL 318 | British Literature I <br> British Literature II |  |
| ENGL 319 | American Literature I |  |
| or ENGL 320 | American Literature II |  |
| ENGL 332 | Modern English Grammar and Syntax |  |
| ENGL 402 | World Literature |  |
| Subtotal |  | 30 |
| Total Hours |  | 79 |

[^8]3 Credits earned in these courses will be applied to Rock Studies.

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


## Grades 4-6 Core Content Areas

- To meet the English Language Arts 12 credit Pennsylvania Department of Education requirements, students must complete SEFE 251 - Teaching Reading in the Content Areas Grades $4-8$ if they have not completed ENGL 102.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Social Studies |  |  |
| HIST 140 | Spotlight on the Past ${ }^{1}$ | 3 |
| POLS 101 | American National Government ${ }^{1}$ | 3 |
| SEFE 380 | History and Philosophy of Education ${ }^{2}$ | 3 |
| Select one of the following: |  | 3 |
| HIST 151 | Ancient and Medieval World |  |
| HIST 152 | Rise of the Modern World |  |
| HIST 153 | Contemporary World History |  |
| HIST 201 | Colonial America to 1815 |  |
| HIST 202 | United States, 1815-1920 |  |
| HIST 203 | U.S. History Since 1920 |  |
| Math |  |  |
| MATH 118 | Elementary Geometry | 3 |
| MATH 210 | Elementary Mathematics I ${ }^{1}$ | 3 |
| MATH 310 | Elementary Mathematics II ${ }^{1}$ | 3 |
| STAT 152 | Elementary Statistics ${ }^{1}$ | 3 |
| Science |  |  |
| SCI 101 | Science of Life ${ }^{1}$ | 3 |
| SCI 102 | Understanding the Physical World ${ }^{1}$ | 3 |
| Select two of | owing classes from different departmen | 6 |


| BIOL 101 | General Biology |
| :--- | :--- |
| BIOL 104 | Principles of Biology with Lab |
| BIOL 105 | Environmental Biology |
| BIOL 216 | Anatomy and Physiology I with Lab |
| CHEM 104 | Introduction Chemistry I |
| CHEM 107 | General Chemistry I |
| EGEO 100 | Environmental Geology |
| EGEO 101 | Physical Geology |
| EGEO 121 | Meteorology/Lab |
| PHYS 101 | Concepts of Science I with Lab |
| PHYS 201 | Elements of Physics I with Lab |
| PHYS 211 | General Physics I with Lab |
| Subtotal |  |
| Total Hours |  |

1 Credits earned in these courses will be applied to Rock Studies.
2 SEFE 380 credit earned will be applied to Professional Core.

## Prerequisites for Admission to Teacher Candidacy

- Grades below a "C" are not admissible.




## Middle-Level Math (4-8), Bachelor of Science in Education (BSED)

All candidates completing this program and student teaching are eligible to receive Pennsylvania certification after achieving a passing or qualifying score on Pennsylvania Department of Education required exam(s). If you are interested in teaching in another state, please contact the Department of Education in that state.

## Related Links

Middle-Level Education - Mathematics, BSED Program Page (https:// www.sru.edu/academics/majors-and-minors/middle-level-educationmathematics/)

Secondary Education/Foundations of Education Department Page (https://www.sru.edu/academics/colleges-and-departments/coe/ departments/secondary-education-/-foundations-of-education/)

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

## Curriculum Guide

## GPA Requirement

GPA must be 2.8 or higher for Teacher Candidacy
A 3.0 GPA and passing subject area assessment (PECT) or a 2.8 GPA and a qualifying passing subject area assessment (PECT) score (as determined by PDE) is required for certification.

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirements | $0-3$ |


| Computer Competency | $0-3$ |
| :--- | ---: |
| Major Requirements | 79 |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| HIST 140 | Spotlight on the Past | 3 |
| Social Science Inquiry |  |  |
| POLS 101 | American National Government | 3 |
| Natural Sciences Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Sciences Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |


| Additional Rock Studies Requirements (12 credits) |  |  |
| :--- | :--- | :--- |
| SPED 121 | Overview of Special Education | 3 |
| MATH 210 | Elementary Mathematics I | 3 |
| MATH 310 | Elementary Mathematics II | 3 |
| Select one of the following: | 3 |  |


| HIST 151 | Ancient and Medieval World |  |
| :--- | :--- | :--- |
| HIST 152 | Rise of the Modern World |  |
| HIST 153 | Contemporary World History |  |
| HIST 201 | Colonial America to 1815 |  |
| HIST 202 | United States, 1815-1920 |  |
| HIST 203 | U.S. History Since 1920 | $\mathbf{4 2}$ |
| Total Hours |  |  |

1 Course offered in multiple subjects; cannot take course in first major subject.

## Basic Math Requirement

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

| Code | Title |
| :--- | ---: |
| Complete one of the following: | Hours |
|  | $0-3$ |

Complete one of the following: 0-3
Meet required minimum SAT or ACT math score OR

ESAP 110
Beginning Algebra
Total Hours

## Computer Competency

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

## Major Requirements

- 40 major credits must be taken at SRU or PASSHE
- 40 major credits must be taken at the 300 level or above
- All grades in Professional Education \& Specialization must be grades of "C" or above.
Code Title Hours


## Middle Level Education

| SEFE 200 | Introduction to Education, Teaching Methods and Field ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| SEFE 230 | Production and Utilization of Instructional Technology ${ }^{1}$ | 3 |
| SEFE 251 | Teaching Reading in the Content Areas Grades 4-8 ${ }^{1}$ | 3 |
| SEFE 300 | Middle Level Cognitive Development ${ }^{1}$ | 3 |
| SEFE 311 | Teaching of Mathematics in the Middle School ${ }^{1}$ | 3 |
| SEFE 326 | ELL Strategies and Practice ${ }^{1}$ | 3 |
| SEFE 338 | Standards-Based Instruction \& Assessment in the Inclusionary Classroom ${ }^{1}$ | 3 |
| SEFE 342 | Educational Psychology for Diverse Learners ${ }^{1}$ | 3 |
| SEFE 370 | Educational Measurements, Assessment and Evaluation ${ }^{1}$ | 3 |
| SEFE 380 | History and Philosophy of Education ${ }^{1}$ | 3 |
| SEFE 426 | Practicum in Middle-Level \& Secondary Education ${ }^{1}$ | 1 |
| SEFE 456 | Student Teaching - Middle Level Grades ${ }^{\text {1,2 }}$ | 12 |
| SPED 121 | Overview of Special Education ${ }^{1,3}$ | 3 |
| SPED 315 | Special Education Issues in Diverse Secondary Classrooms ${ }^{1,2}$ | 3 |
| Subtotal |  | 49 |

Math Certification Specialization
Select 10 Credits from the courses listed below: 10

| MATH 118 | Elementary Geometry |
| :--- | :--- |
| MATH 131 | Discrete Mathematics |
| MATH 225 | Calculus I |
| MATH 210 | Elementary Mathematics I $^{3}$ |
| MATH 310 | Elementary Mathematics II $^{3}$ |

STAT 152 Elementary Statistics I ${ }^{3}$

Select 11 credits from the courses listed below: 11

| MATH 122 | Finite Mathematics with Matrices |
| :--- | :--- |
| MATH 125 | Precalculus |
| MATH 230 | Calculus II |
| MATH 231 | Calculus III |
| MATH 235 | Foundations of Mathematical Proof |
| MATH 240 | Linear Algebra and Differential Equations |
| STAT 252 | Introduction to Statistical Modeling |
| Subtotal |  |
| Total Hours |  |

1 Course counts for 50\% of Major requirements but not for Major GPA
2 SPED 315 \& SEFE 456 must be taken in the same semester.
3 Credits earned in these courses will be applied to Rock Studies.

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


## Grades 4-6 Core Content Areas

- To meet the English Language Arts 12 credit Pennsylvania Department of Education requirements, students must complete SEFE 251 - Teaching Reading in the Content Areas Grades 4-8 if they have not completed ENGL 102.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Social Studies |  |  |
| HIST 140 | Spotlight on the Past ${ }^{1}$ | 3 |
| POLS 101 | American National Government ${ }^{1}$ | 3 |
| SEFE 380 | History and Philosophy of Education ${ }^{2}$ | 3 |
| Select one of the following: | 3 |  |


| HIST 151 | Ancient and Medieval World ${ }^{1}$ |
| :---: | :---: |
| HIST 152 | Rise of the Modern World ${ }^{1}$ |
| HIST 153 | Contemporary World History ${ }^{1}$ |
| HIST 201 | Colonial America to $1815{ }^{1}$ |
| HIST 202 | United States, 1815-1920 ${ }^{1}$ |
| HIST 203 | U.S. History Since $1920{ }^{1}$ |

## English/Language Arts

| ENGL 102 | Critical Writing $^{1}{ }^{1}{ }^{1}$ | 3 |
| :--- | :--- | :--- |
| ENGL 104 | Critical Reading $^{1}$ | 3 |
| ENGL 328 | Young Adult Literature | 3 |
| ENGL 305 | Practicum: Teaching Writing | 3 |
| Science | Science of Life $^{1}$ | 3 |
| SCI 101 | Understanding the Physical World $^{1}$ | 3 |
| SCI 102 | Select two of the following classes from two different <br> departments: | 6 |


| BIOL 101 | General Biology |
| :--- | :--- |
| BIOL 104 | Principles of Biology with Lab |
| BIOL 105 | Environmental Biology |
| BIOL 216 | Anatomy and Physiology I with Lab |
| CHEM 104 | Introduction Chemistry I |
| CHEM 107 | General Chemistry I |
| EGEO 100 | Environmental Geology |


| EGEO 101 | Physical Geology |  |
| :---: | :--- | :--- |
| EGEO 121 | Meteorology/Lab |  |
| PHYS 101 | Concepts of Science I with Lab |  |
| PHYS 201 | Elements of Physics I with Lab |  |
| PHYS 211 | General Physics I with Lab | 36 |
| Subtotal |  | $\mathbf{3 6}$ |
| Total Hours |  |  |

${ }^{1}$ Credits earned in these courses will be applied to Rock Studies.
2 SEFE 380 credit earned will be applied to Professional Core.
Prerequisites for Admission to Teacher Candidacy

- Grades below a "C" are not admissible.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Basic Courses |  |  |
| Select six of the following: |  | 18 |
| ENGL 102 | Critical Writing |  |
| ENGL 104 | Critical Reading |  |
| SPED 121 | Overview of Special Education |  |
| SEFE 230 | Production and Utilization of Instructional Technology |  |
| SEFE 326 | ELL Strategies and Practice |  |
| SEFE 370 | Educational Measurements, Assessment and Evaluation |  |
| Math Requirement for BS in Education |  |  |
| Required prior to Admission to Teacher Candidacy |  |  |
| Select one of the following: |  | 3 |
| MATH 118 | Elementary Geometry |  |
| MATH 210 | Elementary Mathematics I |  |
| MATH 310 | Elementary Mathematics II |  |
| STAT 152 | Elementary Statistics I | 3 |
| Total Hours |  | 24 |

## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
MIDDLE-LEVEL MATHEMATICS (4-8) - BSED (1233)
This program is effective as of Fall 2019.
Revised 02.10.2022
UCC 02.01.2022

Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| ENGL 102 | Critical Writing | 3 |
| HIST 140 | Spotlight on the Past | 3 |
| INDS 101 | FYRST Seminar * | 1 |
| SCI 101 | Science of Life | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| Computer Competency Requirement ${ }^{2}$ |  | 0-3 |
|  | Hours | 16-19 |


| Spring |  | 3 |
| :--- | :--- | :--- |
| ENGL 104 | Critical Reading | 3 |
| SEFE 200 | Introduction to Education, Teaching <br> Methods and Field | 3 |
| SCI 102 | Understanding the Physical World | 3 |
| Math Certification Specialization Course | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :--- | :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
|  | Hours | $\mathbf{1 5}$ |


| Second Year |  |  |
| :---: | :---: | :---: |
| Fall |  |  |
| POLS 101 | American National Government | 3 |
| SEFE 230 | Production and Utilization of Instructional Technology | 3 |
| SPED 121 | Overview of Special Education | 3 |
| Select one of the following: |  | 3 |
| HIST 151 | Ancient and Medieval World |  |
| HIST 152 | Rise of the Modern World |  |
| HIST 153 | Contemporary World History |  |
| HIST 201 | Colonial America to 1815 |  |
| HIST 202 | United States, 1815-1920 |  |
| HIST 203 | U.S. History Since 1920 |  |
| BIO/CHEM/EGEO/PHYS Course 1 |  | 3 |
| First Aid Competency ${ }^{3}$ |  | 0-3 |
|  | Hours | -18 |

## Spring

MATH 210 Elementary Mathematics I 3
SEFE 326 ELL Strategies and Practice 3

BIO/CHEM/EGEO/PHYS Course 23
Math Certification Specialization Course 3
Math Certification Specialization Course 3
Hours

## Third Year

Fall
ENGL $328 \quad$ Young Adult Literature 3
MATH 310 Elementary Mathematics II 3
SEFE 370 Educational Measurements, Assessment 3
and Evaluation

| SEFE 380 | History and Philosophy of Education | 3 |
| :---: | :---: | :---: |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| ENGL 305 | Practicum: Teaching Writing | 3 |
| SEFE 300 | Middle Level Cognitive Development | 3 |
| SEFE 342 | Educational Psychology for Diverse Learners | 3 |
| Math Certification Specialization Course |  | 3 |
| Math Certification Specialization Course |  | 3 |
|  | Hours | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| SEFE 251 | Teaching Reading in the Content Areas Grades 4-8 | 3 |
| SEFE 311 | Teaching of Mathematics in the Middle School | 3 |
| SEFE 338 | Standards-Based Instruction \& Assessment in the Inclusionary Classroom | 3 |
| SEFE 422 | Practicum in the Middle-Level Grades | 1 |
| Math Certification Specialization Course |  | 3 |
| Math Certification Specialization Course |  | 3 |
|  | Hours | 16 |
| Spring |  |  |
| SEFE 456 | Student Teaching - Middle Level Grades | 12 |
| SPED 315 | Special Education Issues in Diverse Secondary Classrooms | 3 |
|  | Hours | 15 |
|  | Total Hours** | 128 |

1 Course offered in multiple subjects; cannot take course in first major subject
2 Pass Computer Competency Exam or complete CPSC 100, CPSC 110, CPSC 130, or PE 202
3 Complete one of the following: CPR and First Aid \& Safety certification or SAFE 205

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

Major Code: 1233
Revised: 01.13.21
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Middle-Level Science (4-8), Bachelor of Science in Education (BSED)

All candidates completing this program and student teaching are eligible to receive Pennsylvania certification after achieving a passing or qualifying score on Pennsylvania Department of Education required exam(s). If you are interested in teaching in another state, please contact the Department of Education in that state.

## Related Links

Middle-Level Education - Science, BSED Program Page (https:// www.sru.edu/academics/majors-and-minors/middle-level-educationscience/)

Secondary Education/Foundations of Education Department Page (https://www.sru.edu/academics/colleges-and-departments/coe/ departments/secondary-education-/-foundations-of-education/)

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

## Curriculum Guide GPA Requirement

GPA must be 2.8 or higher for Teacher Candidacy.
A 3.0 GPA and passing subject area assessment (PECT) or a 2.8 GPA and a qualifying passing subject area assessment (PECT) score (as determined by PDE) is required for certification.

## Summary*

| Title | Hours |
| :--- | ---: |
| Code | 42 |
| Rock Studies Requirements | $0-3$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | 79 |
| Major Requirements |  |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| HIST 140 | Spotlight on the Past | 3 |
| Social Science Inquiry |  |  |
| POLS 101 | American National Government | 3 |
| Natural Sciences Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Sciences Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |

Additional Rock Studies Requirements ( 12 credits)

| SPED 121 | Overview of Special Education | 3 |
| :--- | :--- | :--- |
| MATH 210 | Elementary Mathematics I | 3 |
| MATH 310 | Elementary Mathematics II | 3 |
| Select one of the following: | 3 |  |
| HIST 151 | Ancient and Medieval World |  |
| HIST 152 | Rise of the Modern World |  |
| HIST 153 | Contemporary World History |  |
| HIST 201 | Colonial America to 1815 |  |
| HIST 202 | United States, 1815-1920 |  |
| HIST 203 | U.S. History Since 1920 |  |

Total Hours
1 Course offered in multiple subjects; cannot take course in first major subject.

## Basic Math Requirement

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one | following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | uter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |

## Major Requirements

- 40 major credits must be taken at SRU or PASSHE
- 40 major credits must be taken at the 300 level or above
- All grades in Professional Education \& Specialization must be grades of "C" or above.
Code Title Hours


## Middle Level Education

| SEFE 200 | Introduction to Education, Teaching <br> Methods and Field $^{1}$ | 3 |
| :--- | :--- | ---: |
| SEFE 230 | Production and Utilization of Instructional <br> Technology ${ }^{1}$ | 3 |
| SEFE 251 | Teaching Reading in the Content Areas <br> Grades 4-8 ${ }^{1}$ | 3 |
| SEFE 300 | Middle Level Cognitive Development ${ }^{1}$ | 3 |
| SEFE 326 | ELL Strategies and Practice ${ }^{1}$ | 3 |


| SEFE 338 | Standards-Based Instruction \& Assessment in the Inclusionary Classroom ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| SEFE 342 | Educational Psychology for Diverse Learners ${ }^{1}$ | 3 |
| SEFE 349 | Teaching of Science in the Middle School ${ }^{1}$ | 3 |
| SEFE 370 | Educational Measurements, Assessment and Evaluation ${ }^{1}$ | 3 |
| SEFE 380 | History and Philosophy of Education ${ }^{1}$ | 3 |
| SEFE 426 | Practicum in Middle-Level \& Secondary Education | 1 |
| SEFE 456 | Student Teaching - Middle Level Grades ${ }^{1,2}$ | 12 |
| SPED 121 | Overview of Special Education ${ }^{1,3}$ | 3 |
| SPED 315 | Special Education Issues in Diverse Secondary Classrooms ${ }^{1,2}$ | 3 |

Science Certification Specialization

| SCI 101 | Science of Life $^{3}$ | 3 |
| :--- | ---: | ---: |
| SCI 102 | Understanding the Physical World $^{3}$ | 3 |
| Select at least 24 credits from the following list: | 24 |  |


| Select at least 2 | s from the following list: | 24 |
| :---: | :---: | :---: |
| BIOL 105 | Environmental Biology |  |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab |  |
| CHEM 108 <br> \& CHEM 112 | General Chemistry II and General Chemistry II Lab |  |
| $\begin{aligned} & \text { EGEO } 100 \\ & \& \text { EGEO } 110 \end{aligned}$ | Environmental Geology and Environmental Geology Lab |  |
| EGEO 201 | Earth Materials and Processes/Lab |  |
| EGEO 121 | Meteorology/Lab |  |
| EGEO 131 | Oceanography |  |
| PHYS 201 | Elements of Physics I with Lab |  |
| PHYS 202 | Elements of Physics II/ Lab |  |
| PHYS 317 | Space Science |  |
| Subtotal |  | 30 |
| Total Hours |  | 79 |

1 Course counts for $50 \%$ of Major requirements but not for Major GPA
2 SPED 315 \& SEFE 456 must be taken in the same semester.
3 Credits earned in these courses will be applied to Rock Studies.

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


## Grades 4-6 Core Content Areas

- To meet the English Language Arts 12 credit Pennsylvania Department of Education requirements, students must complete SEFE 251 - Teaching Reading in the Content Areas Grades $4-8$ if they have not completed ENGL 102.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Social Studies |  |  |
| HIST 140 | Spotlight on the Past ${ }^{1}$ | 3 |
| POLS 101 | American National Government ${ }^{1}$ | 3 |
| SEFE 380 | History and Philosophy of Education ${ }^{2}$ | 3 |
| Select one of the following: | 3 |  |
| HIST 151 |  | Ancient and Medieval World ${ }^{1}$ |


| HIST 152 | Rise of the Modern World ${ }^{1}$ |  |
| :---: | :---: | :---: |
| HIST 153 | Contemporary World History ${ }^{1}$ |  |
| HIST 201 | Colonial America to $1815{ }^{1}$ |  |
| HIST 202 | United States, 1815-1920 ${ }^{1}$ |  |
| HIST 203 | U.S. History Since $1920{ }^{1}$ |  |
| Subtotal |  | 12 |
| English/Language Arts |  |  |
| ENGL 102 | Critical Writing ${ }^{1}$ | 3 |
| ENGL 104 | Critical Reading ${ }^{1}$ | 3 |
| ENGL 305 | Practicum: Teaching Writing | 3 |
| ENGL 328 | Young Adult Literature | 3 |
| Subtotal |  | 12 |
| Math |  |  |
| MATH 118 | Elementary Geometry | 3 |
| MATH 210 | Elementary Mathematics I ${ }^{1}$ | 3 |
| MATH 310 | Elementary Mathematics II ${ }^{1}$ | 3 |
| STAT 152 | Elementary Statistics I ${ }^{1}$ | 3 |
| Subtotal |  | 12 |
| Total Hours |  | 36 |

1 Credits earned in these courses will be applied to Rock Studies.
2 SEFE 380 credit earned will be applied to Professional Core.
Prerequisites for Admission to Teacher Candidacy

- Grades below a "C" are not admissible.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Basic Courses |  |  |
| Select six of the following: |  | 18 |
| ENGL 102 | Critical Writing |  |
| ENGL 104 | Critical Reading |  |
| SPED 121 | Overview of Special Education |  |
| SEFE 230 | Production and Utilization of Instructional Technology |  |
| SEFE 326 | ELL Strategies and Practice |  |
| SEFE 370 | Educational Measurements, Assessment and Evaluation |  |
| Math Requirement for BS in Education |  |  |
| Required prior to Admission to Teacher Candidacy |  |  |
| Select one of the following: |  | 3 |
| MATH 118 | Elementary Geometry |  |
| MATH 210 | Elementary Mathematics I |  |
| MATH 310 | Elementary Mathematics II |  |
| STAT 152 | Elementary Statistics I | 3 |
| Total Hours |  | 24 |

MIDDLE-LEVEL SCIENCE (4-8) - BSED (1235)
This program is effective as of Fall 2019.
Revised 02.10.2022
UCC 02.01.2022

## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| ENGL 102 | Critical Writing | 3 |
| HIST 140 | Spotlight on the Past | 3 |
| INDS 101 | FYRST Seminar * | 1 |
| SCI 101 | Science of Life | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| Computer Competency Requirement ${ }^{2}$ |  | 0-3 |
|  | Hours | 16-19 |
| Spring |  |  |
| ENGL 104 | Critical Reading | 3 |
| MATH 118 | Elementary Geometry | 3 |
| SCI 102 | Understanding the Physical World | 3 |
| SEFE 200 | Introduction to Education, Teaching Methods and Field | 3 |
| Select one of the following: |  | 3 |


| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :--- | :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
|  | Hours | $\mathbf{1 5}$ |

## Second Year

Fall

| MATH 210 | Elementary Mathematics I | 3 |
| :---: | :---: | :---: |
| POLS 101 | American National Government | 3 |
| SEFE 230 | Production and Utilization of Instructional Technology | 3 |
| SPED 121 | Overview of Special Education | 3 |
| Science Course Major |  | 3 |
| First Aid Competency ${ }^{3}$ |  | 0-3 |
|  | Hours | 15-18 |
| Spring |  |  |
| SEFE 326 | ELL Strategies and Practice | 3 |
| Select one of the follow | wing: | 3 |


| HIST 151 | Ancient and Medieval World |
| :--- | :--- |
| HIST 152 | Rise of the Modern World |
| HIST 153 | Contemporary World History |
| HIST 201 | Colonial America to 1815 |
| HIST 202 | United States, 1815-1920 |
| HIST 203 | U.S. History Since 1920 |
| Science Course Major | 3 |
| Science Course Major | 3 |


| Science Course Major |  | 3 |
| :---: | :---: | :---: |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| ENGL 328 | Young Adult Literature | 3 |
| MATH 310 | Elementary Mathematics II | 3 |
| SEFE 370 | Educational Measurements, Assessment and Evaluation | 3 |
| SEFE 380 | History and Philosophy of Education | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| ENGL 305 | Practicum: Teaching Writing | 3 |
| SEFE 300 | Middle Level Cognitive Development | 3 |
| SEFE 342 | Educational Psychology for Diverse Learners | 3 |
| Science Course Major |  | 3 |
| Science Course Major |  | 3 |
|  | Hours | 5 |
| Fourth Year |  |  |
| Fall |  |  |
| SEFE 251 | Teaching Reading in the Content Areas Grades 4-8 | 3 |
| SEFE 338 | Standards-Based Instruction \& Assessment in the Inclusionary Classroom | 3 |
| SEFE 349 | Teaching of Science in the Middle School | 3 |
| Science Course Major |  | 3 |
| SEFE 422 | Practicum in the Middle-Level Grades | 1 |
| Science Course Major |  | 3 |
|  | Hours | 16 |
| Spring |  |  |
| SEFE 456 | Student Teaching - Middle Level Grades | 12 |
| SPED 315 | Special Education Issues in Diverse Secondary Classrooms | 3 |
|  | Hours | 15 |
|  | Total Hours** 12 |  |
| Course offered in multiple subjects; cannot take course in first major subject |  |  |
| Pass Computer Competency Exam or complete CPSC 100, CPSC 110, CPSC 130, or PE 202 |  |  |
| Complete one of the following: CPR and First Aid \& Safety certification or SAFE 205 |  |  |
|  |  |  |
| Major Code: 1235 |  |  |
| Revised: 01.20.2021 |  |  |
| ** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year. |  |  |

## Middle-Level Social Studies (4-8), Bachelor of Science in Education (BSED)

All candidates completing this program and student teaching are eligible to receive Pennsylvania certification after achieving a passing or qualifying score on Pennsylvania Department of Education required exam(s). If you are interested in teaching in another state, please contact the Department of Education in that state.

## Related Links

Middle-Level Education - Social Studies, BSED Program Page (https:// www.sru.edu/academics/majors-and-minors/middle-level-education-social-studies/)

Secondary Education/Foundations of Education Department Page (https://www.sru.edu/academics/colleges-and-departments/coe/ departments/secondary-education-/-foundations-of-education/)

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

## Curriculum Guide

GPA Requirement
GPA must be 2.8 or higher for Teacher Candidacy.
A 3.0 GPA and passing subject area assessment (PECT) or a 2.8 GPA and a qualifying passing subject area assessment (PECT) score (as determined by PDE) is required for certification.

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 79 |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credit | 378) | 3 |


| Humanities Inquiry |  |
| :--- | :--- |
| HIST 140 | Spotlight on the Past |


| Social Science Inquiry |  |  |
| :--- | :--- | :--- |
| POLS $101 \quad$ American National Government | 3 |  |

Natural Sciences Inquiry
SCI 101 Science of Life 3

Physical Sciences Inquiry
SCI $102 \quad 3$
Subtotal 15

| Additional Rock Studies Requirements (12 credits) |  |  |
| :--- | :---: | :---: |
| SPED 121 | Overview of Special Education | 3 |

MATH 210 Elementary Mathematics I 3
MATH 310 Elementary Mathematics II 3
Select one of the following: 3

| HIST 151 | Ancient and Medieval World |  |
| :---: | :--- | :--- |
| HIST 152 | Rise of the Modern World |  |
| HIST 153 | Contemporary World History |  |
| Total Hours |  | $\mathbf{4 2}$ |

1 Course offered in multiple subjects; cannot take course in first major subject.

## Basic Math Requirement

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete on | following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Ar |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major Requirements

- 40 major credits must be taken at SRU or PASSHE
- 40 major credits must be taken at the 300 level or above
- All grades in Professional Education \& Specialization must be grades of "C" or above.


3 Credits earned in these courses will be applied to Rock Studies.

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


## Grades 4-6 Core Content Areas

- To meet the English Language Arts 12 credit Pennsylvania Department of Education requirements, students must complete SEFE 251 - Teaching Reading in the Content Areas Grades 4-8 if they have not completed ENGL 102.

| Code | Title | Hours |
| :---: | :---: | :---: |
| English/Language Arts |  |  |
| ENGL 102 | Critical Writing ${ }^{1}$ | 3 |
| ENGL 104 | Critical Reading ${ }^{1}$ | 3 |
| ENGL 305 | Practicum: Teaching Writing | 3 |
| ENGL 328 | Young Adult Literature | 3 |
| Math |  |  |
| STAT 152 | Elementary Statistics ${ }^{1}$ | 3 |
| MATH 118 | Elementary Geometry | 3 |
| MATH 210 | Elementary Mathematics I ${ }^{1}$ | 3 |
| MATH 310 | Elementary Mathematics II ${ }^{1}$ | 3 |
| Science |  |  |
| SCI 101 | Science of Life ${ }^{1}$ | 3 |
| SCI 102 | Understanding the Physical World ${ }^{1}$ | 3 |
| Select two of the following classes from different departments: |  | 6 |
| BIOL 101 | General Biology |  |
| BIOL 104 | Principles of Biology with Lab |  |
| BIOL 105 | Environmental Biology |  |
| BIOL 216 | Anatomy and Physiology I with Lab |  |
| CHEM 104 | Introduction Chemistry I |  |
| CHEM 107 | General Chemistry I |  |
| EGEO 100 | Environmental Geology |  |
| EGEO 101 | Physical Geology |  |
| EGEO 121 | Meteorology/Lab |  |
| PHYS 101 | Concepts of Science I with Lab |  |
| PHYS 201 | Elements of Physics I with Lab |  |
| PHYS 211 | General Physics I with Lab |  |
| Subtotal |  | 36 |
| Total Hours |  | 36 |

1 Credits earned in these courses will be applied to Rock Studies.

## Prerequisites for Admission to Teacher Candidacy

Grades below a "C" are not admissible.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Basic Courses |  |  |
| Select 6 of the following: |  | 18 |
| ENGL 102 | Critical Writing |  |
| ENGL 104 | Critical Reading |  |
| SPED 121 | Overview of Special Education |  |
| SEFE 230 | Production and Utilization of Instructional Technology |  |
| SEFE 326 | ELL Strategies and Practice |  |

SEFE $370 \quad \begin{aligned} & \text { Educational Measurements, Assessment } \\ & \text { and Evaluation }\end{aligned}$
Math Requirement for BS in Education
Required prior to Admission to Teacher Candidacy
Select one of the following:

| MATH 118 | Elementary Geometry |  |
| :--- | :--- | ---: |
| MATH 210 | Elementary Mathematics I |  |
| MATH 310 | Elementary Mathematics II | $\mathbf{3}$ |
| STAT 152 | Elementary Statistics I | $\mathbf{2 4}$ |
| Total Hours |  |  |

## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
MIDDLE-LEVEL SOCIAL STUDIES (4-8) - BSED (1234)
This program is effective as of Fall 2019.
Revised 02.10.2022
UCC 02.01.2022

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| ENGL 102 | Critical Writing | 3 |
| HIST 140 | Spotlight on the Past | 3 |
| INDS 101 | FYRST Seminar * | 1 |
| SCI 101 | Science of Life | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| Computer Competency Requirement ${ }^{2}$ |  | 0-3 |
|  | Hours | 16-19 |
| Spring |  |  |
| ENGL 104 | Critical Reading | 3 |
| MATH 118 | Elementary Geometry | 3 |
| SCI 102 | Understanding the Physical World | 3 |
| SEFE 200 | Introduction to Education, Teaching Methods and Field | 3 |
| Select one of the following: |  | 3 |


| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :--- | :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
|  | Hours |  |

## Second Year

Fall
POLS 101
American National Government

| SEFE 230 | Production and Utilization of Instructional Technology | 3 |
| :---: | :---: | :---: |
| SPED 121 | Overview of Special Education | 3 |
| BIO/CHEM/EGEO/PHYS Course 1 |  | 3 |
| Social Studies Course Major |  | 3 |
| First Aid Competency ${ }^{3}$ |  | 0-3 |
|  | Hours | 15-18 |
| Spring |  |  |
| MATH 210 | Elementary Mathematics I | 3 |
| SEFE 326 | ELL Strategies and Practice | 3 |
| Select one of the following: |  | 3 |
| HIST 151 | Ancient and Medieval World |  |
| HIST 152 | Rise of the Modern World |  |
| HIST 153 | Contemporary World History |  |
| BIO/CHEM/EGEO/PHYS Course 2 |  | 3 |
| Social Studies Course Major |  | 3 |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| ENGL 328 | Young Adult Literature | 3 |
| MATH 310 | Elementary Mathematics II | 3 |
| SEFE 370 | Educational Measurements, Assessment and Evaluation | 3 |
| SEFE 380 | History and Philosophy of Education | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| ENGL 305 | Practicum: Teaching Writing | 3 |
| SEFE 300 | Middle Level Cognitive Development | 3 |
| SEFE 342 | Educational Psychology for Diverse Learners | 3 |
| Social Studies Course Major |  | 3 |
| Social Studies Course Major |  | 3 |
|  | Hours | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| SEFE 251 | Teaching Reading in the Content Areas Grades 4-8 | 3 |
| SEFE 335 | Teaching Middle Level Social Studies | 3 |
| Social Studies Course Major |  | 3 |
| SEFE 338 | Standards-Based Instruction \& Assessment in the Inclusionary Classroom | 3 |
| SEFE 422 | Practicum in the Middle-Level Grades | 1 |
| Social Studies Course Major |  | 3 |
|  | Hours | 16 |
| Spring |  |  |
| SEFE 456 | Student Teaching - Middle Level Grades | 12 |
| SPED 315 | Special Education Issues in Diverse Secondary Classrooms | 3 |
|  | Hours | 15 |
|  | Total Hours** 12 | 22-128 |

1 Course offered in multiple subjects; cannot take course in first major subject
2 Pass Computer Competency Exam or complete CPSC 100, CPSC 110, CPSC 130, or PE 202
omplete one of the following: CPR and First Aid \& Safety certification or SAFE 205

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

Major Code: 1233
Revised: 01.13.2021
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Secondary Education - English (7-12), Bachelor of Science in Education (BSED)

This program track prepares students for careers teaching English in secondary schools. Requirements for the Major in Secondary Education (7-12) include a combination courses and student teaching experiences that lead to certification for a state-approved teaching license. All candidates completing this program and student teaching are eligible to receive Pennsylvania certification after achieving a passing or qualifying score on Pennsylvania Department of Education required exam(s). If you are interested in teaching in another state, please contact the Department of Education in that state.

Teacher Education Policy Manual (https://www.sru.edu/documents/ academics/colleges/COE/Teacher\%20Education\%20Policy\%20Manual \%20HANDBOOK.pdf)

## Related Links

Secondary Education - English, BSED Program Page (https:// www.sru.edu/academics/majors-and-minors/secondary-educationenglish/)

Secondary Education/Foundations of Education Department Page (https://www.sru.edu/academics/colleges-and-departments/coe/ departments/secondary-education-/-foundations-of-education/)

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

## Curriculum Guide

## GPA Requirement

GPA must be 2.8 or higher for Teacher Candidacy.
A 3.0 GPA and passing subject area assessment (PRAXIS) or a 2.8 GPA and a qualifying passing subject area assessment (PRAXIS) score (as determined by PDE) is required for certification.

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 43 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 94 |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |


| Subtotal | 15 |
| :--- | :--- |

Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378)

| Humanities Inquiry |  |
| :--- | :--- |
| ENGL 220 | Introduction to Literary and Cultural |


| Social Science Inquiry |  |
| :--- | :--- |
| COMM $263 \quad$ Mass Media and Society |  |

Physical \& Natural Sciences
SCI $101 \quad$ Science of Life
SCI 102 Understanding the Physical World 3
Subtotal 15

| Additional Rock Studies Requirements (13 credits) |  |  |
| :--- | :--- | ---: |
| MATH 125 | Precalculus | 4 |
| SPED 121 | Overview of Special Education | 3 |
| SPED 315 | Special Education Issues in Diverse <br> Secondary Classrooms | 3 |
| COMM 217 | Intercultural Communication | 3 |
| Total Hours |  | $\mathbf{4 3}$ |

1 Course offered in multiple subjects; cannot take course in first major subject.

## Basic Math Requirement

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

| Code Title | Hours |
| :--- | ---: |
| Complete one of the following: | $0-3$ |
| Meet required minimum SAT or ACT math score OR |  |

ESAP $110 \quad$ Beginning Algebra

| Total Hours | $0-3$ |
| :--- | :--- |

## Computer Competency

| Code | Title | Hours |
| :--- | :--- | ---: |
| Demonstrate "computer competency" by one of the following: | $0-3$ |  | | Pass Computer Competency Exam OR |
| :--- | :--- |

## Major Requirements

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Professional Education |  |  |
| All grades earned in Professional Education must be a "C" or above |  |  |
| CDEV 248 | Human Development and Education | 3 |
| SEFE 200 | Introduction to Education, Teaching Methods and Field | 3 |
| SEFE 230 | Production and Utilization of Instructional Technology | 3 |
| SEFE 320 | Teaching of Language Arts in Secondary Schools | 3 |
| SEFE 326 | ELL Strategies and Practice | 3 |
| SEFE 338 | Standards-Based Instruction \& Assessment in the Inclusionary Classroom | 3 |
| SEFE 342 | Educational Psychology for Diverse Learners | 3 |
| SEFE 370 | Educational Measurements, Assessment and Evaluation | 3 |
| SEFE 380 | History and Philosophy of Education | 3 |
| SEFE 426 | Practicum in Middle-Level \& Secondary Education | 1 |
| SEFE 455 | Student Teaching - Secondary Education | 12 |
| SPED 121 | Overview of Special Education | 3 |
| SPED 315 | Special Education Issues in Diverse Secondary Classrooms | 3 |
| Subtotal |  | 46 |


| Writing Specialization |  | 3 |
| :--- | :--- | ---: |
| ENGL 204 | Composition and Rhetoric | 3 |
| ENGL 235 | Writing for Non-Print Media | 3 |
| ENGL 305 | Practicum: Teaching Writing | 9 |
| Subtotal |  | 3 |
| Language Requirement |  |  |
| ENGL 230 | Introduction to Linguistics and Grammar | 3 |
| ENGL 331 | Historical Development of the English <br>  | Language |


| ENGL 332 | Modern English Grammar and Syntax | 3 |
| :--- | :--- | ---: |
| Subtotal |  | 9 |
| Required English Courses |  |  |
| ENGL 312 | Introduction to Shakespeare |  |
| or ENGL 389 | Stratford Shakespeare Tour | 3 |
| ENGL 317 | British Literature I | 3 |
| ENGL 318 | British Literature II | 3 |
| ENGL 319 | American Literature I | 3 |
| ENGL 320 | American Literature II | 3 |
| ENGL 328 | Young Adult Literature | 3 |
| ENGL 402 | World Literature | 3 |
| ENGL 403 | Literary and Cultural Theory | 3 |
| Subtotal |  | 24 |
| Communication Courses | 3 |  |
| COMM 215 | Small Group Communication |  |
| or COMM 217 | Intercultural Communication | 3 |
| COMM 263 | Mass Media and Society | 6 |
| Subtotal |  | 94 |
| Total Hours |  | 3 |

1 Course counts for 50\% of Major and Major GPA

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


## Important Information

For information only: Please see adviser for more details pertaining to this certification

## Optional Dual Certification in Secondary Education and Special Education

Secondary Education majors can add special education certification by taking the following courses in addition to those required for the secondary education major.

| Code | Title | Hours |
| :--- | :--- | ---: |
| SPED 230 | Early Intervention Practices for Students <br> with Disabilities | 3 |
| SPED 350 | Universal Intervention | 3 |
| SPED 360 | Targeted Instructional and Behavioral <br> Interventions for Neuro-Diverse Learners | 3 |
| SPED 431 | Intense Behavioral and Emotional <br> Interventions for Neuro-Diverse Learners | 3 |
| SPED 432 | Intensive ELA Interventions for Neuro- <br> Diverse Learners | 3 |
| SPED 433 | Assessment Strategies in Special <br> Education | 3 |
| SPED 435 | Professional Collaboration and Ethical <br> Practices | $\mathbf{3}$ |
| Total Hours | Processes and Procedures in Special <br> Education | $\mathbf{3}$ |

## Prerequisites for Admission to Teacher Candidacy

- Grades below a "C" are not admissible.

Secondary Education / Foundations of Education Department Page (https://www.sru.edu/academics/colleges-and-departments/coe/ departments/secondary-education-/-foundations-of-education/)

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

## Curriculum Guide

## GPA Requirement

GPA must be 2.8 or higher for Teacher Candidacy.
A 3.0 GPA and passing subject area assessment (PRAXIS) or a 2.8 GPA and a qualifying passing subject area assessment (PRAXIS) score (as determined by PDE) is required for certification.

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 43 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | $76-82$ |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics |  |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |


| Integrated Inquiry |  |
| :--- | ---: |
| Creative and Aesthetic Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Humanities Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Social Science Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Physical \& Natural Sciences | 3 |
| SCI $101 \quad$ Science of Life | 3 |
| SCI 102 | Understanding the Physical World |
| Subtotal | 15 |


| Additional Rock Studies Requirements (13 credits) |  |  |
| :--- | :--- | :--- |
| MATH 125 | Precalculus | 4 |
| SPED 121 | Overview of Special Education | 3 |
| SPED 315 | Special Education Issues in Diverse | 3 |
|  | Secondary Classrooms |  |


| FREN 300 | French Grammar and Composition 1 | 3 |
| :--- | ---: | ---: |
| Total Hours |  | 43 |

1 Course offered in multiple subjects; cannot take course in first major subject.

## Basic Math Requirement

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major Requirements

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Professional Education |  |  |
| All grades earned in Professional Education must be a "C" or above |  |  |
| CDEV 248 | Human Development and Education | 3 |
| SEFE 200 | Introduction to Education, Teaching Methods and Field | 3 |
| SEFE 230 | Production and Utilization of Instructional Technology | 3 |
| SEFE 323 | Teaching World Languages | 3 |
| SEFE 326 | ELL Strategies and Practice | 3 |
| SEFE 338 | Standards-Based Instruction \& Assessment in the Inclusionary Classroom | 3 |
| SEFE 342 | Educational Psychology for Diverse Learners | 3 |
| SEFE 370 | Educational Measurements, Assessment and Evaluation | 3 |
| SEFE 380 | History and Philosophy of Education | 3 |
| SEFE 426 | Practicum in Middle-Level \& Secondary Education | 1 |
| SEFE 455 | Student Teaching - Secondary Education | 12 |
| SPED 121 | Overview of Special Education | 3 |


| SPED 315 | Special Education Issues in Diverse Secondary Classrooms | 3 |
| :---: | :---: | :---: |
| Subtotal |  | 46 |
| Secondary Content Area - French |  |  |
| For student teaching and certification, all grades earned in Content Area must be a "C" or above. |  |  |
| Basic Skill Courses |  |  |
| Exemption is possible from these courses according to performance on the language placement test. CLEP, AP, and OPI credits are accepted. |  |  |
| Complete the following: |  | 0-15 |
| FREN 101 | French Language and Culture I |  |
| FREN 102 | French Language and Culture II |  |
| FREN 103 | French Language and Culture III |  |
| FREN 201 | French Conversation 1 |  |
| FREN 220 | Reading in French |  |
| Required French Courses |  |  |
| FREN 300 | French Grammar and Composition 1 | 3 |
| FREN 301 | French Conversation 2 | 3 |
| or FREN 401 | French Conversation 3 |  |
| FREN 305 | France through the Ages | 3 |
| or FREN 306 | France and Francophone Identities Today |  |
| FREN 320 | Main Currents in French Literature | 3 |
| FREN 350 | French Linguistics and Phonetics | 3 |
| FREN 400 | French Grammar and Composition 2 | 3 |
| Select one of the following: |  | 3 |
| FREN 402 | Eighteenth-Century Novel |  |
| FREN 403 | Nineteenth-Century French Literature |  |
| FREN 404 | Exploring French Culture through Media |  |
| FREN 411 | Literature of the Classical Period |  |
| French Electives - For students who exempt from Basic Skills |  |  |
| Select as many elects as necessary to reach 30 credits: |  | 9-0 |
| Subtotal |  | 30-36 |
| Total Hours |  | 76-82 |
| Course counts for 50\% of Major and Major GPA |  |  |
| * Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course. |  |  |
| Important Information |  |  |
| For information only: Please see adviser for more details pertaining to this certification |  |  |
| Optional Dual Certification in Secondary Education and Special Education <br> Secondary Education majors can add special education certification by taking the following courses in addition to those required for the secondary education major. |  |  |
| Code | Title | Hours |
| SPED 230 | Early Intervention Practices for Students with Disabilities | 3 |
| SPED 350 | Universal Intervention | 3 |
| SPED 360 | Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners | 3 |


| SPED 431 | Intense Behavioral and Emotional <br> Interventions for Neuro-Diverse Learners | 3 |
| :--- | :--- | :---: |
| SPED 432 | Intensive ELA Interventions for Neuro- <br> Diverse Learners | 3 |
| SPED 433 | Assessment Strategies in Special <br> Education | 3 |
| SPED 434 | Professional Collaboration and Ethical <br> Practices | 3 |
| SPED 435 | Processes and Procedures in Special <br> Education | 3 |

Total Hours

## Prerequisites for Admission to Teacher Candidacy

- Grades below a " $C$ " are not admissible.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Basic Courses |  |  |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| SEFE 230 | Production and Utilization of Instructional Technology | 3 |
| SEFE 326 | ELL Strategies and Practice | 3 |
| SEFE 370 | Educational Measurements, Assessment and Evaluation | 3 |
| SPED 121 | Overview of Special Education | 3 |
| Math Requirement for BS in Education |  |  |
| Required prior to Admission to Teacher Candidacy |  |  |
| MATH 113 or higher |  | 6 |
| Total Hours |  | 24 |

SECONDARY EDUCATION - FRENCH K-12 BSED (1228)
Effective Fall 2019
Revised: 02.10.2022
UCC 02.01.2022

## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall |  |  |
| INDS 101 | FYRST Seminar * | 1 |
| SUBJ 139 | University Seminar $^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| SCI 101 | Science of Life | 3 |
| FREN 101 | French Language and Culture I $^{2}$ | 3 |


| Select one of the following: |  | 3 |
| :---: | :---: | :---: |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
|  | Hours | 16 |
| Spring |  |  |
| SEFE 200 | Introduction to Education, Teaching Methods and Field | 3 |
| ENGL 104 | Critical Reading | 3 |
| SCI 102 | Understanding the Physical World | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| FREN 102 | French Language and Culture II ${ }^{2}$ | 3 |
|  | Hours | 15 |
| Second Year |  |  |
| Fall |  |  |
| MATH 125 | Precalculus | 4 |
| Social Science Inquiry (p. 1378) |  | 2 |
| FREN 201 | French Conversation 1 | 3 |
| SEFE 230 | Production and Utilization of Instructional Technology | 3 |
| FREN 103 | French Language and Culture III ${ }^{2}$ | 3 |
|  | Hours | 15 |
| Spring |  |  |
| SEFE 326 | ELL Strategies and Practice | 3 |
| SEFE 370 | Educational Measurements, Assessment and Evaluation | 3 |
| FREN 220 | Reading in French | 3 |
| SPED 121 | Overview of Special Education | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
|  | Hours | 15 |


| Third Year |  |
| :--- | :--- |
| Fall |  |
| SEFE 323 | Teaching World Languages |

Creative \& Aesthetic Inquiry (p. 1378) 3
FREN Elective ${ }^{3} 3$

| FREN 305 |  |
| :--- | :--- |
| or FREN 306 | France through the Ages <br> or France and Francophone Identities <br> Today |


| SEFE 342 | Educational Psychology for Diverse <br> Learners | 3 |
| :--- | :--- | :--- |


| Spring <br> SEFE 338 | Standards-Based Instruction \& Assessment <br> in the Inclusionary Classroom | 3 |
| :--- | :--- | :--- |
| CDEV 248 | Human Development and Education | 3 |
| FREN Elective 3 |  | 3 |
| FREN 300 | French Grammar and Composition 1 | 3 |
| FREN 301 <br> or FREN 401 | French Conversation 2 <br> or French Conversation 3 | 3 |

## Hours

## Fourth Year

Fall

| SEFE 426 | Practicum in Middle-Level \& Secondary <br> Education | 1 |
| :--- | :--- | :--- |
| FREN 402 | Eighteenth-Century Novel | 3 |


| or FREN 403 <br> or FREN 404 <br> or FREN 411 | or Nineteenth-Century French Literature <br> or Exploring French Culture through <br> Media |  |
| :--- | :--- | ---: |
|  | or Literature of the Classical Period |  |
| FREN 400 | French Grammar and Composition 2 | 3 |
| SEFE 380 | History and Philosophy of Education | 3 |
| FREN 320 | Main Currents in French Literature | 3 |
| FREN 350 | French Linguistics and Phonetics | 3 |
|  | Hours | $\mathbf{1 6}$ |

Spring
SEFE 456 Student Teaching - Middle Level Grades 12

SPED 315 Special Education Issues in Diverse 3
Secondary Classrooms
Hours 15

Total Hours**
1 Course offered in multiple subjects; cannot take course in first major subject
2 French Elective for students who are exempt from basic skills. Total French credits must total 30 .

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


## SECONDARY EDUCATION - FRENCH K-12 BSED (1228)

Revised: 02.02.2021
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Secondary Education - Social Studies - History (7-12), Bachelor of Science in Education (BSED)

This program track prepares students for careers teaching Social Studies / History in secondary schools. Requirements for the Major in Secondary Education (7-12) include a combination of education courses and student teaching experiences that lead to certification for a stateapproved teaching license. All candidates completing this program and student teaching are eligible to receive Pennsylvania certification after achieving a passing or qualifying score on Pennsylvania Department of Education required exam(s). If you are interested in teaching in another state, please contact the Department of Education in that state.

Teacher Education Policy Manual (https://www.sru.edu/documents/ academics/colleges/COE/Teacher\%20Education\%20Policy\%20Manual \%20HANDBOOK.pdf)

## Related Links

Secondary Education - Social Studies and History, BSED Program Page (https://www.sru.edu/academics/majors-and-minors/secondary-education-social-studies-and-history/)

Secondary Education / Foundations of Education Department Page (https://www.sru.edu/academics/colleges-and-departments/coe/ departments/secondary-education-/-foundations-of-education/)

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

## Curriculum Guide

## GPA Requirement

GPA must be 2.8 or higher for Teacher Candidacy.
A 3.0 GPA and passing subject area assessment (PRAXIS) or a 2.8 GPA and a qualifying passing subject area assessment (PRAXIS) score (as determined by PDE) is required for certification.

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 40 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 103 |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |


\section*{Rock Studies Requirements <br> Code Title Hours <br> | The Rock |  |  |
| :--- | :--- | :--- |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics I | 3 |}

Select one of the following: 3

| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |


| Subtotal | 15 |
| :--- | :--- |


| Integrated Inquiry |  |
| :--- | ---: |
| Creative and Aesthetic Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Humanities Inquiry (Select 1) |  |
| POLS 101 | American National |
| INDP 202 | Introduction to Anthropology |
| Social Science Inquiry |  |
| PSYC 105 | Introduction to Psychology |

Physical \& Natural Sciences
SCI $101 \quad$ Science of Life
Subtotal 12

Additional Rock Studies Requirements ( 13 credits)
ECON 105 Economics of Social Issues
3

| MATH 125 | Precalculus | 4 |
| :--- | :--- | :--- |
| SPED 121 | Overview of Special Education | 3 |
| SPED 315 | Special Education Issues in Diverse | 3 |
|  | Secondary Classrooms |  |

Total Hours
1 Course offered in multiple subjects; cannot take course in first major subject.

## Basic Math Requirement

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major Requirements

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

| Code <br> Professional Education | Title | Hours |
| :--- | :--- | :---: |
| All grades earned in Professional Education must be a "C" or <br> above |  |  |
| CDEV 248 | Human Development and Education | 3 |
| SEFE 200 | Introduction to Education, Teaching <br> Methods and Field | 3 |
| SEFE 230 | Production and Utilization of Instructional <br> Technology | 3 |
| SEFE 319 | Teaching of Social Studies in Secondary <br> Schools | 3 |
| SEFE 326 | ELL Strategies and Practice |  |
| SEFE 338 | Standards-Based Instruction \& Assessment <br> in the Inclusionary Classroom | 3 |
| SEFE 370 | Educational Measurements, Assessment <br> and Evaluation | 3 |
| SEFE 380 | History and Philosophy of Education | 3 |
| SEFE 426 | Practicum in Middle-Level \& Secondary <br> Education | 1 |


| SEFE 455 | Student Teaching - Secondary Education | 12 |
| :--- | :--- | ---: |
| SPED 121 | Overview of Special Education | 3 |
| SPED 315 | Special Education Issues in Diverse <br> Secondary Classrooms | 3 |
| Subtotal |  | 43 |


| Non-US History Courses |
| :--- |
| Select two of the following: |


| HIST 151 | Ancient and Medieval World |
| :---: | :--- |
| HIST 152 | Rise of the Modern World |
| HIST 153 | Contemporary World History |
| US History Courses |  |
| Select two of the following: |  |
| HIST 201 | Colonial America to 1815 |
| HIST 202 | United States, 1815-1920 |
| HIST 203 | U.S. History Since 1920 |


| Historian Methods/Historian Craft Course |  |  |
| :--- | :--- | :---: |
| HIST 205 | The Historian's Craft | 3 |
| Economics Course |  | 3 |
| ECON 105 | Economics of Social Issues |  |
| Geography Courses |  | 3 |
| GES XXX | Geography Course | 3 |
| GES XXX | Geography Course |  |


| Political Science Courses |  |  |
| :--- | :--- | :--- |
| POLS 101 | American National Government | 3 |
| POLS XXX | Political Science Course | 3 |


| Professional Studies Courses |  |  |
| :--- | :--- | :--- |
| INDP 106 | Race and Ethnic Diversity in the USA | 3 |
| INDP 202 | Introduction to Anthropology | 3 |


| Psychology Course |  |  |
| :--- | :--- | ---: |
| PSYC 105 | Introduction to Psychology | 3 |
| Subtotal |  | 39 |

## Secondary Education Social Studies - History Electives

Must take at least six credits in two areas and nine credits 21 required in one area.
American History Electives (p. 251)

| HIST 435 | Pennsylvania |  |
| :---: | :---: | :---: |
| HIST XXX | American History Elective |  |
| HIST XXX | American History Elective |  |
| Non-Western History Electives (p. 252) |  |  |
| HIST XXX | Non-Western History Elective |  |
| HIST XXX | Non-Western History Elective |  |
| HIST XXX | Non-Western History Elective |  |
| European History Electives (p. 251) |  |  |
| HIST XXX | European History Elective |  |
| HIST XXX | European History Elective |  |
| HIST XXX | European History Elective |  |
| Subtotal |  | 21 |
| Total Hours |  | 103 |


| 1 | Course counts for $50 \%$ of Major and Major GPA |
| :--- | :--- |
| * | Some courses may require pre-requisites. Please see course |
| descriptions to determine if there are any pre-requisites for that |  |
| specific course. |  |

## American History Electives

| Code | Title | Hours |
| :--- | :--- | ---: |
| HIST 304 | American Military History | 3 |
| HIST 313 | U.S. Manhood and Masculinities | 3 |
| HIST 323 | African American History to 1876 | 3 |
| HIST 324 | African American History Since 1876 | 3 |
| HIST 335 | Outstanding Americans | 3 |
| HIST 337 | Native American History | 3 |
| HIST 344 | The American City | 3 |
| HIST 350 | The American Civil War | 3 |
| HIST 351 | Latin America to 1830 | 3 |
| HIST 352 | Latin America Since 1830 | 3 |
| HIST 358 | American Popular Culture, 1865 to the | 3 |
|  | Present | 3 |
| HIST 364 | History of Medicine | 3 |
| HIST 390 | Experimental | 3 |
| HIST 435 | Pennsylvania | 3 |
| HIST 437 | The American West | 3 |
| HIST 445 | Americans and the Environment | 3 |
| HIST 450 | History Internship | 3 |
| HIST 453 | American Constitutional History and Law | 3 |
| HIST 490 | Independent Study | 3 |

## European History Electives

| Code | Title | Hours |
| :--- | :--- | ---: |
| HIST 305 | Russia to 1855 | 3 |
| HIST 306 | Russia Since 1855 | 3 |
| HIST 319 | History of Women to 1750 | 3 |
| HIST 331 | England to 1689 | 3 |
| HIST 332 | Britain Since 1689 | 3 |
| HIST 333 | Medieval Church | 3 |
| HIST 346 | Rise of Imperial Britain | 3 |
| HIST 347 | Twentieth Century British Culture | 3 |
| HIST 364 | History of Medicine | 3 |
| HIST 390 | Experimental | 3 |
| HIST 404 | Ancient Greece | 3 |
| HIST 422 | The Middle Ages | 3 |
| HIST 424 | French Revolution and Napoleon | 3 |
| HIST 426 | Nineteenth Century Europe | 3 |
| HIST 427 | History Internship | 3 |
| HIST 450 | The Scientific Revolution of the 17th and | 3 |
| HIST 464 | 18th Centuries | 3 |
| HIST 490 | Independent Study | 3 |
| HIST 498 | Selected Topics | 3 |


| Non-Western History Electives |  |  |
| :--- | :--- | ---: |
| Code | Title | Hours |
| HIST 362 | Africa North of the Zambezi | 3 |
| HIST 363 | Southern Africa | 3 |
| HIST 364 | History of Medicine | 3 |
| HIST 370 | History and the Bible | 3 |
| HIST 371 | History of Jews | 3 |
| HIST 376 | Modern Japan | 3 |
| HIST 380 | Egyptology | 3 |
| HIST 381 | East Asian Military Traditions | 3 |
| HIST 382 | Modern Asian Pacific Rim | 3 |
| HIST 386 | Modern China | 3 |
| HIST 390 | Experimental | 3 |
| HIST 406 | Mass Killing and Genocide in the Modern | 3 |
|  | World |  |
| HIST 450 | History Internship | 3 |
| HIST 462 | The Contemporary Middle East | 3 |
| HIST 463 | Israel-History, State and Society | 3 |
| HIST 490 | Independent Study | 3 |
| HIST 498 | Selected Topics | 3 |

## Important Information

For information only. Please see adviser for more details pertaining to this certification

## Optional Dual Certification in Secondary Education and Special Education

Secondary Education majors can add special education certification by taking the following courses in addition to those required for the secondary education major:

| Code | Title | Hours |
| :--- | :--- | ---: |
| SPED 230 | Early Intervention Practices for Students <br> with Disabilities | 3 |
| SPED 350 | Universal Intervention | 3 |
| SPED 360 | Targeted Instructional and Behavioral <br> Interventions for Neuro-Diverse Learners | 3 |
| SPED 431 | Intense Behavioral and Emotional <br> Interventions for Neuro-Diverse Learners | 3 |
| SPED 432 | Intensive ELA Interventions for Neuro- <br> Diverse Learners | 3 |
| SPED 433 | Assessment Strategies in Special <br> Education | 3 |
| SPED 434 | Professional Collaboration and Ethical <br> Practices | 3 |
| SPED 435 | Processes and Procedures in Special <br> Education | 3 |

## Total Hours

## Prerequisites for Admission to Teacher Candidacy

- Grades below a "C" are not admissible.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Basic Courses |  |  |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |


| SEFE 230 | Production and Utilization of Instructional Technology | 3 |
| :---: | :---: | :---: |
| SEFE 326 | ELL Strategies and Practice | 3 |
| SEFE 370 | Educational Measurements, Assessment and Evaluation | 3 |
| SPED 121 | Overview of Special Education | 3 |
| Math Requirement for BS in Education |  |  |
| Required prior to Admission to Teacher Candidacy |  |  |
| MATH 113 or higher |  | 6 |
| Total Hours |  | 24 |

SECONDARY EDUC - SOCIAL STUDIES - HISTORY 7-12 BSED (1277)
Effective Fall 2019
Revised: 02.10.2022
UCC 02.01.2022

## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions

## Secondary Education - Spanish (K-12), Bachelor of Science in Education (BSED)

This program track prepares students for careers teaching Spanish in all school levels. Requirements for the Major in Secondary Education ( $K-12$ ) include a combination of education courses and student teaching experiences that lead to certification for a state-approved teaching license. All candidates completing this program and student teaching are eligible to receive Pennsylvania certification after achieving a passing or qualifying score on Pennsylvania Department of Education required exam(s). If you are interested in teaching in another state, please contact the Department of Education in that state.

Teacher Education Policy Manual (https://www.sru.edu/documents/ academics/colleges/COE/Teacher\%20Education\%20Policy\%20Manual \%20HANDBOOK.pdf)

## Related Links

Secondary Education - Spanish, BSED Program Page (https:// www.sru.edu/academics/majors-and-minors/secondary-educationspanish/)

Secondary Education / Foundations of Education Department Page (https://www.sru.edu/academics/colleges-and-departments/coe/ departments/secondary-education-/-foundations-of-education/)

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

## Curriculum Guide

## GPA Requirement

GPA must be 2.8 or higher for Teacher Candidacy.
A 3.0 GPA and passing subject area assessment (PRAXIS) or a 2.8 GPA and a qualifying passing subject area assessment (PRAXIS) score (as determined by PDE) is required for certification.

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 43 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | $76-88$ |

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


## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  | 3 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics | 3 |
| Select one of the following: |  |  |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |


| Subtotal | 15 |
| :--- | ---: |
| Integrated Inquiry |  |
| Creative and Aesthetic Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Humanities Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Social Science Inquiry |  |
| Select 3 Credits (p. 1378) |  |
| Physical \& Natural Sciences | 3 |
| SCI 101 $\quad$ Science of Life | 3 |
| SCI 102 $\quad$ Understanding the Physical World |  |
| Subtotal |  |


| Additional Rock Studies Requirements (13 credits) |  |  |
| :--- | :--- | ---: |
| MATH 125 | Precalculus | 4 |
| SPED 121 | Overview of Special Education | 3 |
| SPED 315 | Special Education Issues in Diverse <br> Secondary Classrooms | 3 |
| SPAN 300 | Writing in Spanish for the Professions II | 3 |
| Total Hours |  | $\mathbf{4 3}$ |

[^9]
## Basic Math Requirement

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

| Code | Title |
| :--- | ---: |
| Complete one of the following: | Hours |
| $0-3$ |  |

Meet required minimum SAT or ACT math score OR

| ESAP 110 | Beginning Algebra |  |
| :--- | :--- | :--- |
| Total Hours | $\mathbf{0 - 3}$ |  |

## Computer Competency

Code Title Hours

Demonstrate "computer competency" by one of the following: 0-3
Pass Computer Competency Exam OR
Select one of the following at SRU or another post-secondary institution:

| CPSC 100 | Introduction to Computing for Liberal Arts |
| :--- | :--- |
| CPSC 110 | Computer Concepts |
| CPSC 130 | Introduction to Computing and <br> Programming |
| PE 202 | Technology for Wellness |
| Total Hours |  |

## Major Requirements

- 38 major credits must be taken at SRU or PASSHE
- 38 major credits must be taken at the 300 level or above
Code Title Hours

Professional Education

| All grades above. | fessional Education must be a " C " or |  |
| :---: | :---: | :---: |
| CDEV 248 | Human Development and Education ${ }^{1}$ | 3 |
| SEFE 200 | Introduction to Education, Teaching Methods and Field ${ }^{1}$ | 3 |
| SEFE 230 | Production and Utilization of Instructional Technology ${ }^{1}$ | 3 |
| SEFE 323 | Teaching World Languages ${ }^{1}$ | 3 |
| SEFE 326 | ELL Strategies and Practice ${ }^{1}$ | 3 |
| SEFE 338 | Standards-Based Instruction \& Assessment in the Inclusionary Classroom ${ }^{1}$ | 3 |
| SEFE 342 | Educational Psychology for Diverse Learners ${ }^{1}$ | 3 |
| SEFE 370 | Educational Measurements, Assessment and Evaluation ${ }^{1}$ | 3 |
| SEFE 380 | History and Philosophy of Education ${ }^{1}$ | 3 |
| SEFE 426 | Practicum in Middle-Level \& Secondary Education ${ }^{1}$ | 1 |
| SEFE 455 | Student Teaching - Secondary Education ${ }^{1,2}$ | 12 |
| SPED 121 | Overview of Special Education ${ }^{1}$ | 3 |
| SPED 315 | Special Education Issues in Diverse Secondary Classrooms ${ }^{1,2}$ | 3 |


| For student teaching and certification all grades earned in Content Area must be a "C" or above. |  |  |
| :---: | :---: | :---: |
| Basic Skill Courses |  |  |
| Exemption is possible from these courses according to performance on the language placement test. CLEP, AP, and OPI credits are accepted: |  | 0-18 |
| SPAN 101 | Spanish Language \& Culture $\mathrm{I}^{1}$ |  |
| SPAN 102 | Spanish Language \& Culture II ${ }^{1}$ |  |
| SPAN 103 | Spanish Language \& Culture III ${ }^{1}$ |  |
| SPAN 200 | Writing in Spanish for the Professions I ${ }^{1}$ |  |
| SPAN 201 | Speaking in Spanish for the Professions I ${ }^{1}$ |  |
| SPAN 220 | Understanding Hispanic Cultures Through Reading ${ }^{1}$ |  |
| Required Spanish Courses |  |  |
| SPAN 300 | Writing in Spanish for the Professions II ${ }^{1}$ | 3 |
| SPAN 350 | The Sounds of Spanish ${ }^{1}$ | 3 |
| SPAN 400 | Writing in Spanish for the Professions III ${ }^{1}$ | 3 |
| SPAN 401 | Speaking in Spanish for the Professions III 1 | 3 |
| Conversation Courses |  |  |
| Select one of the following: |  | 3 |
| SPAN 301 | Speaking in Spanish for the Professions II ${ }^{1}$ |  |
| SPAN 302 | Communication in Spanish for the Elementary Classroom ${ }^{1}$ |  |
| Civilization Courses |  |  |
| Select one of the following: |  | 3 |
| SPAN 305 | Spain Today ${ }^{1}$ |  |
| SPAN 328 | Latin American Today ${ }^{1}$ |  |
| Literature Courses |  |  |
| Select one of the following: |  | 3 |
| SPAN 431 | Exploring Spanish Culture through Media ${ }^{1}$ |  |
| SPAN 432 | Exploring Latin American Cultures through Media ${ }^{1}$ |  |
| Spanish Electives - For students who Exempt from Basic Skills |  |  |
| Choose as many SPAN electives as necessary to reach 30 credits |  | 9-0 |
| Subtotal |  | 30-39 |
| Total Hours |  | 76-85 |

1 Course counts for $50 \%$ of Major but not for Major GPA.
2 SPED 315 and SEFE 455 are taken together during the student teaching semester.

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


## Important Information

For information only: Please see adviser for more details pertaining to this certification

## Optional Dual Certification in Secondary Education and Special Education

Secondary Education majors can add special education certification by taking the following courses in addition to those required for the secondary education major:

| Code | Title | Hours |
| :---: | :---: | :---: |
| SPED 230 | Early Intervention Practices for Students with Disabilities | 3 |
| SPED 350 | Universal Intervention | 3 |
| SPED 360 | Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners | 3 |
| SPED 431 | Intense Behavioral and Emotional Interventions for Neuro-Diverse Learners | 3 |
| SPED 432 | Intensive ELA Interventions for NeuroDiverse Learners | 3 |
| SPED 433 | Assessment Strategies in Special Education | 3 |
| SPED 434 | Professional Collaboration and Ethical Practices | 3 |
| SPED 435 | Processes and Procedures in Special Education | 3 |
| Total Hours |  | 24 |

## Prerequisites for Teacher Candidacy

- Grades below a "C" are not admissible.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Basic Courses |  | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| SEFE 230 | Production and Utilization of Instructional <br>  <br> Technology | 3 |
| SEFE 326 | ELL Strategies and Practice | 3 |
| SPED $\mathbf{3 7 0}$ Educational Measurements, Assessment <br> and Evaluation  | 3 |  |
| Math Requirement for BS in Education | Overview of Special Education | 3 |
| Mequired prior to Admission to Teacher Candidacy |  |  |
| Total Hours |  | $\mathbf{2 4}$ |

SECONDARY EDUCATION - SPANISH K-12 BSED (1284)
Effective Fall 2019
Revised: 02.10.2022
UCC 02.01.2022

## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions

Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| INDS 101 | FYRST Seminar* | 1 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| SCI 101 | Science of Life | 3 |
| SPAN 101 | Spanish Language \& Culture ${ }^{2}$ | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
|  | Hours | 16 |
| Spring |  |  |
| SEFE 200 | Introduction to Education, Teaching | 3 |
|  | Methods and Field |  |
| ENGL 104 | Critical Reading | 3 |
| SCI 102 | Understanding the Physical World | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| SPAN 102 | Spanish Language \& Culture II ${ }^{2}$ | 3 |
|  | Hours | 15 |
| Second Year |  |  |
| Fall |  |  |
| MATH 125 | Precalculus | 4 |
| SPED 121 | Overview of Special Education | 3 |
| SPAN 103 | Spanish Language \& Culture III ${ }^{2}$ | 3 |
| SEFE 230 | Production and Utilization of Instructional Technology | 3 |
| SPAN 200 | Writing in Spanish for the Professions I | 3 |
|  | Hours | 16 |
| Spring |  |  |
| SEFE 326 | ELL Strategies and Practice | 3 |
| SEFE 370 | Educational Measurements, Assessment and Evaluation | 3 |
| SPAN 201 | Speaking in Spanish for the Professions I ${ }^{2}$ | 3 |
| SPAN 220 | Understanding Hispanic Cultures Through Reading ${ }^{2}$ | 3 |


| Creative \& Aesthetic Inquiry (p. 1378) | 3 |
| :---: | ---: |
| Hours | 15 |


| Third Year |  |
| :--- | :--- |
| Fall |  |
| SEFE 323 | Teaching World Languages |

Social Science Inquiry/ (p. 1378) 3
SPAN $350 \quad$ The Sounds of Spanish 3
CDEV 248 Human Development and Education 3
SEFE 342 Educational Psychology for Diverse 3
ners

## Hours

## Spring

SEFE 338
Standards-Based Instruction \& Assessment in the Inclusionary Classroom

3

| SPAN 401 | Speaking in Spanish for the Professions III | 3 |
| :---: | :---: | :---: |
| SPAN 300 | Writing in Spanish for the Professions II | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
| Spanish Civilization Course ${ }^{3}$ |  | 3 |
|  | Hours | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| SEFE 426 | Practicum in Middle-Level \& Secondary Education | 1 |
| Spanish Literature Course ${ }^{4}$ |  | 3 |
| SPAN 400 | Writing in Spanish for the Professions III | 3 |
| SEFE 380 | History and Philosophy of Education | 3 |
| Spanish Course Elective |  | 3 |
| Spanish Conversation Course ${ }^{5}$ |  | 3 |
|  | Hours | 16 |
| Spring |  |  |
| SEFE 455 | Student Teaching - Secondary Education | 3-12 |
| SPED 315 | Special Education Issues in Diverse Secondary Classrooms | 3 |
|  | Hours | 6-15 |
|  | Total Hours** | -123 |

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

1 Course offered in multiple subjects; cannot take course in first major subject
2 Spanish Elective for students who are exempt from basic skills. Total Spanish credits must total 30.
3 Select one of the following: SPAN 305 or SPAN 328
4 Select one of the following: SPAN 301 or SPAN 302
SECONDARY EDUCATION - SPANISH K-12 BSED (1284)
Revised: 02.03.2021
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Special Education

| Chair | Secretary | Location | Department <br> Phone |
| :--- | :--- | :--- | :--- |
| Dr. Matthew | Penny Dean | 114 McKay | $724-738-2085$ |
| Erickson |  | Education | Building |

Department Web Site URL (https://www.sru.edu/academics/colleges-and-departments/coe/departments/special-education/)
Department Fact Sheet URL (https://www.sru.edu/documents/programs/ factsheets/undergraduate/sped-fs.pdf)

## Faculty

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Special Education
D.Ed., Indiana University of PA
M.S., Clarion University
B.S., Clarion University

## Eric Bieniek

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M.Ed., Indiana University of PA
B.A., Edinboro University

Natalie Burick
Instructor
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D.E.D., Indiana University of PA
M.E.D., Slippery Rock University
B.S., Slippery Rock University

Amy DeLuca
Instructor
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Matthew Erickson
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M.Ed., California University of Pennsylvania
B.S., Slippery Rock University

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Ph.D., Robert Morris University
M.A., Eastern Mennonite University
B.S., Millersville University of Pennsylvania

## Anne Rose

Assistant Professor
Special Education
Ph.D., University of Pittsburgh
M.A., Chatham University
B.S., Geneva College

Annessa Steele
Instructor
Special Education

## Programs

All first-year students who enter SRU in the Summer and Fall terms of 2019 and after will follow Rock Studies. Students who entered SRU before Spring 2019 will follow Liberal Studies. All new transfer students beginning Summer 2019 and after will follow Liberal Studies. We anticipate that transfer students will begin to enter under Rock Studies during the Summer/Fall term of 2021.

## Majors

- Early Childhood Education (PK-4)/Special Education (PK-12), Bachelor of Science in Education (BSED) (p. 261)
- Early Childhood Education (PK-4)/Special Education (PK-12), Bachelor of Science in Education (BSED) - Concentration in International Education (p. 265)
- Special Education (K-12), Bachelor of Science in Education (BSED) (p. 269)
- Special Education Transition Programming, Bachelor of Science (BS) (p. 272)


## Minors

- Special Education, Minor (p. 275)


## Courses

## SPED 121-Overview of Special Education

The purpose of this course is to provide a broad overview of the terminology, strategies, and issues commonly encountered when addressing the needs of exceptional individuals. This course takes a multidisciplinary approach that begins with an introduction to the history of special education and important legislation, followed by discussion of individual areas of exceptionalities. Emphasis will be placed on etiology, identification, assessment treatment and social issues and concerns.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## SPED 122 - Low Incidence Disabilities

This course will examine best practice and policies relating to the educational consequences of low-incidence disabilities. An emphasis on deafness, blindness, deaf-blindness, severe disability and multiple disability will occur. Placement and accommodation issues in integrated educational settings will also be a focus.

Prerequisite: SPED $121^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## SPED 139 - University Seminar

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

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## SPED 190 - Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## SPED 195 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## SPED 198 - Selected Topics

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

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## SPED 220 - The Nature and Needs of Autism Spectrum Disorders

This course will focus on an understanding of the characteristics of Autism Spectrum Disorders (ASD) and the implications for individual's lifespan. The course will explore the latest research on potential causes, best practices for assessment and intervention, as well as current legal and ethical issues related to autism services.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## SPED 222 - Introduction to Special Education Law

In this course, students will discuss genesis of special education by way of litigation and resulting legislation as rooted in the Civil Rights Movement of the 1960's, PL 94-142, and the inception of IDEA Part A-D. An overview of PA Chapter 14 and its relation to IDEA, Chapter 15 and ADA, along with Chapter 16. Students will also explore LRE, compliance, and professional ethics and standards.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
SPED 230 - Early Intervention Practices for Students with Disabilities In this course, students will identify the critical components of an educational program for early learners with disabilities and medical diagnosis including: curricular areas, early interventions and effective teaching techniques, use of appropriated materials, transition to school age regarding Part C of IDEA, related services and personnel, parental involvement, assistive technology and inclusionary practices.

Prerequisite: SPED $121^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3

## SPED 245 - Technology in Special Education

Candidates will develop the use of technologies to assist in the teaching, remediation, assessment and enrichment of students with special needs in inclusive traditional and/or cyber classrooms. The goal is to help pre-service teachers iimplement instructional and assistive technology effectively. This course will also provide a framework for utilizing educational technology to meet the individualized needs of students.

Prerequisite: SPED $121^{\mathrm{C}}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1 or Freshman 2 may not enroll.

## SPED 290 - Experimental

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## SPED 295 - Workshop

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

## Credits: 1-6

Term(s) Typically Offered: Offered as Needed

## SPED 298 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## SPED 302 - Developmental Disabilities

The learner will identify the critical components of an educational program for persons who have mental retardation classified as moderate, severe, or profound including: curricular areas, effective teaching techniques, appropriate materials, team approaches, ancillary services, parental involvement and inclusionary practices. Includes a lab of three contact hours per week with students who have severe and/or multiple disabilities.

Prerequisites: (SPED $202^{\mathrm{D}}$ or SPED $122^{\mathrm{D}}$ ) and (SPED $203^{\mathrm{D}}$ or SPED $121^{\mathrm{D}}$ or SPED $100^{\mathrm{D}}$ ) and (SPED $204^{\mathrm{D}}$ or SPED $230^{\mathrm{D}}$ )
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
SPED 315 - Special Education Issues in Diverse Secondary Classrooms This course is designed to familiarize secondary education majors with the various behavioral problems they may encounter in the inclusive classroom. Suggestions are given for ameliorating these problems, as well as successfully organizing the classroom and classroom routine. Three units of study will be explored. The three units are: 1) Classroom management with a focus on dealing with students with special needs, 2) Legal issues for secondary teachers, 3) Impact of exceptionalities in inclusive settings.

Corequisite(s): SPED 455
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPED 341 - Transition Across the Lifespan

This course is designed to provide students with a life management perspective for educating persons with disabilities in an inclusive etting. this course prepares students to apply the foundational principles of special education for meeting the major developmental needs of persons with disabilities from early infancy to adulthood. This course is designed to provide the undergraduate student with a foundation for the understanding of the major developmental needs and community requirements for individuals with disabilities.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPED 342 - Building Community Partnerships

This course focuses on the multi-dimensaional role of service provider to individuals with disabilities. In addition to hands-on experiences with service agencies, students enrolled in this course will interact with service providers, supervisors, related service personnel parents and caretakers. Students will learn how to take on all roles of a service provider and implement effective programming to address all the needs of a client(s). Students will become skilled in matching student needs with appropriate transtion programming as well as identifying personnel key in providing necessary services.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Comm Prgrms Amer with Disabil, Comm Prg Am Dis-Adap Phys Actv, Comm Prg Am Dis-NonPrft Mgmt or SPED Transition Programming.

## SPED 343 - Americans with Disabilities

This course will provide background for understanding how disabling conditions may handicap a person in terms of jobs, marriage, and family life, housing and transportation and citizenship. The course stresses how everyone is involved in determining the success or failure of the disabled in society. An historical overview of society's treatment of the disabled will be contrasted with recent legislation and the emerging roles of the disabled in American society. The impact of special education on the disabled person, the parents, siblings, employers, neighbors, and peers will be presented.

Credits: 3
Term(s) Typically Offered: Offered Fall, Winter, \& Spring
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPED 346-Assessment in Transition Planning

This course introduces the student to the assessments utilized for evaluation of students at all levels of transition planning, spanning from school readiness assessments to transition planning for the secondeary level. Students will learn to identify appropriate assessment based on student needs as well as how to administer and score evaluation data. In addition, the course will guide students in reviewing and interpreting assessment data to determine appropriate transition planning to address student needs. The course will also indentify the major litigation and legislation that have sigificantly influenced the nature of service to exceptional populations in the area of transition planning and assessment of their needs.
Prerequisites: SPED $121^{C}$ and SPED $122^{\circ}$ and SPED $230^{\circ}$ and SPED $341^{\circ}$ and SPED $342^{\text {C }}$ and SPED $343^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment is limited to students with a program in SPED Transition Programming.

## SPED 347 - Management \& Leadership

This is an advanced level course that expands students' knowledge in skills necessary to take on leadership and management roles in the secondary transition planning level. Students will be required to engage in professional organizations at the state and local level. Students will learn to identify how to develop an effective system for service delivery to clients. Additional, an emphasis will be placed on current funding sources in the nation and state as well as how to manage necessary paperwork for obtaining funding necessary to run appropriate transition programs for children and adults of transition age.

Prerequisites: SPED $121^{C}$ and SPED $122^{\circ}$ and SPED $230^{C}$ and SPED $341^{C}$ and SPED $342^{\text {C }}$ and SPED $343^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment is limited to students with a program in SPED Transition Programming.

## SPED 350 - Universal Intervention

In this course, student will identify the critical components of Tier 1 in the Multi-Tiered System of Support (MTSS) for learners with and without disabilities including: universal interventions, best practices, screening, progressing monitoring, classroom management, PBIS, collaboration, coteaching, SDI and accommodations and inclusionary practices.

Prerequisite: SPED $121^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Corequisite(s): ELEC 311
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER
CANDIDACY attribute.

## SPED 353 - Teaching in an Area of High Need

In this course, we will discuss the problem of over representation of individuals from diverse backgrounds in special education and the racial, cultural, and economic concerns of school systems and communities (both domestically and abroad) trying to narrow the opportunity/ achievement gap for students. During the semester, students will be analyzing some of the historical, socioeconomic, and political factors school systems in areas of high need confront.Specifically, students will investigate effective instructional and organizational practices, examine home-school connections, and identify possible disparities in available resources for urban and rural schools.

Credits: 3
Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Sophomore 1 or Sophomore 2.

## SPED 360 - Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners

In this course, students will identify the critical components of Tier II in the Multi-Tiered System of Support (MTSS) for learners with and without disabilities including: data-based decision making, evidenced based practices, supplemental and intensive programming, differentiated instruction and assessment. These concepts will be explored within the scopes of academic and behavioral supports for exceptional learners.

Corequisite(s): ELEC 420
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Early Childhood Ed (PK-4), Early Child/Spec Ed(PK-4)PK-8), Special Education (PK-12) or Exceptionalities.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SPED 390 - Experimental

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

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPED 395 - Workshop

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

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPED 398 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPED 410- Transition Practicum

The practicum course focuses on developing skills in collaboration, consultation and teaming to prepare pre-service Transition Specialist students for entry into a multi-disciplinary and multi-dimensional role of services provider to individuals with disabilities. In addition to handson experience with service agencies, Transition Specialist students enrolled in this course will interact with clients, service providers, agency supervisors, related service personnel and care takers.
Prerequisites: SPED $121^{\mathrm{D}}$ and SPED $122^{\mathrm{D}}$ and SPED $230^{\mathrm{D}}$ and SPED $341^{\mathrm{D}}$ and SPED $342^{\text {D }}$ and SPED $343^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPED 431 - Intense Behavioral and Emotional Interventions for Neuro-

## Diverse Learners

In this course, students will identify the critical components of Tier III Emotional and Behavioral Interventions within the Multi-Tiered System of Support (MTSS) for learners with and without disabilities including: overview of severe behavior. Functional Behavioral Assessment (FBA), use of evidenced based interventions to support challenging behavior, develop more age appropriate social and emotional skills, application of effective preventative and environmental planning to limit problem behaviors as well as understanding the acting out cycle, trauma informed care and legal implications surrounding challenging behaviors in today's schools.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.
SPED 432 - Intensive ELA Interventions for Neuro-Diverse Learners
This course in Special Education is designed for the teacher candidate seeking certification in K-12 Special Education. This course will focus on reading and writing interventions. Students will gain experience with a variety of strategies and interventions to use with various levels of special education needs in the regular education classroom \& in pull-out placements. This course will examine effective instructional practices and delivery methods for intensive levels of special education support ( $K-12$ ) in both the inclusionary and resource settings.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER
CANDIDACY attribute.

## SPED 433-Assessment Strategies in Special Education

This course is designed to provide undergraduate students with the skills and knowledge necessary to conduct educational assessment of diverse students and interpret assessment results in order to plan an educational program (i.e., determine elegibility and develop an individualized education program).

Prerequisites: SPED $121^{\mathrm{D}}$ and SPED $122^{\mathrm{D}}$ and SPED $230^{\mathrm{D}}$ and (SPED $325^{\mathrm{D}}$ or SPED $350^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SPED 434 - Professional Collaboration and Ethical Practices

This course focuses on skills in consultation, collaboration and learning to prepare the pre-service teacher for the multidimensional role of today's special educator. In addition to hands-on experience in classrooms, students enrolled in this course will interact with special educators, parents, general educators, and resource personnel among others. Application of teaching techniques with children with disabilities under faculty and host teacher supervision will provide the pre-service teacher with an opportunity for experience in the special education classroom as well as inclusive settings prior to the student teaching experience.
Prerequisites: SPED $121^{\mathrm{D}}$ and SPED $122^{\mathrm{D}}$ and SPED $230^{\mathrm{D}}$ and (SPED $325^{\mathrm{D}}$ or SPED $350^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SPED 435 - Processes and Procedures in Special Education

 In this course, we will discuss special education legal documentation, including referral forms relating to Tier 1-3 interventions, the evaluation process, ER, IEP, procedural safegaurds, NOREPs, and Transition. Emphasis will be placed on legally defensible IEP writing, mediation, due process, objective tone, and data collection.Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER
CANDIDACY attribute.

SPED 436-Intensive Mathematics Interventions for Neuro-Diverse Learners
In this course, we will discuss instructional interventions and strategies that can be utilized in an intensive, Tier 3 type, setting to assist neurodiverse learners in understanding mathematics concepts/topics. Particular emphasis will be placed on topics and remediation strategies frequently encountered within the Grade 4 to Algebra/Grade 9 levels.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SPED 440-Seminar in Special Education

The purpose of this seminar is to help pre-service special education teachers understand some of the challenges encountered during the first year of teaching, and provide strategies to help prepare them to overcome these challenges as they begin their first year of teaching.

Corequisite(s): SPED 455
Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPED 450 - Transition Internship

This 12 credit internship course focuses on advancing skills in collaboration, consultation and teaming to prepare pre-service students for entry into a multi-disciplinary and multi-dimenstional role of services provider to individuals with disabilities. Students set up their own internship sites with guidance and approval from their advisor. This hadns-on experience with service agencies makes up 480 hours of time in the field. Transition Specialist students enrolled in this course will interact with clients, service providers, agency supervisors, related service personnel and care takers.
Prerequisites: SPED $121^{\mathrm{D}}$ and SPED $202^{\mathrm{D}}$ and SPED $2033^{\mathrm{D}}$ and SPED $204^{\mathrm{D}}$ and SPED $212^{\mathrm{D}}$ and (SPED $311^{\mathrm{D}}$ or SPED $313^{\mathrm{D}}$ ) and SPED $400^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3-12
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPED 455 - Student Teaching - Special Education

Under the guidance of a cooperating teacher and university supervisor, students engage in two eight- week assignments on a full-time basis in specified school districts and attend scheduled seminars. Supervisors assign additional requirements.
Prerequisites: SPED $202^{\mathrm{D}}$ and SPED $203^{\mathrm{D}}$ and SPED $204^{\mathrm{D}}$ and SPED $212^{\mathrm{D}}$ and SPED $314^{\mathrm{D}}$ and SPED $302^{\mathrm{D}}$ and SPED $306^{\mathrm{D}}$ and SPED $311^{\mathrm{D}}$ and SPED $312^{\text {D }}$ and SPED $400^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3-12
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER
CANDIDACY attribute.

## SPED 490 - Independent Study

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPED 495 - Workshop

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

## Credits: 1-6

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPED 498 - Selected Topics

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

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Early Childhood Education (PK-4)/ Special Education (PK-12), Bachelor of Science in Education (BSED) <br> Related Links

Early Childhood Education (PK-4)/Special Education (PK-12), BSED Program Page (https://www.sru.edu/academics/majors-and-minors/ early-childhood-(pk-4)-/-special-education-(k-8)/)

Special Education Department Page (https://www.sru.edu/academics/ colleges-and-departments/coe/departments/special-education/)

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

## Curriculum Guide

## GPA Requirement

GPA must be 2.8 or higher for Teacher Candidacy.
A 3.0 GPA and passing subject area assessment (PECT) or a 2.8 GPA and a qualifying passing subject area assessment (PECT) score (as determined by PDE) is required for certification.

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 98 |

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


## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 210 | Elementary Mathematics I | 3 |
| Select one of the following: | 3 |  |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy | 15 |


| Integrated Inquiry |  |
| :--- | ---: |
| Creative and Aesthetic Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Humanities Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Social Science Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Natural Sciences Inquiry |  |
| SCl 101 | Science of Life |
| Physical Sciences Inquiry | 3 |
| SCl 102 Understanding the Physical World |  |
| Subtotal | 15 |


| Additional Rock Studies Requirements (12 credits) |  |  |
| :---: | :---: | :---: |
| SOWK 105 | Human Diversity | 3 |
| SPED 121 | Overview of Special Education ${ }^{2}$ | 3 |
| PE 243 | Educational Movement in Health \& Wellness ${ }^{2}$ | 3 |
| MATH 310 | Elementary Mathematics $\mathrm{II}^{2}$ | 3 |
| Total Hours |  | 42 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 Indicates coursework required for the ELEC Major as per PA Dept. of Education Certification Policy.

## Basic Math Requirement

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

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

Total Hours ..... 0-3

## Computer Competency

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


| Total Hours | $\mathbf{0 - 3}$ |
| :--- | :--- |

## Major Requirements

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Foundation Courses |  |  |
| ELEC 100 | Early Childhood Education Theory \& Practice ${ }^{1}$ | 3 |
| ELEC 200 | Child Development Typical ${ }^{1}$ | 3 |
| ELEC 348 | Leadership, Advocacy \& Program Development ${ }^{1}$ | 3 |
| PE 243 | Educational Movement in Health \& Wellness ${ }^{1}$ | 3 |
| or DANC 223 | Creative Dance for Children |  |
| SPED 121 | Overview of Special Education ${ }^{1}$ | 3 |
| SPED 222 | Introduction to Special Education Law | 3 |
| SPED 230 | Early Intervention Practices for Students with Disabilities ${ }^{1}$ | 3 |
| SPED 245 | Technology in Special Education | 3 |
| Subtotal |  | 24 |
| Diversity Block ${ }^{2}$ |  |  |
| ELEC 230 | Field-Based Child Development Typical ${ }^{1}$ | 3 |
| ELEC 237 | ELL Strategies and Practice for Early Childhood Education ${ }^{1}$ | 3 |
| ELEC 281 | Family and Community Diversity and Partnerships ${ }^{1}$ | 3 |
| Subtotal |  | 9 |
| Early Literacy Block ${ }^{2}$ |  |  |
| ELEC 238 | Literacy Practices for the Emergent Learner, PK-1 ${ }^{1}$ | 3 |
| ELEC 285 | Integrating Creative Expression through the Arts ${ }^{1}$ | 3 |
| Subtotal |  | 6 |
| Block $1^{3}$ |  |  |
| ELEC 311 | Mathematics \& Literacy Teaching Lab Pre K $-4^{1}$ | 1 |
| ELEC 316 | Developmental Formal and Informal Assessments ${ }^{1}$ | 3 |
| ELEC 330 | Literacy Practices for the Developing Learner, Grades 2-4 ${ }^{1}$ | 3 |
| ELEC 340 | Mathematics Methods and Strategies for PRE K - 4 Teachers ${ }^{1}$ | 3 |


| SPED 350 | Universal Intervention | 3 |
| :---: | :---: | :---: |
| Subtotal |  | 13 |
| Block $2^{3}$ |  |  |
| Must complete Block 1 first |  |  |
| ELEC 420 | Early Childhood Field Experience ${ }^{1}$ | 3 |
| ELEC 460 | Instructional Strategies for Science and Technology ${ }^{1}$ | 3 |
| ELEC 470 | Social Studies \& Citizenship ${ }^{1}$ | 3 |
| ELEC 480 | Assessment for Differentiation of Literacy Instruction ${ }^{1}$ | 3 |
| SPED 360 | Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners | 3 |
| Subtotal |  | 15 |
| Block 3 |  |  |
| Must complete blocks 1 and 2 first |  |  |
| SPED 431 | Intense Behavioral and Emotional Interventions for Neuro-Diverse Learners ${ }^{1}$ | 3 |
| SPED 432 | Intensive ELA Interventions for NeuroDiverse Learners ${ }^{1}$ | 3 |
| SPED 433 | Assessment Strategies in Special Education ${ }^{1}$ | 3 |
| SPED 434 | Professional Collaboration and Ethical Practices ${ }^{1}$ | 3 |
| SPED 435 | Processes and Procedures in Special Education | 3 |
| SPED 436 | Intensive Mathematics Interventions for Neuro-Diverse Learners | 3 |

## Student Teaching

All previously listed coursework must be completed prior to

| Student Teaching |  |  |
| :--- | :--- | :--- |
| ELEC 455 | Student Teaching: Early Childhood ${ }^{1}$ | 6 |
| SPED 440 | Seminar in Special Education | 1 |
| SPED 455 | Student Teaching - Special Education ${ }^{1}$ | 6 |
| or ELEC 475 International Student Teaching: Early Childhood |  |  |
| Subtotal |  | 13 |
| Total Hours |  | $\mathbf{9 8}$ |

1 Course counts for $50 \%$ of Major requirements but not for Major GPA
2 Diversity and Early Literacy blocks can be taken in any order, but not at the same time. You must enroll in all courses within the block.
3 Blocks 1, 2, and 3 must be taken in sequence and completed prior to Student Teaching. No two blocks below can be taken together. You must enroll in all courses within the block.

## Co-curricular and Experiential Learning

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

1. International study programs
2. High-Impact Practice (HIP) designated classes
3. Student-Faculty research and Student Leadership development
4. Career Education and Development
5. Internships/Field Experiences
6. Student teaching (required)

## Important Information

## Prerequisites for Admission to Teacher Candidacy

- Grades below a "C" are not admissible.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Basic Courses |  | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| Select one of the following: |  |  |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| ELEC 100 | Early Childhood Education Theory \& | 3 |
|  | Practice |  |
| ELEC 200 | Child Development Typical | 3 |
| ELEC 230 | Field-Based Child Development Typical | 3 |

Math Requirement for BS in Education
Prior to Admission to Teacher Candidacy. Minimum grade of "D" required.

| MATH 210 | Elementary Mathematics I | 3 |
| :--- | :--- | ---: |
| MATH 310 | Elementary Mathematics II | 3 |
| Total Hours |  | $\mathbf{2 4}$ |

## BSED Early Childhood (PK-4)/Special Education (PK-12) Grade Requirements

- Grades in each of the following courses must be " C " or better to qualify for Student Teaching and/or Graduation

| Code | Title | Hours |
| :---: | :---: | :---: |
| ELEC 100 | Early Childhood Education Theory \& Practice | 3 |
| ELEC 200 | Child Development Typical | 3 |
| ELEC 230 | Field-Based Child Development Typical | 3 |
| ELEC 237 | ELL Strategies and Practice for Early Childhood Education | 3 |
| ELEC 238 | Literacy Practices for the Emergent Learner, PK-1 | 3 |
| ELEC 281 | Family and Community Diversity and Partnerships | 3 |
| ELEC 285 | Integrating Creative Expression through the Arts | 3 |
| ELEC 311 | Mathematics \& Literacy Teaching Lab Pre K - 4 | 1 |
| ELEC 316 | Developmental Formal and Informal Assessments | 3 |
| ELEC 330 | Literacy Practices for the Developing Learner, Grades 2-4 | 3 |
| ELEC 340 | Mathematics Methods and Strategies for PRE K-4 Teachers | 3 |
| ELEC 348 | Leadership, Advocacy \& Program Development | 3 |
| ELEC 420 | Early Childhood Field Experience | 3 |
| ELEC 455 | Student Teaching: Early Childhood | 12 |


| or ELEC 475 | International Student Teaching: Early Childhood |  |
| :---: | :---: | :---: |
| ELEC 460 | Instructional Strategies for Science and Technology | 3 |
| ELEC 470 | Social Studies \& Citizenship | 3 |
| ELEC 480 | Assessment for Differentiation of Literacy Instruction | 3 |
| PE 243 | Educational Movement in Health \& Wellness | 3 |
| SPED 121 | Overview of Special Education | 3 |
| SPED 222 | Introduction to Special Education Law | 3 |
| SPED 230 | Early Intervention Practices for Students with Disabilities | 3 |
| SPED 245 | Technology in Special Education | 3 |
| SPED 350 | Universal Intervention | 3 |
| SPED 360 | Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners | 3 |
| SPED 431 | Intense Behavioral and Emotional Interventions for Neuro-Diverse Learners | 3 |
| SPED 432 | Intensive ELA Interventions for NeuroDiverse Learners | 3 |
| SPED 433 | Assessment Strategies in Special Education | 3 |
| SPED 434 | Professional Collaboration and Ethical Practices | 3 |
| SPED 435 | Processes and Procedures in Special Education | 3 |
| SPED 436 | Intensive Mathematics Interventions for Neuro-Diverse Learners | 3 |
| SPED 440 | Seminar in Special Education | 1 |
| SPED 455 | Student Teaching - Special Education | 3-12 |

## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
Early Childhood (PK-4)/Special Education (K-8) BSED - (1192)
Effective Fall 2021
Revised 07.09.2021
UCC 03.02.2021

## Recommended Four-Year Plan

## Course

Title
Hours

## First Year

Fall

| ELEC 100 |  <br> Practice | 3 |
| :--- | :--- | :---: |
| SPED 121 | Overview of Special Education | 3 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |


| ENGL 102 | Critical Writing | 3 |
| :---: | :---: | :---: |
| INDS 101 | FYRST Seminar | 1 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
|  | Hours | 16 |
| Spring |  |  |
| ELEC 200 | Child Development Typical | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 210 | Elementary Mathematics I | 3 |
| SPED 222 | Introduction to Special Education Law | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
| Social Science Inquiry (p. 1378) |  | 3 |
|  | Hours | 18 |
| Second Year |  |  |
| Fall |  |  |
| SPED 230 | Early Intervention Practices for Students with Disabilities | 3 |
| ELEC 230 | Field-Based Child Development Typical | 3 |
| ELEC 237 | ELL Strategies and Practice for Early Childhood Education | 3 |
| ELEC 281 | Family and Community Diversity and Partnerships | 3 |
| SCI 101 | Science of Life | 3 |
| MATH 310 | Elementary Mathematics II | 3 |
|  | Hours | 18 |
| Spring |  |  |
| ELEC 238 | Literacy Practices for the Emergent Learner, PK-1 | 3 |
| ELEC 285 | Integrating Creative Expression through the Arts | 3 |
| Select one of the following: |  | 3 |


| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :---: | :--- | ---: |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| SCI 102 | Understanding the Physical World | 3 |
| SOWK 105 | Human Diversity | 3 |
| SPED 245 | Technology in Special Education | 3 |
|  | Hours | $\mathbf{1 8}$ |

## Third Year

Fall

| PE 243 | Educational Movement in Health \& Wellness | 3 |
| :---: | :---: | :---: |
| ELEC 311 | Mathematics \& Literacy Teaching Lab Pre K $-4$ | 1 |
| ELEC 316 | Developmental Formal and Informal Assessments | 3 |
| ELEC 330 | Literacy Practices for the Developing Learner, Grades 2-4 | 3 |
| ELEC 340 | Mathematics Methods and Strategies for PRE K-4 Teachers | 3 |
| SPED 350 | Universal Intervention | 3 |
|  | Hours | 16 |
| Spring |  |  |
| ELEC 348 | Leadership, Advocacy \& Program Development | 3 |


| ELEC 420 | Early Childhood Field Experience | 3 |
| :--- | :--- | :---: |
| ELEC 460 | Instructional Strategies for Science and <br> Technology | 3 |
| ELEC 470 | Social Studies \& Citizenship | 3 |
| ELEC 480 | Assessment for Differentiation of Literacy <br> Instruction | 3 |
| SPED 360 | Targeted Instructional and Behavioral <br> Interventions for Neuro-Diverse Learners | 3 |
|  | Hours | $\mathbf{1 8}$ |

## Fourth Year

Fall

| SPED 431 | Intense Behavioral and Emotional <br> Interventions for Neuro-Diverse Learners | 3 |
| :--- | :--- | :---: |
| SPED 432 | Intensive ELA Interventions for Neuro- <br> Diverse Learners | 3 |
| SPED 433 | Assessment Strategies in Special <br> Education | 3 |
| SPED 434 | Professional Collaboration and Ethical <br> Practices | 3 |
| SPED 435 | Processes and Procedures in Special <br> Education <br> SPED 436 | Intensive Mathematics Interventions for <br> Neuro-Diverse Learners |


| Spring |  |  |
| :--- | :--- | ---: |
| ELEC 455 | Student Teaching: Early Childhood | 6 |
| SPED 440 | Seminar in Special Education | 1 |
| SPED 455 <br> or ELEC 475 | Student Teaching - Special Education <br> or International Student Teaching: Early <br> Childhood | 6 |
|  | Hours | $\mathbf{1 3}$ |
|  | Total Hours** | $\mathbf{1 3 5}$ |

1 Course offered in multiple subjects; cannot take course in first major subject

* Students are encouraged to take INDS 101 as a Free Elective.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 1192
Revised: 09.20.2021

## Early Childhood Education (PK-4)/ Special Education (PK-12), Bachelor of Science in Education (BSED) - Concentration in International Education

Students who elect to complete Early Childhood Ed (PK-4)/Special Education (PK-12) - International Education will choose from already
established liberal studies courses that focus on international and global perspectives. They will also complete a care break, spring break trip, or field experience in an international setting. The capstone will be the completion of an international student teaching experience.

All candidates completing this program and student teaching are eligible to receive Pennsylvania certification after achieving a passing or qualifying score on Pennsylvania Department of Education required exam(s). If you are interested in teaching in another state, please contact the Department of Education in that state.

The mission of the International track is to equip, inspire and empower teacher candidates by providing them opportunities to develop their personal and professional global awareness; to deepen their understanding of culturally responsive teaching and to experience international teaching in order to be prepared for teaching in the $21^{\text {st }}$ century.

## Related Links

Early Childhood Education (PK-4)/Special Education (PK-12) International Education, BSED Program Page (https://www.sru.edu/ academics/majors-and-minors/early-childhood-/-special-education-international-education/)

Special Education Department Page (https://www.sru.edu/academics/ colleges-and-departments/coe/departments/special-education/)

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

## Curriculum Guide

## GPA Requirement

- GPA must be 2.8 or higher for Teacher Candidacy.
- A 3.0 GPA and passing subject area assessment (PECT) or A 2.8 GPA and a qualifying passing subject area assessment (PECT) score (as determined by PDE) is required for certification.
- Students must complete $50 \%$ of credits required for the Major from a PASSHE university.


## Summary*

Code Title Hours
Rock Studies Requirements 42
Other Basic Requirements 0-3
Computer Competency 0-3
Major Requirements 98

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

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

Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 210 | Elementary Mathematics |  |
| Select one of the following: | 3 |  |

COMM 200 Civil Discourse: Theory \& Practice

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| PHIL 110 | Ethics and Civil Discourse |
| :--- | :--- |
| POLS 235 | Civil Discourse and Democracy |

Subtotal 15

Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378)
Humanities Inquiry
Select 3 Credits (p. 1378) 3
Social Science Inquiry
Select 3 Credits (p. 1378) 3

| Natural Sciences Inquiry |  |
| :--- | :--- |
| SCI 101 | Science of Life |

Physical Sciences Inquiry
SCI $102 \quad 3$
Subtotal 15

| Additional Rock Studies Requirements (12 credits) |  |  |
| :--- | :--- | ---: |
| MATH 310 | Elementary Mathematics II ${ }^{2}$ | 3 |
| PE 243 |  <br> Wellness |  |
|  | SPED 121 | Overview of Special Education $^{2}$ |

Select one of the following: 3

| GES 201 | Latin America and the Caribbean |
| :--- | :--- |
| HIST 351 | Latin America to 1830 |
| HIST 352 | Latin America Since 1830 |
| POLS 370 | Latin American Politics and Development |

Total Hours
1 Course offered in multiple subjects; cannot take course in first major subject.
2 Required as per PA Department of Education Certification Policy.

## Basic Math Requirement

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |

PE 202
Technology for Wellness
$\begin{array}{ll}\text { Total Hours } & \mathbf{0 - 3}\end{array}$

## Major Requirements

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Early Childhood Education Courses |  |  |
| ELEC 100 | Early Childhood Education Theory \& Practice ${ }^{1,2}$ | 3 |
| ELEC 200 | Child Development Typical ${ }^{1,2}$ | 3 |
| ELEC 405 | Overview of Global Education \& Issues ${ }^{\text {1,2 }}$ | 3 |
| PE 243 | Educational Movement in Health \& Wellness ${ }^{1}$ | 3 |
| or DANC 223 | Creative Dance for Children |  |
| SPED 121 | Overview of Special Education ${ }^{1,2}$ | 3 |
| SPED 222 | Introduction to Special Education Law | 3 |
| SPED 230 | Early Intervention Practices for Students with Disabilities ${ }^{1,2}$ | 3 |
| SPED 245 | Technology in Special Education | 3 |
| Subtotal |  | 24 |
| Diversity Block |  |  |
| ELEC 230 | Field-Based Child Development Typical ${ }^{1,2}$ | 3 |
| ELEC 237 | ELL Strategies and Practice for Early Childhood Education ${ }^{1,2}$ | 3 |
| ELEC 281 | Family and Community Diversity and Partnerships ${ }^{1,2}$ | 3 |
| Subtotal |  | 9 |
| Early Literacy Block |  |  |
| ELEC 238 | Literacy Practices for the Emergent Learner, PK-1 1,2 | 3 |
| ELEC 285 | Integrating Creative Expression through the Arts ${ }^{1,2}$ | 3 |
| Subtotal |  | 6 |

## Early Childhood Major Courses

Must be admitted to College of Education and complete both Diversity and Literacy Blocks.

| Block 1 |  |  |
| :---: | :---: | :---: |
| ELEC 311 | Mathematics \& Literacy Teaching Lab Pre K $-4^{1,2}$ | 1 |
| ELEC 316 | Developmental Formal and Informal Assessments ${ }^{1,2}$ | 3 |
| ELEC 330 | Literacy Practices for the Developing Learner, Grades 2-4 ${ }^{1,2}$ | 3 |
| ELEC 340 | Mathematics Methods and Strategies for PRE K-4 Teachers ${ }^{1,2}$ | 3 |
| SPED 350 | Universal Intervention | 3 |
| Subtotal |  | 13 |
| Block 2 |  |  |
| Must complete Block 1 first |  |  |
| ELEC 420 | Early Childhood Field Experience ${ }^{\text {1,2 }}$ | 3 |
| ELEC 460 | Instructional Strategies for Science and Technology ${ }^{1,2}$ | 3 |
| ELEC 470 | Social Studies \& Citizenship ${ }^{\text {1,2 }}$ | 3 |



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| ELEC 480 | Assessment for Differentiation of Literacy Instruction | 3 |
| :---: | :---: | :---: |
| PE 243 | Educational Movement in Health \& Wellness | 3 |
| SPED 121 | Overview of Special Education | 3 |
| SPED 222 | Introduction to Special Education Law | 3 |
| SPED 230 | Early Intervention Practices for Students with Disabilities | 3 |
| SPED 245 | Technology in Special Education | 3 |
| SPED 350 | Universal Intervention | 3 |
| SPED 360 | Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners | 3 |
| SPED 431 | Intense Behavioral and Emotional Interventions for Neuro-Diverse Learners | 3 |
| SPED 432 | Intensive ELA Interventions for NeuroDiverse Learners | 3 |
| SPED 433 | Assessment Strategies in Special Education | 3 |
| SPED 434 | Professional Collaboration and Ethical Practices | 3 |
| SPED 435 | Processes and Procedures in Special Education | 3 |
| SPED 436 | Intensive Mathematics Interventions for Neuro-Diverse Learners | 3 |
| SPED 440 | Seminar in Special Education | 1 |
| SPED 455 | Student Teaching - Special Education | 3-12 |

## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions
Early Childhood Education PK-4 - BSED (1192)
Concentration in International (INTE)
This program is effective as of Fall 2019.
Revised 07.09.2021
UCC 03.02.2021

## Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | :---: |
| First Year |  |  |
| Fall |  |  |
| ELEC 100 |  <br> Practice | 3 |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar | 1 |
| SPED 121 | Overview of Special Education | 3 |
| SCI 101 | Science of Life | 3 |
| \{SUBJ 139\} | University Seminar |  |


| Rock Studies Requirements | 3 |
| :---: | ---: |
| Hours | $\mathbf{1 6}$ |


| Spring |  | 3 |
| :--- | :--- | ---: |
| ELEC 200 | Child Development Typical | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 210 | Elementary Mathematics I | 3 |
| SPED 222 | Introduction to Special Education Law | 3 |

Rock Studies Requirements ..... 3
Rock Studies Requirements ..... 3
Second Year

Fall
Diversity Block
Civil Discourse - Select one of the following: 3

| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :---: | :---: | :---: |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| ELEC 230 | Field-Based Child Development Typical ${ }^{2}$ | 3 |
| ELEC 237 | ELL Strategies and Practice for Early Childhood Education ${ }^{2}$ | 3 |
| ELEC 281 | Family and Community Diversity and Partnerships ${ }^{2}$ | 3 |
| MATH 310 | Elementary Mathematics II | 3 |
| SPED 230 | Early Intervention Practices for Students with Disabilities | 3 |
|  | Hours | 18 |

## Spring

| Early Literacy Block |  |  |
| :---: | :---: | :---: |
| ELEC 238 | Literacy Practices for the Emergent Learner, PK-1 ${ }^{2}$ | 3 |
| ELEC 285 | Integrating Creative Expression through the Arts ${ }^{2}$ | 3 |
| $\begin{aligned} & \text { PE } 243 \\ & \quad \text { or DANC } 223 \end{aligned}$ | Educational Movement in Health \& Wellness or Creative Dance for Children | 3 |
| SPED 245 | Technology in Special Education | 3 |
| Rock Studies Requirements |  | 2-3 |
| Rock Studies Requirements |  | 3 |
|  | Hours | -18 |

## Third Year

Fall
Block I

| ELEC 311 | Mathematics \& Literacy Teaching Lab Pre K - 4 | 1 |
| :---: | :---: | :---: |
| ELEC 316 | Developmental Formal and Informal Assessments | 3 |
| ELEC 330 | Literacy Practices for the Developing Learner, Grades 2-4 | 3 |
| ELEC 340 | Mathematics Methods and Strategies for PRE K-4 Teachers | 3 |
| ELEC 405 | Overview of Global Education \& Issues | 3 |
| SPED 350 | Universal Intervention | 3 |
| Rock Studi | ments | 3 |


| Rock Studies Requirements $\quad 3$ |  | Concentration: INTE <br> Revised date: 09.20.2021 |
| :---: | :---: | :---: |
|  | Hours 22 |  |
| Spring Block II |  | Soecial Education (K-12), Bachepor of |
| ELEC 420 | Early Childhood Field Experience 3 | Pnce In EOUCALOn (bSED) |
| ELEC 460 | Instructional Strategies for Science and Technology | Related Links |
| ELEC 470 | Social Studies \& Citizenship 3 | Special Education (K-12), BSED Program Page (https://www.sru.edu/ |
| ELEC 480 | Assessment for Differentiation of Literacy Instruction 2,5 | academics/majors-and-minors/special-education-(k-12)/) |
| SPED 360 | Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners | Special Education Department Website (https://www.sru.edu/academics/ colleges-and-departments/coe/departments/special-education/) |
| Rock Studies Requirements |  | Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/) |
|  | Hours 18 |  |
| Fourth Year |  | Curriculum Guide |
| SPED ProSem |  | GPA Requirement |
| SPED 435 | Processes and Procedures in Special Education | GPA must be 2.8 or higher for Teacher Candidacy. |
| SPED 436 | Intensive Mathematics Interventions for Neuro-Diverse Learners | A 3.0 GPA and passing subject area assessment (PECT) or a 2.8 GPA and a qualifying passing subject area assessment (PECT) score (as determined by PDE) is required for certification, |
| SPED 431 | Intense Behavioral and Emotional Interventions for Neuro-Diverse Learners | Summary* |
| SPED 432 | Intensive ELA Interventions for NeuroDiverse Learners | Code Title Hours |
| SPED 433 |  | Rock Studies Requirements 42 |
|  | Assessment Strategies in Special Education | $\begin{array}{ll}\text { Other Basic Requirements } & 0-3\end{array}$ |
| SPED 434 | Professional Collaboration and Ethical | Computer Competency 0-3 |
|  | Practices | Major Requirements 84 |
| Rock Studies Requirements 3 |  | * All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. |
| Spring | Hours 21 |  |
| Student Teaching |  | Rock Studies Requirements |
| ELEC 455 | Student Teaching: Early Childhood 6 |  |
| SPED 440 | Seminar in Special Education 1 | Code Title Hours |
| SPED 455 or ELEC 475 | Student Teaching - Special Education (Ireland/Mexico) | The Rock SUBJ 139 $\quad$ University Seminar ${ }^{1} \quad 3$ |
|  | or International Student Teaching: Early | ENGL 102 Critical Writing 3 |
|  | Childhood | ENGL 104 Critical Reading 3 |
|  | Hours 13 | MATH 210 Elementary Mathematics ${ }^{2}{ }^{2}$ |
|  | Total Hours** 143-144 | Select one of the following: 3 |
|  |  | COMM 200 Civil Discourse: Theory \& Practice |
| 2 Early Literacy and Diversity Block can be done either semester. Blocks I and II must be completed in sequence. |  | PHIL 110 Ethics and Civil Discourse |
|  |  | POLS 235 Civil Discourse and Democracy |
| * Students are encouraged to take INDS 101 as a Free Elective. |  | Subtotal 15 |
| ** Must complete 1 spring break, care break**, or early field experience in an international setting. |  | Integrated Inquiry |
|  |  | Creative and Aesthetic Inquiry |
| ** This document is meant to serve as a guide. Some planners may show |  | Select 3 Credits (p. 1378) 3 |
| more than 120 credits because faculty have created flexibility in choosing |  | Humanities Inquiry |
| courses. However, only 120 credits are required to obtain a degree. Please |  | Select 3 Credits (p. 1378) 3 |
| consult with your academic adviser and refer to your curriculum guide prior to |  | Social Science Inquiry |
| your academic adviser at least once each academic year. |  | Select 3 Credits (p.1378) 3 |
|  |  | Natural Sciences Inquiry |
| Major Code: 11 |  | SCI 101 Science of Life 3 |


| Physical Sciences Inquiry |  |  |
| :---: | :---: | :---: |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |
| Additional Rock Studies Requirements (12 credits) |  |  |
| MATH 310 | Elementary Mathematics II ${ }^{2}$ | 3 |
| PE 243 | Educational Movement in Health \& Wellness ${ }^{2}$ | 3 |
| SOWK 105 | Human Diversity | 3 |
| SPED 121 | Overview of Special Education ${ }^{2}$ | 3 |
| Total Hours |  | 42 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 Required as per PA Department of Education Certification Policy.

## Basic Math Requirement

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one | following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |

## Total Hours

## Major Requirements

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Foundation Courses |  |  |
| ELEC 200 | Child Development Typical | 3 |
| PE 243 | Educational Movement in Health \& Wellness ${ }^{2}$ | 3 |
| or DANC 223 | Creative Dance for Children |  |
| SPED 121 | Overview of Special Education ${ }^{2}$ | 3 |
| SPED 222 | Introduction to Special Education Law | 3 |
| SPED 230 | Early Intervention Practices for Students with Disabilities | 3 |
| SPED 245 | Technology in Special Education | 3 |
| Subtotal ${ }^{2}$ |  | 18 |

## ELEC Courses

| ELEC 230 | Field-Based Child Development Typical | 3 |
| :--- | :--- | :---: |
| ELEC 237 | ELL Strategies and Practice for Early <br> Childhood Education | 3 |
| ELEC 238 | Literacy Practices for the Emergent <br> Learner, PK-1 | 3 |
| ELEC 281 | Family and Community Diversity and <br> Partnerships | 3 |

Subtotal 12

## Block 1

Block 1 must be taken before Special Education Core courses and you must enroll in all courses within the block

| ELEC 311 | Mathematics \& Literacy Teaching Lab Pre K - 4 | 1 |
| :---: | :---: | :---: |
| ELEC 316 | Developmental Formal and Informal Assessments | 3 |
| ELEC 330 | Literacy Practices for the Developing Learner, Grades 2-4 | 3 |
| ELEC 340 | Mathematics Methods and Strategies for PRE K-4 Teachers | 3 |
| SPED 350 | Universal Intervention | 3 |
| Subtotal |  | 13 |

Special Education Core

| SPED 360 | Targeted Instructional and Behavioral <br> Interventions for Neuro-Diverse Learners | 3 |
| :--- | :--- | :---: |
| SPED 431 | Intense Behavioral and Emotional <br> Interventions for Neuro-Diverse Learners | 3 |
| SPED 432 | Intensive ELA Interventions for Neuro- <br> Diverse Learners | 3 |
| SPED 433 | Assessment Strategies in Special <br> Education | 3 |
| SPED 434 | Professional Collaboration and Ethical <br> Practices | 3 |
| SPED 435 | Processes and Procedures in Special <br> Sducation | 3 |
| Intensive Mathematics Interventions for | 3 |  |

Subtotal

## Education Electives

Select seven credits from the following:

| ELEC 410 | Culture and Politics of American Education |
| :--- | :--- |
| SEFE 420 | American Education in the Twenty-First <br> Century: A Comparative Perspective |
| SPAN 110 | Spanish for Educators |
| SPED 220 | The Nature and Needs of Autism Spectrum <br> Disorders |
| SPED 341 | Transition Across the Lifespan |
| SPED 343 | Americans with Disabilities |
| SPED 353 | Teaching in an Area of High Need |

Subtotal

## Student Teaching

All previously listed coursework must be completed prior to Student Teaching
SPED $440 \quad$ Seminar in Special Education 1

| Subtotal | 13 |
| :--- | :--- |
| Total Hours | $\mathbf{8 4}$ |

1 ELEC courses required by PDE Guidelines for Special Education Certification
2 Course required as part of Rock Studies Program and major requirements. Course credits count in Rock Studies only.

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


## Important Information

## Prerequisites for Admission to Teacher Candidacy

- Grades below a "C" are not admissible.

| Code <br> Basic Courses | Title | Hours |
| :--- | :--- | ---: |
| ENGL 102 | Critical Writing | 3 |
| Select one of the following: | 3 |  |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| SPED 121 | Overview of Special Education | 3 |
| ELEC 200 | Child Development Typical | 3 |
| ELEC 230 | Field-Based Child Development Typical | 3 |
| ENGL 104 | Critical Reading | 3 |

Math Requirement for BS in Education
Prior to Admission to Teacher Candidacy. Minimum grade of "D" required.

| MATH 210 | Elementary Mathematics I | $\mathbf{3}$ |
| :--- | :--- | ---: |
| MATH 310 | Elementary Mathematics II | $\mathbf{3}$ |
| Total Hours |  | $\mathbf{2 4}$ |

## Special Education (PK-12) Grade Requirements

- Grades in each of the following courses must be "C" or better to qualify for Student Teaching and/or Graduation

| Code | Title | Hours |
| :---: | :---: | :---: |
| ELEC 200 | Child Development Typical | 3 |
| ELEC 230 | Field-Based Child Development Typical | 3 |
| ELEC 237 | ELL Strategies and Practice for Early Childhood Education | 3 |
| ELEC 238 | Literacy Practices for the Emergent Learner, PK-1 | 3 |
| ELEC 281 | Family and Community Diversity and Partnerships | 3 |
| ELEC 311 | Mathematics \& Literacy Teaching Lab Pre K $-4$ | 1 |
| ELEC 316 | Developmental Formal and Informal Assessments | 3 |
| PE 243 | Educational Movement in Health \& Wellness | 3 |
| SPED 121 | Overview of Special Education | 3 |
| SPED 222 | Introduction to Special Education Law | 3 |
| SPED 230 | Early Intervention Practices for Students with Disabilities | 3 |


| SPED 245 | Technology in Special Education | 3 |
| :---: | :---: | :---: |
| SPED 350 | Universal Intervention | 3 |
| SPED 360 | Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners | 3 |
| SPED 432 | Intensive ELA Interventions for NeuroDiverse Learners | 3 |
| SPED 433 | Assessment Strategies in Special Education | 3 |
| SPED 434 | Professional Collaboration and Ethical Practices | 3 |
| SPED 435 | Processes and Procedures in Special Education | 3 |
| SPED 436 | Intensive Mathematics Interventions for Neuro-Diverse Learners | 3 |
| SPED 440 | Seminar in Special Education | 1 |
| SPED 455 | Student Teaching - Special Education | 3-12 |
| Special Education (K-12) BSED - (17) |  |  |
| Effective Fall 2020 |  |  |
| Revised 11.20.20 |  |  |
| UCC 10.27.20 |  |  |

## Important Curriculum Guide Notes

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

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

Course Title Hours

## First Year

Fall

| SPED 121 | Overview of Special Education | 3 |
| :---: | :---: | :---: |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar * | 1 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
|  | Hours | 16 |


| Spring |  |  |
| :--- | :--- | ---: |
| SPED 222 | Introduction to Special Education Law | 3 |
| ELEC 200 | Child Development Typical | 3 |
| ENGL 104 | Critical Reading | 3 |
| SCI 101 | Science of Life | 3 |
| SOWK 105 | Human Diversity | 3 |
|  | Hours | $\mathbf{1 5}$ |


| Second Year <br> Fall |  |  |
| :---: | :---: | :---: |
| SPED 230 | Early Intervention Practices for Students with Disabilities | 3 |
| ELEC 230 | Field-Based Child Development Typical | 3 |
| ELEC 237 | ELL Strategies and Practice for Early Childhood Education | 3 |
| ELEC 281 | Family and Community Diversity and Partnerships | 3 |
| MATH 210 | Elementary Mathematics I | 3 |
|  | Hours | 15 |
| Spring |  |  |
| $\begin{aligned} & \text { PE } 243 \\ & \text { or DANC } 223 \end{aligned}$ | Educational Movement in Health \& Wellness or Creative Dance for Children | 3 |
| ELEC 238 | Literacy Practices for the Emergent Learner, PK-1 | 3 |
| MATH 310 | Elementary Mathematics II | 3 |
| SCI 102 | Understanding the Physical World | 3 |
| Social Science Inquiry (p. 1378) |  | 3 |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| ELEC 311 | Mathematics \& Literacy Teaching Lab Pre K $-4$ | 1 |
| ELEC 316 | Developmental Formal and Informal Assessments | 3 |
| ELEC 330 | Literacy Practices for the Developing Learner, Grades 2-4 | 3 |
| ELEC 340 | Mathematics Methods and Strategies for PRE K-4 Teachers | 3 |
| SPED 350 | Universal Intervention | 3 |
|  | Hours | 16 |
| Spring |  |  |
| SPED 245 | Technology in Special Education | 3 |
| SPED 360 | Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners | 3 |
| Electives |  | 3 |
| Electives |  | 3 |
| Electives |  | 1-3 |
|  | Hours | 13-15 |
| Fourth Year |  |  |
| Fall |  |  |
| SPED 431 | Intense Behavioral and Emotional Interventions for Neuro-Diverse Learners | 3 |
| SPED 432 | Intensive ELA Interventions for NeuroDiverse Learners | 3 |
| SPED 433 | Assessment Strategies in Special Education | 3 |


| SPED 434 | Professional Collaboration and Ethical <br> Practices | 3 |
| :--- | :--- | ---: |
| SPED 435 | Processes and Procedures in Special <br> Education | 3 |
| SPED 436 | Intensive Mathematics Interventions for |  |
| Neuro-Diverse Learners |  |  |$\quad 3$

## Related Links

Special Education Transition Programming, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/special-education-transition-programming/)

Special Education Department Page (https://www.sru.edu/academics/ colleges-and-departments/coe/departments/special-education/)

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

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher Overall GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 60 |
| Electives | 18 |

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

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 210 | Elementary Mathematics I | 3 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |
| :---: | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |
| Subtotal |  |


| Integrated Inquiry |  |
| :---: | :---: |
| Creative and Aesthetic Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Humanities Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Social Science Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Natural Sciences Inquiry |  |
| SCI 101 Science of Life | 3 |
| Physical Science Inquiry |  |
| SCI 102 Understanding the Physical World | 3 |
| Subtotal | 15 |
| Additional Rock Studies Requirements (12 credits) |  |
| MATH 310 Elementary Mathematics II ${ }^{2}$ | 3 |
| PE 243 Educational Movement in Health \& Wellness ${ }^{2}$ | 3 |
| SOWK 105 Human Diversity | 3 |
| SPED 121 Overview of Special Education ${ }^{2}$ | 3 |
| Total Hours | 42 |

1 Course offered in multiple subjects; cannot take course in first major subject
2 Indicates coursework required for the ELEC Major as per PA Dept. of Education Certification Policy.

## Basic Math Requirement

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

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

## Computer Competency

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


| Total Hours | $\mathbf{0 - 3}$ |
| :--- | :--- |

## Major Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :---: | :---: | :---: |
| Foundation Courses |  |  |
| SPED 121 | Overview of Special Education ${ }^{1}$ | 3 |
| SPED 122 | Low Incidence Disabilities ${ }^{1}$ | 3 |
| SPED 230 | Early Intervention Practices for Students with Disabilities ${ }^{1}$ | 3 |
| ELEC 200 | Child Development Typical ${ }^{1}$ | 3 |
| PE 227 | Introduction to Adapted Physical Activity | 3 |
| Core Professional Courses |  |  |
| SPED 220 | The Nature and Needs of Autism Spectrum Disorders ${ }^{1}$ | 3 |
| SPED 341 | Transition Across the Lifespan ${ }^{1}$ | 3 |
| SPED 342 | Building Community Partnerships ${ }^{1}$ | 3 |
| SPED 343 | Americans with Disabilities ${ }^{1}$ | 3 |
| PE 353 | Adapted Physical Activity and Health Through the Lifespan | 3 |
| PE 485 | Fundraising/Grant Writing in Adapted Physical Activity ${ }^{1}$ | 3 |

## Professional Semester Block

These courses are taken together during the semester before internship:

| SPED 245 | Technology in Special Education ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| SPED 346 | Assessment in Transition Planning ${ }^{1}$ | 3 |
| SPED 347 | Management \& Leadership ${ }^{1}$ | 3 |
| SPED 410 | Transition Practicum ${ }^{1}$ | 3 |
| PE 460 | Program Design in Adapted Physical Activity ${ }^{1}$ | 3 |

Internship

| SPED 450 | Transition Internship ${ }^{1}$ | 12 |
| :--- | :--- | :--- |
| Total Hours |  | $\mathbf{6 0}$ |

1 Course counts for 50\% Major requirement and Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research and student leadership development
4. Career education and development
5. Internships/Field Experiences
6. Student teaching (required)

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Special Education Transition Programming - BS (1793)
This program is effective as of Fall 2019.
Revised 10.28.2021
UCC 2.5.2019

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| ENGL 102 | Critical Writing | 3 |
| SPED 121 | Overview of Special Education | 3 |
| SUBJ 139 | University Seminar | 3 |
| Rock Studies Requirements |  | 6 |
|  | Hours | 15 |
| Spring |  |  |
| Civil Discourse - Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| SPED 122 | Low Incidence Disabilities | 3 |
| Rock Studies Requirements |  | 9 |
|  | Hours | 15 |
| Second Year |  |  |
| Fall |  |  |
| ELEC 200 | Child Development Typical | 3 |
| GERO 265 | Aging and the Older Person | 3 |
| SPED 230 | Early Intervention Practices for Students with Disabilities | 3 |
| SPED 343 | Americans with Disabilities | 3 |


| Elective |  | $\mathbf{3}$ |
| :--- | :--- | ---: |
|  | Hours | $\mathbf{1 5}$ |
| Spring | Introduction to Adapted Physical Activity | 3 |
| PE 227 | Introduction to Nonprofit Management | 3 |
| NLPA 220 | Transition Across the Lifespan | 3 |
| SPED 341 |  | 3 |
| Elective | Hours | $\mathbf{3}$ |
| Rock Studies Requirement | $\mathbf{1 5}$ |  |

## Third Year

Fall

| Elective |  | 3 |
| :--- | :--- | ---: |
| PE 485 | Fundraising/Grant Writing in Adapted <br> Physical Activity | 3 |
| PE 353 | Adapted Physical Activity and Health <br> Through the Lifespan | 3 |
| SPED 342 | Building Community Partnerships | 3 |
| Global Community-Non-US Global | 3 |  |
| Hours | $\mathbf{1 5}$ |  |


| Spring |  | 3 |
| :--- | :--- | :---: |
| Elective |  | 3 |
| ENGL 104 | Critical Reading | 3 |
| NLPA 120 | Civic Engagement and Community <br> Decision-Making | 3 |
| SPED 220 | The Nature and Needs of Autism Spectrum <br> Disorders | 3 |


| Rock Studies Requirements | 3 |
| ---: | ---: |
| Hours | $\mathbf{1 5}$ |

Fourth Year
Fall

| PE 460 | Program Design in Adapted Physical Activity | 3 |
| :---: | :---: | :---: |
| SPED 245 | Technology in Special Education | 3 |
| SPED 346 | Assessment in Transition Planning | 3 |
| SPED 347 | Management \& Leadership | 3 |
| SPED 410 | Transition Practicum | 3 |
|  | Hours | 15 |
| Spring |  |  |
| SPED 450 | Transition Internship | 12 |
| Elective |  | 3 |
|  | Hours | 15 |
|  | Total Hours** | 120 |

Major Code: 1793
Concentration Code:
Revised date: 08/2018
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Special Education, Minor

In this minor program, students seeking to become educators and/or community-based program coordinators will learn strategies for working with individuals with a wide range of learning, mental, and physical, abilities and levels of functioning in both the classroom and communitybased settings.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Special Education, Minor Program Page (https://www.sru.edu/ academics/majors-and-minors/special-education-(minor)/)

Special Education Department Page (https://www.sru.edu/academics/ colleges-and-departments/coe/departments/special-education/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN SPECIAL EDUCATION (88D)
This program is effective as of Summer 2019.
Revised 10.28.2021
UCC 02.04.20

## College of Health, Engineering \& Sciences

## Dean's Office Staff

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Interim Dean, College of Health, Engineering and Sciences
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## Departments

- Biology (p. 276)
- Chemistry (p. 362)
- Computer Science (p. 404)
- Exercise and Rehabilitative Sciences (p. 432)
- Geography, Geology, and the Environment (p. 476)
- Mathematics \& Statistics (p. 518)
- Nursing (p. 537)
- Parks, Conservation and Recreational Therapy (p. 543)
- Physics and Engineering (p. 570)
- Psychology (p. 626)
- Public Health and Social Work (p. 674)


## Biology

| Chair | Secretary | Location | Department <br> Phone |
| :--- | :--- | :--- | :--- |
| Dr. Nicole Dafoe | Melissa Barber | 300 Vincent <br> Science Center | $724-738-2023$ |
|  |  |  |  |

Department Web Site URL (http://www.sru.edu/academics/colleges-anddepartments/ches/departments/biology/)
Department Fact Sheet URL (https://www.sru.edu/documents/programs/ factsheets/undergraduate/biology-fs.pdf)

## Faculty

Simon Beeching
Professor
Biology
Ph.D., Indiana University
B.A., University of Maine

## Martin Buckley

Associate Professor
Biology
Ph.D., Michigan State University
M.S., Saint Louis University
B.A., Saint Louis University

## Nicole Dafoe

## Biology

Ph.D., University of Victoria
B.S., Grand Valley State University

## Dean Denicola

Professor
Biology
Ph.D., Oregon State University
M.S., University of Maine
B.A., University of Vermont

## Amber Eade

Assistant Professor
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Ph.D., State University New York Upstate Medical University
M.S., Lake Erie College of Osteopathic Medicine
M.A., Chicago School of Professional Psychology
B.S., Millikin University

## Paul Falso

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Ph.D., University of California
B.S., Allegheny College

## Miranda Falso

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Ph.D., University of Pittsburgh
B.S., Allegheny College

Biology
Ph.D., University of West Indies
B.S., University of West Indies

## Evan Guiney

Assistant Professor

## Biology

Ph.D., Stanford University
B.A., Amherst College

## Stacy Hrizo

Associate Professor
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Ph.D., University of Pittsburgh
B.S., West Chester University

## David Krayesky

Professor
Biology
Ph.D., University of Louisiana
M.S., Southern Illinois University
B.S., Johnson State College

## Jack Layne

Assistant Professor

## Biology

Ph.D., Miami University
M.S., Miami University
B.S., University of Evansville

## Christopher Maltman

Assistant Professor

## Biology

Ph.D., University of Manitoba
M.S., University of Manitoba
B.S., University of Manitoba

## Susan Rehorek

Professor
Biology
Ph.D., University of Adelaide (Australia)
B.S., University of Adelaide (Australia)

## Cory Shoemaker

Assistant Professor

## Biology

Ph.D., Mississippi State University
M.S., Mississippi State University
B.S., Wittenberg University

Mark Shotwell
Associate Professor
Biology
Ph.D., University of Michigan
B.S., Ohio University

Steven Strain
Professor
Biology
Ph.D., Oregon State University
B.S., Memphis State University

## Wayne Forbes

Associate Professor

## Programs

All first-year students who enter SRU in the Summer and Fall terms of 2019 and after will follow Rock Studies. Students who entered SRU before Spring 2019 will follow Liberal Studies. All new transfer students beginning Summer 2019 and after will follow Liberal Studies. We anticipate that transfer students will begin to enter under Rock Studies during the Summer/Fall term of 2021.

## Majors

- Biology, Bachelor of Arts (BA) (p. 290)
- Biology, Bachelor of Arts (BA) - Pre Master of Education (7-12) (p. 294)
- Biology, Bachelor of Science (BS) - Concentration in Biomedical Sciences (p. 298)
- Biology, Bachelor of Science (BS) - Concentration in Histotechnology (p. 302)
- Biology, Bachelor of Science (BS) - Concentration in Medical Technology (p. 305)
- Biology, Bachelor of Science (BS) - Concentration in Professional (p. 307)
- Biology, Bachelor of Science (BS) - Concentration in Professional Concentration in Bioinformatics (p. 311)
- Biology, Bachelor of Science (BS) - Concentration in Professional / Antigua Medicine (4+4) (p. 315)
- Biology, Bachelor of Science (BS) - Concentration in Professional / Pre Master of Education (7-12) (p. 319)
- Biology, Bachelor of Science (BS) - Concentration in Professional / Pre-Chiropractic (Logan) (3+3) (p. 323)
- Biology, Bachelor of Science (BS) - Concentration in Professional / Pre-Chiropractic (Palmer) (3+3) (p. 326)
- Biology, Bachelor of Science (BS) - Concentration in Professional / Pre-Dental (LECOM) (4+4) (p. 328)
- Biology, Bachelor Of Science (BS) - Concentration In Professional / Pre-Dental (WVU) (4+4) (p. 332)
- Biology, Bachelor of Science (BS) - Concentration in Professional / Pre-Osteopathy (LECOM) (3+4) (p. 336)
- Biology, Bachelor of Science (BS) - Concentration in Professional / Pre-Osteopathy (LECOM) (4+4) (p. 339)
- Biology, Bachelor of Science (BS) - Concentration in Professional / Pre-Physical Therapy (SRU) (3+3) (p. 343)
- Biology, Bachelor of Science (BS) - Concentration in Professional / Pre-Physical Therapy (SRU) (Traditional) (p. 346)
- Biology, Bachelor of Science (BS) - Concentration in Professional / Pre-Physician Assistant (SRU) (3+2) (p. 350)
- Biology, Bachelor of Science (BS) - Concentration in Professional / Pre-Physician Assistant (SRU) (Traditional) (p. 354)
- Biology, Pre-Pharmacy (LECOM) (2+3) (p. 359)


## Minors

- Biology, Minor (p. 358)
- Marine Science, Minor (p. 361)


## Courses

## BIOL Courses

BIOL 100 - Introductory Biology Laboratory
This laboratory activity course is designed to introduce the non-biology major to science as a process. Basic biological concepts and principles are the focal points for the laboratory activities. The scientific process is used throughout the hands on exercises to facilitate the learning experience.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms

## BIOL 101 - General Biology

A principles course in biology, designed for non-biology majors, which emphasizes cellular structure and function, Mendelian and molecular genetics, reproduction, and classic and modern concepts of ecology and evolution.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## BIOL 102 - Human Biology

This non-biology majors course considers the human as a whole organism, with emphasis on the interrelationships of organ systems, the relationship to the environment, and human origins and genetics.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Body and Self, Healthy Body, Mind \& Environment, Transfer Thread Completion Course, Who Do We Think We Are

BIOL 104 - Principles of Biology with Lab
A laboratory and lecture course that emphasizes basic biological principles to prepare students for subsequent sequential courses required of biology majors.

Credits: 4
Term(s) Typically Offered: Offered Every Term
Enrollment limited to students with department of Biology.

## BIOL 105 - Environmental Biology

A non-biology majors course which provides an introduction to ecological principles and concepts with an examination of the biological basis of contemporary environmental problems.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Environmental Problems Toolkit, Sustainable International Development, Sustainability, Transfer Thread Completion Course
BIOL 110 - The Human Body: Fundamentals of Structure and Physiology
This one semester lecture course is designed for non-biology majors and provides a basic introduction to the human body and the fundamental anatomy and physiology of each organ system.

Credits: 3
Thematic Thread(s): 21 st Century Healthcare, Transfer Thread Completion Course

## BIOL 120 - Plants and Society

Basic structures, functions, and uses of plants. This course, for the nonbiology major, will stress many of the economic and practical aspects of plants. It will also offer historical insights concerning the impact plants have had on world exploration, colonization, etc.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Transfer Thread Completion Course, Transnational Culture

## BIOL 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## BIOL 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with department of Biology.

## BIOL 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with department of Biology.

## BIOL 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with department of Biology.
BIOL 201 - General Botany with Lab
Basic biochemical, morphological, and physiological aspects of plant biology as they relate to evolution. Includes a lab.

Prerequisites: (BIOL $101^{\mathrm{C}}$ and BIOL $100^{\mathrm{C}}$ ) or BIOL $104^{\mathrm{C}}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 4

Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Biology.

## BIOL 207 - Land Plants and Their Environment/Lab

This course for non-biology majors surveys the common plants native to Pennsylvania. Includes a lab.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## BIOL 208 - Introduction to Wildlife Management/Lab

For non-biology majors, this course covers basic ecological principles with emphasis on the taxonomy and life histories of vertebrate animals. Includes a lab.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## BIOL 210 - Medical Microbiology with Lab

The study of pathogenic microorganisms to include taxonomy, structure, biological activities, host defense mechanisms, disease transmission, and disease states. Includes a lab.

Prerequisites: BIOL $101^{\mathrm{D}}$ or BIOL $102^{\mathrm{D}}$ or BIOL $216^{\mathrm{D}}$ or BIOL $110^{\mathrm{D}}$ or BIOL $104^{\text {D }}$ or BIOL $217^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Enrollment is limited to students with a major in Biology, Biology (Pre MEd) (7-12), Biology, Biology-Prof (Pre MEd)(7-12), Health Science - Public Health, Hlth Sci-P Hlth-Pre PT-SRU 3+3, Hlth Sci-P Hlth-Pre PA-SRU 3+2, Cytotechnology, Histotechnology, Medical Technology or Professional.

## BIOL 212 - General Zoology with Lab

The anatomy, physiology, ecology, and economic importance of representative animals with emphasis on the understanding of development and the evolutionary blueprint of the animal kingdom. Includes a lab.
Prerequisites: (BIOL $100^{\mathrm{C}}$ and BIOL $101^{\circ}$ ) or BIOL $104^{\mathrm{C}}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 4
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Biology.

## BIOL 216 - Anatomy and Physiology I with Lab

The first of two lecture and laboratory courses for non-biology majors which surveys the normal structure and function of the human body. It is recommended that 216 be taken prior to 217 . This course includes a lab.

## Credits: 3

Term(s) Typically Offered: Offered Every Term
Enrollment is limited to students with a major in Music Therapy, Biology, Biology (Pre MEd) (7-12), Biology, Biology-Prof (Pre MEd)(7-12), Health Science - Public Health, Hlth Sci-P HIth-Pre PT-SRU 3+3, Therapeutic Recreation Serv, Recreational Therapy, Therapeutic Recreation 3+3 PT, Rec Therapy- Pre PT-SRU 3+3, Rec Therapy-Pre OT-SRU $3+3$, Hlth Sci-P Hlth-Pre PA-SRU 3+2, Cytotechnology, Histotechnology, Medical Technology or Professional.

## BIOL 217 - Anatomy and Physiology II with Lab

The second of two lecture and laboratory courses for non-biology majors which surveys the normal structure and function of the human body. It is recommended that 216 be taken prior to 217 . Includes a lab.

Credits: 3
Term(s) Typically Offered: Offered Every Term
Enrollment is limited to students with a major in Music Therapy,
Biology, Biology (Pre MEd) (7-12), Biology, Biology-Prof (Pre MEd)
(7-12), Therapeutic Recreation Serv, Recreational Therapy, Therapeutic Recreation 3+3 PT, Rec Therapy- Pre PT-SRU 3+3, Rec Therapy-Pre OT-
SRU 3+3, Cytotechnology, Histotechnology, Medical Technology or Professional.

## BIOL 250 - Genetics with Lab

An introductory course that covers transmission genetics, molecular genetics, and population genetics, with an emphasis on problem-solving. Examples in both plants and animals (including humans) are considered. Includes a lab.

Prerequisites: (BIOL $100^{C}$ and BIOL $101^{\circ}$ ) or BIOL $104^{C}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 4
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Chemistry or Biology.

## BIOL 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with department of Biology.

## BIOL 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with department of Biology.

## BIOL 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with department of Biology.

## BIOL 300-Social and Ethical Issues in Genetics

Advances in genetics have the potential to do much good, but they may also create difficult social and ethical issues that we are unprepared for. This course seeks to provide students of all majors with the necessary framework for arriving at their own conclusions about the proper role of genetic technology, for themselves, their families, and society at large.

Prerequisites: $\mathrm{BIOL} 101^{\mathrm{D}}$ or $\mathrm{BIOL} 102^{\mathrm{D}}$ or $\mathrm{BIOL} 104^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even
Thematic Thread(s): 21 st Century Healthcare, Transfer Thread
Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## BIOL 301 - Forest Ecology

This course is offered as part of the Pymatuning Laboratory in conjunction with the University of Pittsburgh. For more information, please contact the Biology department, 724-738-2023.

Prerequisites: BIOL $201^{C}$ and (BIOL $100^{C}$ and BIOL $101^{C}$ ) or BIOL $104^{C}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Summer Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 302-Ecology of Amphibians \& Reptiles/Lab

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL $100^{\mathrm{C}}$ and BIOL $101^{\mathrm{C}}$ ) or BIOL $104^{\mathrm{C}}$ and BIOL $212^{\mathrm{C}}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Summer Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 303-Behavioral Ecology/Lab

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL $100^{C}$ and BIOL $101^{\circ}$ ) or BIOL $104^{C}$ and (BIOL $201^{C}$ or BIOL 212 ${ }^{\text {C }}$ )
${ }^{\text {C }}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Summer Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 305 - Wetlands and Aquatic Plants/Lab

This course deals with the identification and quantification of phytoplankton and vascular hydrophytes, with emphasis placed on the productivity of aquatic plants and their importance as indicator organisms. Includes a lab.

Prerequisites: (BIOL $100^{\mathrm{C}}$ and BIOL $101^{\circ}$ ) or BIOL $104^{\mathrm{C}}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Biology, Biology (Pre MEd) (7-12), Environmental Geoscience, Envir Geosci (Pre MEd) (7-12), Biology, Biology-Prof (Pre MEd)(7-12), Environmental Geoscience, Cytotechnology, Environmental Science, Environmental Chemistry, Geology, Histotechnology, Medical Technology or Professional.

## BIOL 306 - Freshwater Biomonitoring/Lab

This course covers the identification and quantification of fish, zooplankton, and benthos organisms, with emphasis placed on the productivity of aquatic animals and their importance as indicator organisms. Includes a lab.
Prerequisites: (BIOL $100^{C}$ and BIOL $101^{\circ}$ ) or BIOL $104^{C}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## BIOL 307 - Vertebrate Ecology/Lab

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.
Prerequisites: (BIOL $100^{C}$ and BIOL $101^{\circ}$ ) or BIOL $104^{C}$ and BIOL $212^{C}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 308 - Aquatic Ecosystem Management / Lab

This field course is offered by the University of Pittsburgh to Slippery
Rock University students who enroll in the summer program at the
Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.
Prerequisites: (BIOL $100^{C}$ and BIOL $101^{\circ}$ ) or BIOL $104^{\text {C }}$ and (BIOL $201^{\text {C }}$ or BIOL 212 ${ }^{\text {C }}$ )
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 310 - Plant Systematics with Lab

Evolutionary trends in floristic morphology are used to examine family relationships among the major groups of vascular plants. Includes a lab.

Prerequisites: (BIOL $100^{C}$ and BIOL $101^{\circ}$ ) or BIOL $104^{C}$ and BIOL $201^{C}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.
BIOL 311 - Entomology/Lab
Insects, including their taxonomy, structure, function, ecology, and economic importance.

Prerequisites: (BIOL $100^{C}$ and BIOL $101^{\circ}$ ) or BIOL $104^{C}$ and BIOL $212^{C}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 313 - Herpetology/Lab

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the
Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL $100^{C}$ and BIOL $101^{\circ}$ ) or BIOL $104^{C}$ and BIOL $212^{C}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 314 - Medical Parasitology with Lab

A lecture and laboratory course which emphasizes the parasites of medical importance.

Prerequisites: (BIOL $100^{\mathrm{C}}$ and BIOL $101^{\mathrm{C}}$ ) or BIOL $104^{\mathrm{C}}$ and (BIOL $210^{\mathrm{C}}$ or BIOL 212 ${ }^{\text {C }}$ )
${ }^{\mathrm{C}}$ Requires minimum grade of C .

## Credits: 1

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 315 - Medical Mycology/Lab

A lecture and laboratory course which emphasizes the fungi of medical importance.

Prerequisites: (BIOL $100^{\mathrm{C}}$ and BIOL $101^{\circ}$ ) or BIOL $104^{\mathrm{C}}$ and (BIOL $210^{\mathrm{C}}$ or BIOL 201 ${ }^{\text {C }}$ )
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 1

Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 316 - Medical Immunology with Lab

A lecture and laboratory course which emphasized immunological principles of medical importance.

Prerequisites: (BIOL $100^{C}$ and BIOL $101^{\circ}$ ) or BIOL $104^{C}$ and (BIOL $210^{\circ}$ or BIOL $250^{\circ}$ )
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 1
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 317 - Ecology and Fungi

This field course is offered by the University of Pittsburgh to Slippery
Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Credits: 3
Term(s) Typically Offered: Offered Summer Terms Even

## BIOL 319-Medical Virology with a Lab

A lecture and laboratory course which discusses viruses of medical importance. Lecture content will focus on the life cycle, pathology and treatment of clinically relevant viruses. Laboratory content may teach students about topics such as, but not limited to, calculating viral load, detecting lysogens, detecting viruses by ELISA and immunity in lysogens.
Prerequisites: (BIOL $104^{\mathrm{C}}$ or (BIOL $100^{\mathrm{C}}$ and BIOL $101^{\circ}$ ) ) and (BIOL $210^{\mathrm{C}}$ or BIOL $250^{\circ}$ )
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2 or Sophomore 2.
Enrollment limited to students with department of Biology.

## BIOL 320 - Ornithology/Lab

Anatomy, physiology, taxonomy, ecology, and behavior of birds. Two weekend field trips are required. Includes a lab.

Prerequisites: (BIOL $100^{\mathrm{C}}$ and BIOL $101^{\circ}$ ) or BIOL $104^{\mathrm{C}}$ and BIOL $212^{\mathrm{C}}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Summer Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 321 - Wildlife Management/Lab

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL $100^{C}$ and BIOL $101^{\circ}$ ) or BIOL $104^{C}$ and BIOL $212^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Summer Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 322 - Conservation Biology/Lab

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.
Prerequisites: (BIOL $100^{\mathrm{C}}$ and BIOL $101^{\mathrm{C}}$ ) or BIOL $104^{\mathrm{C}}$ and (BIOL $201^{\mathrm{C}}$ or BIOL 212 ${ }^{\text {C }}$ )
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Summer Terms
Thematic Thread(s): Sustainability, Transfer Thread Completion Course Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 323-Stream Ecology/Lab

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL $100^{C}$ and BIOL $101^{\circ}$ ) or BIOL $104^{C}$ and BIOL $212^{C}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 325 - Biometry with Lab

An introduction to statistical techniques and experimental design as applied to biological problems. Descriptive methods, tests of significance, linear regression, correlation, analysis of variance and covariance, and non-parametric techniques are included. Use of PC and/or mainframe computer is required. Includes a lab.

Prerequisites: (BIOL $100^{\mathrm{C}}$ and $\mathrm{BIOL} 101^{\circ}$ ) or BIOL $104^{\mathrm{C}}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Geography - Envir Studies Educ, Biology, Biology (Pre MEd) (7-12), Environmental
Geoscience, Envir Geosci (Pre MEd) (7-12), Biology, Biology-Prof (Pre
MEd)(7-12), Environmental Geoscience, Biology-Logan Chiropractic 3+3,
Environmental Science, Geology or Professional.
BIOL 326 - Field Methods in Biogeography/Lab
This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL $100^{C}$ and BIOL $101^{C}$ ) or BIOL $104^{C}$ and (BIOL $201^{C}$ or BIOL 212 ${ }^{\text {C }}$ )
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Summer Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 327 - Limnology/Lab

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL $100^{C}$ and BIOL $101^{C}$ ) or BIOL $104^{C}$ and (BIOL $201^{C}$ or BIOL 212 ${ }^{\text {C }}$ )
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Summer Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 330 - Microbiology/Lab

A consideration of the structure, metabolism, growth, and genetics of microorganisms with emphasis placed on the bacteria and viruses. Includes a lab.

Prerequisites: BIOL $250^{\text {C }}$ and (CHEM $200^{\text {D }}$ or CHEM $201^{\text {D }}$ ) and
((BIOL $100^{\text {C }}$ and BIOL $101^{\text {C }}$ ) or BIOL $104^{\text {C }}$ )
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Chemistry or Biology.

## BIOL 331 - Mammology/Lab

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: BIOL $212^{\mathrm{C}}$ and (BIOL $100^{\mathrm{C}}$ and BIOL $101^{\mathrm{C}}$ ) or BIOL $104^{\mathrm{C}}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 335 - Cell Biology/Lab

Lecture and laboratory investigations related to cellular structure and function. Topics include consideration of extracellular matrix, cell surface, internalization, intracellular signaling and routing, cell-cell communication, renewal, and development. Includes a lab.

Prerequisites: BIOL $250^{\mathrm{C}}$ and (CHEM $200^{\mathrm{D}}$ or CHEM $201^{\mathrm{D}}$ ) and ((BIOL $100^{\mathrm{D}}$ and BIOL $101^{\mathrm{D}}$ ) or BIOL $104^{\mathrm{D}}$ )
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Chemistry or Biology.

## BIOL 340 - Vertebrate Anatomy with Lab

A comparative study of the adult structure of the organs and systems of representative vertebrates. Includes a lab.

Prerequisites: (BIOL $100^{\mathrm{C}}$ and BIOL $101^{\mathrm{C}}$ ) or BIOL $104^{\mathrm{C}}$ and BIOL $212^{\mathrm{C}}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.
BIOL 343 - Embryology with Lab
Developmental processes of vertebrate embryology. A comparative study of gaetogenesis, fertilization, cleavage, gastrulation, organogenesis, and embronic adaptations. Includes a lab.

Prerequisites: ((BIOL $100^{\mathrm{C}}$ and BIOL $101^{\mathrm{C}}$ ) or BIOL $\left.104^{\mathrm{C}}\right)$ and BIOL $212^{\mathrm{C}}$ and BIOL $340^{\circ}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.
BIOL 345 - Introduction to Biological Electron Microscopy
An introduction to the theoretical basis and practice of routine biological electron microscopy. Experiences in the preparation of specimens for transmission and scanning electron microscopy will be presented. The course presentation will involve a one-week workshop and two hours per week during the semester.

Prerequisites: (BIOL $100^{C}$ and BIOL $101^{\circ}$ ) or BIOL $104^{C}$ and BIOL $201^{C}$ and BIOL $212^{\text {C }}$ and BIOL $250^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 2
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 350 - Evolution

Stresses evolution as a process. Evidence of early theories, population genetics and ecology, modern synthetic theory, speciation, phylogeny, and the major features characteristic of organic evolution are included.

Prerequisites: (BIOL $100^{\circ}$ and BIOL $101^{\circ}$ ) or BIOL $104^{C}$ and BIOL $201^{C}$ and BIOL $212^{\text {C }}$ and BIOL $250^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 356 - Field Ecology / Lab

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL $100^{C}$ and BIOL $101^{C}$ ) or BIOL $104^{C}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.
BIOL 357 - Environmental Microbiology with Lab
The interactions of microorganisms with their environment and with other organisms in nutrient cycles and environmental bioremediation, and the effects of microbial activity on plants and animals. Includes a lab.
Prerequisites: (BIOL $100^{\mathrm{C}}$ and BIOL $101^{\circ}$ ) or BIOL $104^{\mathrm{C}}$ and (CHEM $202^{\mathrm{C}}$ or CHEM $200^{\circ}$ )
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 4
Term(s) Typically Offered: Offered Fall Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Biology, Biology (Pre MEd) (7-12), Environmental Geoscience, Envir Geosci (Pre MEd) (7-12), Biology, Biology-Prof (Pre MEd)(7-12), Environmental Geoscience, Cytotechnology, Environmental Science, Geology, Histotechnology, Medical Technology or Professional.

## BIOL 360 - Field Botany

A field course covering the flora of western Pennsylvania. Students will be expected to identify in the field approximately 225 vascular plants.

Prerequisites: (BIOL $100^{\circ}$ and BIOL $101^{\circ}$ ) or BIOL $104^{\text {C }}$ and BIOL $201^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 361 - Flora of Western Pennsylvania

A field class with a lecture component. The primary focus of the class is to enhance student understanding of the taxonomy and ecology of species that compose our flora in western Pennsylvania. Organisms that will be covered include: flowering plants (woody angiosperms and common wildflowers), conifers, ferns \& fern allies, bryophytes, lichens, and some representative fungi and macroalgae in our flora. Terminology associated with general plant/fungal/algal structure as well as life cycles of these aforementioned organisms will be described. Students will be introduced to both terrestrial and aquatic ecosystems and the habitats that select species require.
Prerequisites: (BIOL $100^{\mathrm{C}}$ and BIOL $101^{\circ}$ ) or BIOL $104^{\mathrm{C}}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## BIOL 370 - Molecular Biology with Lab

A lecture and laboratory study of the structure and function of biological macromolecules and of the functions of living cells at the molecular level. Topics include macromolecular structures, gene expression and regulation, and manipulations of genetic material. Includes a lab.

Prerequisites: ((BIOL $100^{\mathrm{C}}$ and BIOL $101^{\circ}$ ) or BIOL $\left.104^{\mathrm{C}}\right)$ and BIOL $250^{\mathrm{C}}$ and (CHEM $200^{\text {D }}$ or CHEM $201^{\text {D }}$ )
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Chemistry or Biology.

## BIOL 371 - Vertebrate Field Zoology

Taxonomy, life histories, and ecological relationships of representative vertebrates are stressed. Several field trips are required.

Prerequisites: (BIOL $100^{\circ}$ and BIOL $101^{\circ}$ ) or BIOL $104^{C}$ and BIOL $212^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 373 - Ichthyology/Lab

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL $100^{C}$ and BIOL $101^{\circ}$ ) or BIOL $104^{C}$ and BIOL $212^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 375 - Ecology of Fish / Lab

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.
Prerequisites: (BIOL $100^{\circ}$ and BIOL $101^{\circ}$ ) or BIOL $104^{C}$ and BIOL $212^{C}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 400 - Disease Ecology

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Credits: 3
Term(s) Typically Offered: Offered Summer Terms

## BIOL 401 - Ecology with Lab

Emphasis is placed on the structure, composition, and dynamics of ecosystems. Lab work primarily consists of field studies.
Prerequisites: (BIOL $100^{\mathrm{C}}$ and BIOL $101^{\circ}$ ) or BIOL $104^{\mathrm{C}}$ and CHEM $108^{\mathrm{C}}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Summer Terms
Thematic Thread(s): Sustainability, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment is limited to students with a major in Biology, Biology (Pre MEd) (7-12), Environmental Geoscience, Envir Geosci (Pre MEd) (7-12), Biology, Biology-Prof (Pre MEd)(7-12), Environmental Geoscience, Cytotechnology, Environmental Science, Environmental Chemistry, Geology, Histotechnology, Medical Technology or Professional.

## BIOL 402 - Biogeography/Lab

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL $100^{C}$ and BIOL $101^{C}$ ) or BIOL $104^{C}$ and BIOL $201^{C}$ and BIOL $212^{C}$ and BIOL $250^{C}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
BIOL 405 - Animal Physiological Ecology with Lab
The adaptations of animals to deal with specialized environmental situations are studied at levels ranging from biochemical to organismal. Includes a lab.

Prerequisites: $\left(\mathrm{BIOL} 100^{\mathrm{C}}\right.$ and BIOL $101^{\mathrm{C}}$ ) or BIOL $104^{\mathrm{C}}$ and BIOL $212^{\mathrm{C}}$ and CHEM $107^{\text {D }}$ and CHEM $108^{\text {D }}$
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 4

Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 410 - Animal Physiology with Lab

Basic animal physiological processes, including a synthesis that begins at the molecular level and moves to the more complex cellular and organismal levels. Includes a lab.

Prerequisites: (BIOL $100^{C}$ and BIOL $101^{C}$ ) or BIOL $104^{C}$ and BIOL $212^{C}$ and CHEM 201 (may be taken concurrently) ${ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 411 - Population Biology/Lab

This field course is offered by the University of Pittsburgh to Slippery
Rock University students who enroll in the summer program at the
Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.
Prerequisite: BIOL $250^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 412 - Population Biology

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: $\left(\mathrm{BIOL} 100^{\mathrm{C}}\right.$ and BIOL $101^{\mathrm{C}}$ ) or BIOL $104^{\mathrm{C}}$ and BIOL $250^{\mathrm{C}}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed

## BIOL 430 - Pathogenic Microbiology with Lab

This course examines the role of bacteria in disease processes with emphasis on host-pathogen interactions and mechanisms by which pathogenic bacteria cause disease. General topics to be discussed include pathogenesis, epidemiology, and characteristics of the major pathogenic bacteria, which allow them to produce a disease state in the host. Includes a lab.

Prerequisites: $\left(\mathrm{BIOL} 100^{\mathrm{C}}\right.$ and BIOL $101^{\mathrm{C}}$ ) or BIOL $104^{\mathrm{C}}$ and BIOL $250^{\mathrm{C}}$ and BIOL $330^{\text {D }}$
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 450 - Biology Internship

This course will permit the biology major to obtain credit for on-the-job experience in such areas as hospitals, greenhouses, nurseries, sewage plants, fish, and game commissions, park service, plant breeders, and seed producers, veterinary medicine, etc.

Prerequisites: (BIOL $100^{C}$ and BIOL $101^{C}$ ) or BIOL $104^{C}$ and BIOL $201^{C}$ and BIOL $212^{C}$ and BIOL $250^{C}$ and CHEM $107^{D}$ and CHEM $108^{D}$ and CHEM $111^{\mathrm{D}}$ and CHEM $112^{\mathrm{D}}$ and CHEM $201^{\mathrm{D}}$ and CHEM $211^{\mathrm{D}}$ and CHEM $202^{\text {D }}$ and CHEM $212^{\text {D }}$
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-6
Term(s) Typically Offered: Offered Every Term
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.
BIOL 451 - Plant Physiology/Lab
A lecture-laboratory study of the functional relationships of the plant body including such topics as nutrition, water relations, photosynthesis, photo-periodism, hormones, and growth processes.

Prerequisites: (BIOL $100^{C}$ and BIOL $101^{C}$ ) or BIOL $104^{C}$ and BIOL $201^{C}$ and CHEM $201{ }^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 465 - Plant Anatomy with Lab

A macroscoic and microscopic laboratory study of vascular plants. Tissue and organ structure and development in a wide variety of plant groups are emphasized. Includes a lab.

Prerequisites: (BIOL $100^{C}$ and BIOL $101^{C}$ ) or BIOL $104^{C}$ and BIOL $201^{C}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 470 - Histology with Lab

Microscopic structure and arrangement of tissues in multicellular organisms. Prepared microscopic slides of representative animal organs are studied. Includes a lab.
Prerequisites: (BIOL $100^{C}$ and BIOL $101^{C}$ ) or BIOL $104^{C}$ and BIOL $212^{C}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.
BIOL 490 - Independent Study
Independent research under the guidance of a faculty member.
Prerequisite: Permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. (repeatable up to 6 credits) Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 492 - Biology Seminar

For junior and senior biology majors. Each semester a different area of current research interest is chosen for study.

Prerequisites: $\left(\operatorname{BIOL} 100^{C}\right.$ and BIOL $\left.101^{C}\right)$ or BIOL $104^{C}$ and BIOL $201^{C}$ and BIOL $212{ }^{C}$ and BIOL $250^{C}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisites: $\left(\mathrm{BIOL} 100^{\mathrm{C}}\right.$ and BIOL $101^{\mathrm{C}}$ ) or BIOL $104^{\mathrm{C}}$ and BIOL $201^{\mathrm{C}}$ and BIOL $212^{C}$ and BIOL $250^{C}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## MARS Courses

MARS 110 - Introduction to Oceanography
An introduction to marine sciences with emphasis on physiography of the ocean basins, waves, tides, near-shore processes, the physical and chemical nature of seawater, circulation, characteristics of marine plant and animal communities, history of oceanography, and law of the sea.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## MARS 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MARS 195-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
MARS 198 - Selected Topics
A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
MARS 200-Art Workshop-Painting of the Coastal Area
This workshop is to be an intensive involvement with the esthetic qualities of the seashore and its environs. Paintings using various media (watercolor, oils, acrylics) according to personal preference will be created. Slides and other reproductions of relevant paintings by artists of historical importance will be examined and discussed.

Credits: 3
Term(s) Typically Offered: Offered as Needed
MARS 201 - Art Workshop-Pewter and Marine Jewelry
This workshop will explore pewter and objects found in the near-shore environment as materials for making jewelry and body ornaments. Participants will learn techniques of casting, fabricating, soldering, tinning and bezel setting for the purpose of creating unique pieces.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## MARS 204 - Writing about the Sea

A survey of literature from several genre, both fiction and nonfiction, which focuses on maritime themes and topics.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## MARS 211 - Field Methods in Oceanography

A course to familiarize students with the dynamic marine environment and field work on board small research vessels, to instruct in the use and application of standard oceanographic instruments and sampling devices and to promote and encourage independent research through the initial stages of scientific projects.

Prerequisites: MARS $110^{\mathrm{D}}$ or EGEO $131^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed

## MARS 212 - Navigation

This course covers navigation, i.e. the art and science of safely bringing a boat from one position to another in a body of water. Topics covered are piloting, navigation within sight of land, electronic navigation, radio bearings by radio direction finder, LORAN, OMEGA, radar, celestial navigation, circles of equal altitude, navigational triangle, celestial lines of position, celestial fix, Greenwich Mean Time, Greenwich Hour Angle.

## Credits: 3

Term(s) Typically Offered: Offered as Needed

## MARS 215 - Marine Wildlife Photography

This class includes an in-depth study of the science of photography and how this relates to the field work of marine biology. The student will develop skills in micro- and macrophotography and an understanding of the science of optics, filter and camera techniques, and darkroom procedures and techniques. The class will learn various chemical processes for color and black/white photography. Specific articles on marine science photography will be used to develop an understanding both within the marine science laboratory and in the field.

## Credits: 3

Term(s) Typically Offered: Offered as Needed

## MARS 221 - Marine Invertebrates

A study of the invertebrate phyla with emphasis on development, reproduction, structure, function and classification of selected marine organisms. Laboratory field experience will be given in collection, preservation and classification of the phyla.

## Credits: 3

Term(s) Typically Offered: Offered as Needed

## MARS 241 - Marine Biology

A study of plant and animal life in the marine environment. Emphasis will be on physical and chemical environmental factors affecting the biota in the inter-tidal, open water, and benthic habitats. Common biota characteristic of each habitat will be investigated in terms of their natural history, morphology, and ecological relationships.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## MARS 250 - Wetland Ecology

The ecology and management of wetland wildlife with emphasis on the management of wetlands as ecological systems.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## MARS 260 - Marine Ecology

A study of the ecology of marine organisms, the relationship of plants and animals to physical, chemical and bio-logical factors and their zonation and communities.

Credits: 3
Term(s) Typically Offered: Offered as Needed
MARS 270 - Coastal Vegetation
In-depth examination of vegetation falling under the marine influence. Identification of same and determination of factors limiting and controlling their distribution.

Credits: 3
Term(s) Typically Offered: Offered as Needed
MARS 280 - Field Biology
An introduction to basic principles of ecology and natural history of selected plants and animals in terrestrial, freshwater, and marine environments. Course is suitable for non-science majors.

Credits: 3
Term(s) Typically Offered: Offered as Needed
MARS 285 - Recreation Management/Development in the Coastal Zone This course focuses on the recreation component of coastal zone management. The nature, extent, location, and value of coastal recreation behavior will be probed and related to the overall coastal management framework.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## MARS 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## MARS 295-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## MARS 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
MARS 300 - Behavior of Marine Organisms
Concepts of ethology; discussion and observation of the influences of external and internal factors on the regulation and control of behavior of organisms living in the marine coastal environment.

Prerequisites: BIOL $101^{\mathrm{D}}$ or BIOL $104^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 310 - The Mammals of Coastal Ecosystems

Distribution, behavior, physiology, adaptations, and ecological relationships of mammals with special emphasis on the mammals of the Delmarva Peninsula. In addition to the lectures and seminars, the laboratory and field work will deal with the productivity, population dynamics, species diversity, ecoenergetics, and behavior of local mammals.

Prerequisites: BIOL $104^{\text {D }}$ or BIOL $101^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 320 - Marine Microbiology

A survey of methods and concepts of marine microbiology. Attention will be given to technical aspects of sample collection, microbial ecology of the marine environment, enrichment culturing, methods of enumeration and identification with emphasis on marine bacteria.

Prerequisite: BIOL 330 ${ }^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 330-Tropical Invertebrates

An introduction to tropical invertebrates. A variety of collection and observation methods will be used to sample near-shore and reef areas. Emphasis will be on systematics and ecology using the communities approach. One week at Wallops will be intensive review of general systematics and ecology of marine invertebrates. The last two weeks in Florida will involve sampling and identifying species and describing ecological communities.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 331 - Chemical Oceanography

Treatment of a wide range of oceanic chemical phenomena, including salinity and age of the oceans, sources and residence times of chemical constituents in seawater, geochemical cycles of mineral resources and trace elements. Sampling and laboratory analysis techniques.
Prerequisites: MARS $110^{\text {D }}$ or EGEO $131^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 342 - Marine Botany

A study of marine and marine fringe plants of the Middle Atlantic Coast, their taxonomy, ecology, distribution, life histories, physiology, and economic status. Techniques of collecting, preserving, identifying and herbarium cataloging will be stressed. Exercises in plant ecology and marine microbiology will be included.

Prerequisites: BIOL $101^{\text {D }}$ or BIOL $104^{\text {D }}$ or BIOL $201^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 343 - Marine Ichthyology

A study of the fishes. Specimens collected along the eastern seaboard by the students will be used to illustrate the anatomy, physiology and systematics of this major vertebrate group. Field collections will also give students the opportunity to observe the relationships of these animals to their biotic and physical environment.

Prerequisites: BIOL $101^{\text {D }}$ or BIOL $104^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 344 - Anatomy of Marine Chordates

A course designed to familiarize the students with the qualitative aspects of the speciation process; to lay ground work for understanding the basic and specialized structure of marine chordates; to trace the most obvious or important trends (and their functional significance) in the evolution of this basic structure in various vertebrate lines. The laboratories will be devoted primarily to dissection of representative marine vertebrates, particularly those collected live on field trips.
Prerequisites: (BIOL $104^{\mathrm{D}}$ or BIOL $101^{\mathrm{D}}$ ) and BIOL $212^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 345 - Ornithology

Introduces the student to avian fauna of the seacoast and at the same time enables comparison with inland species. In addition to the field work providing visual and vocal identification, lecture material will include information on the distribution, behavior, physiology, and anatomy of birds.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 350 - Physiology of Marine Invertebrates

Mechanisms and regulation of organ function in marine invertebrates with emphasis on homeostasis. Invertebrate examples of fundamental principles and of unique physiological mechanisms.
Prerequisites: BIOL $104^{\text {D }}$ or BIOL $101^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 362 - Marine Geology

Structure and sedimentology of the ocean basins and shores; methods of exploration, general feature of the ocean basins, and theory of ocean basin evolution.

Prerequisites: MARS $110^{\mathrm{D}}$ or EGEO $131^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## MARS 364 - Physical Oceanography

A study of the physical properties of the oceans to include: mass and energy budgets; theory of distribution of variables; cause, nature, measurement, analysis and prediction of tides, currents and waves; basic instrumentation in field work.

Prerequisites: MARS $110^{\mathrm{D}}$ or EGEO $131^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 390-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 394-Comparative Physiology of Marine Organisms

This course will provide an introduction to the physiology of marine organisms utilizing a comparative approach. The lecture will introduce the topics of respiration, circulation, metabolism, osmoregulation, thermoregulation, locomation and sensory systems by drawing comparisons between the mechanisms and strategies utilized by a wide range of marine organisms. Laboratory and field work will focus on the physiological responses of marine plants and animals to common environmental stresses such as salt load, temperature variation, depletion of dissolved oxygen, and tidal flux. This will be accomplished through measurements and observations in the field, as well as through experimental manipulations in a laboratory setting.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 395-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisites: BIOL $104^{\mathrm{D}}$ or BIOL $101^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 420 - Marine Micropaleontology

Designed for students majoring in either biological or geological sciences, the course will deal with modern, living representatives of micro-organisms important in the fossil record. Particular emphasis will be on the taxonomy, morphology, evolution and ecological affinities of the Foraminifera (Sarcodina), but other groups, including the Radiolaria, Diatoms and Ostracoda, will also be considered. Laboratory and field aspects will include sample collecting, preparation and analysis.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 431 - Ecology of Marine Plankton

Study of the phytoplankton and zooplankton in marine and brackish environments. Qualitative and quantitative comparisons will be made between the planktonic populations of various types of habitats in relation to primary and secondary productivity.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 432 - Marine Evolutionary

The study of the ecological mechanisms underlying evolutionary processes. This course is broad in scope and requires that students synthesize both evolutionary and ecological concepts and theory into an understanding of how organisms adapt to their environment. Marine, estuarine, and maritime organisms will be used as model systems and processes, which affect marine populations, will be emphasized.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 441 - Biology of Molluscs

The Mollusca is the second largest group of animals and perhaps the most diverse in terms of morphological, ecological and behavioral variations. This course offers an evolutionary, functional, and ecologic approach to studying this important group of organisms.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 451-Coastal Environmental Oceanography

This course examines the interaction of biological, chemical, physical, geological and ecological ocean processes as applied to coastal environments. Emphasis is placed on environmental management issues of the coastal zone. Topics include water quality analysis, barrier island geology and ecology, estuarine pollution, beach defense and biological implications in areas of coastal up welling and coastal fronts. Specific cases in coastal pollution will be examined from coastal environments around the U.S., including Kepone in the James River, VA, DDT on the Palos Verde Shelf, CA., Eutrophication on the North Carolina Coast, The Exxon-Valdex Oil spill and Pfsteria in the coastal waters of N.C. and VA. Cross listed as MARS551.

Prerequisites: MARS $110^{\mathrm{D}}$ or EGEO $131^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 457 - Marine Geophysics

A study of the basic geophysical theories about the transmission of shock waves, and gravity and magnetic fields to the understanding and exploration of the continental shelves and marine basins. The student is introduced to the use and limitations of the portable seismic refraction seismograph, gravity meter, and magnetometer.

Prerequisites: MARS $110^{\text {D }}$ or EGEO $131^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 458 - Exploration Methods in Marine Geology

A study of geophysical and geologic instruments and techniques used to penetrate the water layer obscuring the ocean bottom topography and geology and the results of some of that effort. Emphasis is on laboratory and field assignments using basic geophysical and geological instruments. The students are introduced to the use, limitations and results of these instruments.

Prerequisite: EGEO $101^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## MARS 459-Coastal Geomorphology

A study of coastal environments with an emphasis on understanding the inter-relationship among land forms, processes and materials. The student will participate in field studies conducted along high and low wave energy environments.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 464 - Biological Oceanography

Interdisciplinary study of the interactions between biological communities and the ocean environment as seen by distributions of coastal plankton, fish, and benthic invertebrates. Projects will involve boat trips to sample populations and to quantitatively document environmental variables with state of the art equipment, laboratory and field experiments to determine rate processes, and visits to nearby field and government laboratories. Examples of project topics include transport of plankton at barrier island passes, effect of submarine banks on fish populations, ground truth data for satellite imagery, and other current topics in biological oceanography.

Prerequisites: MARS $110^{\text {D }}$ or EGEO $131^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 490 - Independent Study

Independent research under the guidance of a faculty member.
Prerequisite: Permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. (repeatable up to 6 credits) Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
MARS 491 - Coral Reef Ecology
A study of coral reef structure, formation, types, and the relationships of reef organisms to their environment. Emphasis is given to species diversity, identification, symbioses, and effects of temperature, salinity, light, nutrient concentration, predation, and competition on the abundance and the distribution of coral reef organisms.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 492 - Marine Mammals

A study of the distribution, population ecology, behavior, physiology and adaptations of marine mammals. Student projects will entail collecting physiological and behavioral data at field sites and at facilities studying marine mammals.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 493-Behavioral Ecology

Designed to present animal behavior within an ecological and evolutionary context. Presents mathematical and theoretical framework of behavioral ecology. An in-depth exploration of the ways in which the behavior of animals is influenced by the environment, especially with regard to resource distribution.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 494 - Marine Aquaculture

This course will include the theory and practice of raising organisms for food and for the aquarium trade. Techniques for raising economically important organisms from the egg stage to marketable size and their food supplies will be studied.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 498-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Biology, Bachelor of Arts (BA) Program Learning Outcomes

- Critical Thinking/Problem Solving: Respective program graduates should demonstrate synthetic, analytical, and interpretive skills.
- Knowledge/Content: Graduates should demonstrate that they are founded in the discipline at the molecular, cellular, organismal, population, community, and ecosystem levels and that they have a fundamental understanding of chemistry, physics, and mathematics.
- Practical Skills: Graduates will demonstrate proficiency in laboratory related skills.
- Communication Skills: Respective program graduates should demonstrate strong oral, digital, and written communication skills.
- Professional Attitude: Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures.
- Degree Program Writing Competency: Graduates will demonstrate proficiency in writing based on longitudinal data as opposed to point in time data.


## Related Links

Biology, BA Program Page (https://www.sru.edu/academics/majors-andminors/biology/)

Biology Department Page (https://www.sru.edu/academics/colleges-anddepartments/ches/departments/biology/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher
Core GPA: 2.0 or higher

| Summary* |  |
| :--- | ---: |
| Code $\quad$ Title | Hours |
| Rock Studies Requirements | 45 |
| Modern Language Requirement | $0-9$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major/Concentration Requirements | $39-40$ |
| Natural Science and Math College-Wide Requirements | 12 |
| Electives | 36 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.
Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 125 | Precalculus | 4 |
| or MATH 225 | Calculus I |  |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 16 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Sciences Inquiry |  |  |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| Physical Sciences Inquiry |  |  |
| PHYS 201 | Elements of Physics I with Lab | 4 |


| or PHYS $211 \quad$ General Physics I with Lab |  |
| :--- | :---: |
| Subtotal | 17 |
| Thematic Thread |  |
| Select 12 Credits $\left(\right.$ p. 1378) ${ }^{2}$ | 12 |
| Total Hours | $\mathbf{4 5}$ |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

| Code Title | Hours |
| :--- | ---: |
| Complete 0-9 credits | $0-9$ |
| Total Hours | $\mathbf{0 - 9}$ |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code Title | Hours |
| :--- | ---: |
| Complete one of the following: | $0-3$ |


| Meet required minimum SAT or ACT math score OR |  |
| :--- | :--- |
| ESAP 110 | Beginning Algebra |

Total Hours

## Computer Competency

| Code | Title | Hours |
| :--- | :--- | ---: |
| Demonstrate "computer competency" by one of the following: | $0-3$ |  |
| Pass Computer Competency Exam OR |  |  |$\quad$| Select one of the following at SRU or another post-secondary |  |
| :--- | :--- |
| institution: |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |
| CPSC 110 | Computer Concepts |
| CPSC 130 | Introduction to Computing and <br> Programming |
| PE 202 | Technology for Wellness |
| Total Hours |  |

## Major/Concentration Requirements

- 20 major credits must be taken at SRU or PASSHE
- 20 major credits must be taken at the 300 level or above
- Students desiring a Biology Major must maintain at least a 2.000 average in Biology.
- Before progressing to a 200-level course, students must achieve a 2.000 average in Principles of Biology - BIOL 104.
- Students may register in 200-level courses in any order, but must maintain a Biology average of 2.000 or better and must complete the 200 core sequence before progressing to 300 and 400-level courses in the major.
- A student must repeat any 200-level course that brings the Biology average below a 2.000 .
- Students should complete all 200-level Biology requirements by the end of their sophomore year.
- If you have questions about Financial Aid, visit their website (https:// www.sru.edu/admissions/financial-aid/).
- To view the SRU policy on senior undergraduate students earning graduate credit, click here (https://catalog.sru.edu/undergraduate/ academic-policies/senior-undergraduate-students-earning-graduatecredit/).

| Code | Title | Hours |
| :--- | :--- | ---: |
| Biology Core Requirements |  |  |
| BIOL 104 | Principles of Biology with Lab |  |
| BIOL 201 | General Botany with Lab |  |
| BIOL 212 | General Zoology with Lab $^{1,3}$ | 4 |
| BIOL 250 | Genetics with Lab $^{1,4}$ | 4 |
| Subtotal |  | 4 |

## Required Upper-Level Biology

| BIOL 492 | Biology Seminar ${ }^{1}$ |
| :---: | :---: |
| Subtotal |  |
| Upper Level Biology Electives |  |
| Select nine credits of the following: |  |
| BIOL 330 | Microbiology/Lab ${ }^{1}$ |
| BIOL 340 | Vertebrate Anatomy with Lab ${ }^{1}$ |
| or BIOL 465 | Plant Anatomy with Lab |
| BIOL 370 | Molecular Biology with Lab ${ }^{1}$ |
| BIOL 401 | Ecology with Lab ${ }^{1}$ |
| BIOL 410 | Animal Physiology with Lab ${ }^{1}$ |
| or BIOL 451 | Plant Physiology/Lab |

Subtotal

## Additional Upper-Level Biology Electives

Select six credits from courses not chosen above, or any 300/400 6
level course listed below. Additional electives may be selected from the Marine Science offerings listed below. PLE courses are only offered during the summer months through our affiliation with Pymatuning Laboratory of Ecology. ${ }^{2}$

| Upper-Level Electives (p. 292) |  | 6 |
| :--- | :--- | :---: |
| Subtotal |  |  |
| Related Sciences | Chemistry | 3 |
| CHEM 108 | General Chemistry II ${ }^{2}$ | 1 |
| CHEM 112 | General Chemistry II Lab $^{2}$ | 3 |
| CHEM 201 | Organic Chemistry I $^{2}$ | 1 |
| CHEM 211 | Organic Chemistry Laboratory I $^{2}$ | 8 |

## Required Major Field Test before Graduation

Field Test

## Total Hours

1 Course counts for $50 \%$ of Major and Major GPA
2 Course counts for 50\% of Major requirements but not for Major GPA
3 Course counts in Core GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

| Natural Science and Math College-Wide Requirements |  |  |
| :--- | :--- | ---: |
| Code | Title | Hours |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| MATH 125 | Precalculus | 4 |
| or MATH 225 | Calculus I | 4 |
| PHYS 201 | Elements of Physics I with Lab |  |
| or PHYS 211 | General Physics I with Lab | 4 |

## Electives

| Code | Title | Hours |
| :--- | :--- | ---: |
| Recommended by the Biology Department |  |  |
| CHEM 202 | Organic Chemistry II | 3 |
| CHEM 212 | Organic Chemistry Laboratory II | 1 |

## Upper-Level Biology Electives

| Code | Title | Hours |
| :---: | :---: | :---: |
| BIOL 301 | Forest Ecology ${ }^{1}$ | 3 |
| BIOL 302 | Ecology of Amphibians \& Reptiles/Lab ${ }^{1}$ | 3 |
| BIOL 303 | Behavioral Ecology/Lab ${ }^{1}$ | 3 |
| BIOL 305 | Wetlands and Aquatic Plants/Lab ${ }^{1}$ | 3 |
| BIOL 306 | Freshwater Biomonitoring/Lab ${ }^{1}$ | 3 |
| BIOL 307 | Vertebrate Ecology/Lab ${ }^{1}$ | 3 |
| BIOL 308 | Aquatic Ecosystem Management / Lab ${ }^{1}$ | 3 |
| BIOL 310 | Plant Systematics with Lab ${ }^{1}$ | 3 |
| BIOL 311 | Entomology/Lab ${ }^{1}$ | 3 |
| BIOL 313 | Herpetology/Lab ${ }^{1}$ | 3 |
| BIOL 314 | Medical Parasitology with Lab ${ }^{1}$ | 1 |
| BIOL 315 | Medical Mycology/Lab ${ }^{1}$ | 1 |
| BIOL 316 | Medical Immunology with Lab ${ }^{1}$ | 1 |
| BIOL 317 | Ecology and Fungi ${ }^{1}$ | 3 |
| BIOL 319 | Medical Virology with a Lab ${ }^{1}$ | 1 |
| BIOL 320 | Ornithology/Lab ${ }^{1}$ | 3 |
| BIOL 321 | Wildlife Management/Lab ${ }^{1}$ | 3 |
| BIOL 322 | Conservation Biology/Lab ${ }^{1}$ | 3 |
| BIOL 323 | Stream Ecology/Lab ${ }^{1}$ | 3 |
| BIOL 325 | Biometry with Lab ${ }^{1}$ | 3 |
| BIOL 326 | Field Methods in Biogeography/Lab ${ }^{1}$ | 3 |
| BIOL 327 | Limnology/Lab ${ }^{1}$ | 3 |
| BIOL 330 | Microbiology/Lab ${ }^{1}$ | 3 |
| BIOL 331 | Mammology/Lab ${ }^{1}$ | 3 |
| BIOL 343 | Embryology with Lab ${ }^{1}$ | 3 |
| BIOL 345 | Introduction to Biological Electron Microscopy ${ }^{1}$ | 2 |
| BIOL 350 | Evolution ${ }^{1}$ | 3 |
| BIOL 356 | Field Ecology / Lab ${ }^{1}$ | 3 |
| BIOL 357 | Environmental Microbiology with Lab ${ }^{1}$ | 4 |
| BIOL 360 | Field Botany ${ }^{1}$ | 3 |
| BIOL 361 | Flora of Western Pennsylvania ${ }^{1}$ | 3 |
| BIOL 370 | Molecular Biology with Lab ${ }^{1}$ | 3 |
| BIOL 371 | Vertebrate Field Zoology ${ }^{1}$ | 3 |
| BIOL 373 | Ichthyology/Lab ${ }^{1}$ | 3 |
| BIOL 375 | Ecology of Fish / Lab ${ }^{1}$ | 3 |


| BIOL 400 | Disease Ecology ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| BIOL 401 | Ecology with Lab ${ }^{1}$ | 3 |
| BIOL 402 | Biogeography/Lab ${ }^{1}$ | 3 |
| BIOL 405 | Animal Physiological Ecology with Lab ${ }^{1}$ | 4 |
| BIOL 410 | Animal Physiology with Lab ${ }^{1}$ | 3 |
| BIOL 412 | Population Biology ${ }^{1}$ | 3 |
| BIOL 430 | Pathogenic Microbiology with Lab ${ }^{1}$ | 3 |
| BIOL 450 | Biology Internship ${ }^{1}$ | 3 |
| BIOL 451 | Plant Physiology/Lab ${ }^{1}$ | 3 |
| BIOL 465 | Plant Anatomy with Lab ${ }^{1}$ | 3 |
| BIOL 470 | Histology with Lab ${ }^{1}$ | 3 |
| BIOL 498 | Selected Topics ${ }^{1}$ | 3 |
| MARS 221 | Marine Invertebrates ${ }^{1}$ | 3 |
| MARS 241 | Marine Biology ${ }^{1}$ | 3 |
| MARS 250 | Wetland Ecology ${ }^{1}$ | 3 |
| MARS 260 | Marine Ecology ${ }^{1}$ | 3 |
| MARS 270 | Coastal Vegetation ${ }^{1}$ | 3 |
| MARS 298 | Selected Topics | 3 |
| MARS 300 | Behavior of Marine Organisms ${ }^{1}$ | 3 |
| MARS 310 | The Mammals of Coastal Ecosystems ${ }^{1}$ | 3 |
| MARS 320 | Marine Microbiology ${ }^{1}$ | 3 |
| MARS 330 | Tropical Invertebrates ${ }^{1}$ | 3 |
| MARS 342 | Marine Botany ${ }^{1}$ | 3 |
| MARS 343 | Marine Ichthyology ${ }^{1}$ | 3 |
| MARS 344 | Anatomy of Marine Chordates ${ }^{1}$ | 3 |
| MARS 345 | Ornithology ${ }^{1}$ | 3 |
| MARS 350 | Physiology of Marine Invertebrates ${ }^{1}$ | 3 |
| MARS 398 | Selected Topics ${ }^{1}$ | 3 |
| MARS 420 | Marine Micropaleontology ${ }^{1}$ | 3 |
| MARS 431 | Ecology of Marine Plankton ${ }^{1}$ | 3 |
| MARS 458 | Exploration Methods in Marine Geology ${ }^{1}$ | 3 |
| MARS 490 | Independent Study ${ }^{1}$ | 3 |
| MARS 491 | Coral Reef Ecology ${ }^{1}$ | 3 |
| MARS 492 | Marine Mammals ${ }^{1}$ | 3 |
| MARS 498 | Selected Topics ${ }^{1}$ | 3 |
| MARS 500 | Problems in Marine Science ${ }^{1}$ | 3 |

1 Course counts for $50 \%$ of Major requirements and Major GPA

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Student-faculty research
2. Internships
3. Volunteering
4. Job Shadowing

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum

## categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University. <br> PASSHE - Pennsylvania State System of Higher Education Institutions <br> BIOLOGY - BA (6 08) <br> This program is effective as of Fall 2019. <br> Revised 07.29.2021 <br> UCC 2.5.2019

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| ENGL 102 | Critical Writing | 3 |
| BIOL 104 | Principles of Biology with Lab | 4 |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| INDS 101 | FYRST Seminar * | 1 |
|  | Hours | 15 |
| Spring |  |  |
| ENGL 104 | Critical Reading | 3 |
| CHEM 108 | General Chemistry II | 3 |
| CHEM 112 | General Chemistry II Lab | 1 |
| Select one 200-level Core Course: |  | 4 |
| BIOL 201 | General Botany with Lab |  |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab |  |
| Language 101 |  | 3 |
|  | Hours | 14 |
| Second Year |  |  |
| Fall |  |  |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |

Select one 200-level Core Course: 4

| BIOL 201 | General Botany with Lab |  |
| :---: | :--- | :---: |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab | 3 |
| CHEM 201 | Organic Chemistry I | 1 |
| CHEM 211 | Organic Chemistry Laboratory I | 3 |
| Language 102 |  |  |
| Declare a Thematic Thread $^{2}$ | 14 |  |

## Spring

Language 103 3
Select one 200-level Core Course: 4
BIOL 201 General Botany with Lab
BIOL 212 General Zoology with Lab

| BIOL 250 | Genetics with Lab |  |
| :---: | :---: | :---: |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
| MATH 125 or MATH 225 | Precalculus or Calculus I | 4 |
|  | Hours | 14 |
| Third Year |  |  |
| Fall |  |  |
| Humanities Inquiry (p. 1378) |  | 3 |
| Social Science Inquiry (p. 1378) |  | 3 |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| Free Elective |  | 3 |
| $\begin{aligned} & \text { PHYS } 201 \\ & \text { or PHYS } 211 \end{aligned}$ | Elements of Physics I with Lab or General Physics I with Lab | 4 |
|  | Hours | 16 |
| Spring |  |  |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| Free Elective |  | 3 |
| Free Elective |  | 3 |
|  | Hours | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| Free Elective |  | 3 |
| Free Elective |  | 3 |
| Free Elective |  | 1 |
|  | Hours | 16 |
| Spring |  |  |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| Free Elective |  | 3 |
| Free Elective |  | 3 |
| Free Elective |  | 3 |
| BIOL 492 | Biology Seminar | 1 |
|  | Hours | 16 |
|  | Total Hours** | 120 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.


## Major Code: 608

Revised date: 07.15.2021
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to
registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Biology, Bachelor of Arts (BA) - Pre Master of Education (7-12)

Students seeking state certification in secondary education must also complete requirements for a Master of Education degree, a one-year program at SRU. All of our programs are designed to steadily develop the quantitative, deductive and inductive reasoning skills that biologists must have.

All candidates completing this program and student teaching are eligible to receive Pennsylvania certification after achieving a passing or qualifying score on Pennsylvania Department of Education required exam(s). If you are interested in teaching in another state, please contact the Department of Education in that state.

## Requirements for the Certification

Teacher certification is earned through the master of education degree at Slippery Rock University. Students seeking secondary school teaching certification in biology must earn a bachelor of arts or a bachelor of science degree in biology and contact the Department of Secondary Education/Foundations of Education concerning its graduate program in education. Information about this program, including prerequisites for admission, may be obtained from the Secondary Education/Foundations of Education office in 114 McKay Education Building.

## Program Learning Outcomes

- Critical Thinking/Problem Solving: Respective program graduates should demonstrate synthetic, analytical, and interpretive skills.
- Knowledge/Content: Graduates should demonstrate that they are founded in the discipline at the molecular, cellular, organismal, population, community, and ecosystem levels and that they have a fundamental understanding of chemistry, physics, and mathematics.
- Practical Skills: Graduates will demonstrate proficiency in laboratory related skills.
- Communication Skills: Respective program graduates should demonstrate strong oral, digital, and written communication skills.
- Professional Attitude: Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures.
- Degree Program Writing Competency: Graduates will demonstrate proficiency in writing based on longitudinal data as opposed to point in time data.


## Related Links

Biology - Pre-Masters of Education, BA Program Page (https:// www.sru.edu/academics/majors-and-minors/biology-pre-masters-ofeducation/)

Biology Department Page (https://www.sru.edu/academics/colleges-anddepartments/ches/departments/biology/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher
Core GPA: 2.0 or higher

## Summary*

| Code | Hours |
| :--- | ---: |
| Rock Studies Requirements | 45 |
| Modern Language Requirement | $0-9$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major/Concentration Requirements | $39-40$ |
| Natural Science and Math College-Wide Requirements | 12 |
| Electives | 35 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 125 | Precalculus | 4 |
| or MATH 225 | Calculus I |  |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 16 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Sciences Inquiry |  |  |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| Physical Sciences Inquiry |  |  |
| PHYS 201 or PHYS 211 | Elements of Physics I with Lab General Physics I with Lab | 4 |
| Subtotal |  | 17 |
| Thematic Thread |  |  |
| Select 12 Credits (p.1378) ${ }^{2}$ |  | 12 |
| Total Hours |  | 45 |

[^10]2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete 0-9 credits | $0-9$ |  |
| Total Hours | $\mathbf{0 - 9}$ |  |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code Title | Hours |
| :--- | ---: |
| Complete one of the following: | $0-3$ |

Meet required minimum SAT or ACT math score OR
ESAP $110 \quad$ Beginning Algebra

Total Hours
0-3

## Computer Competency

| Code | Title | Hours |
| :--- | :--- | ---: |
| Demonstrate "computer competency" by one of the following: | $0-3$ |  |
| Pass Computer Competency Exam OR |  |  |$\quad$| Select one of the following at SRU or another post-secondary |  |
| :--- | :--- |
| institution: |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |
| CPSC 110 | Computer Concepts <br> CPSC 130Introduction to Computing and <br> Programming |
| PE 202 | Technology for Wellness |
| Total Hours |  |

## Major/Concentration Requirements

- 20 major credits must be taken at SRU or PASSHE
- 20 major credits must be taken at the 300 level or above
- Students desiring a Biology Major must maintain at least a 2.000 average in Biology.
- Before progressing to a 200 -level course, students must achieve a 2.000 average in Principles of Biology - BIOL 104.
- Students may register in 200-level courses in any order, but must maintain a Biology average of 2.000 or better and must complete the 200 core sequence before progressing to 300 and 400 -level courses in the major.
- A student must repeat any 200-level course that brings the Biology average below a 2.000 .
- Students should complete all 200-level Biology requirements by the end of their sophomore year.
- If you have questions about Financial Aid, visit their website (https:// www.sru.edu/admissions/financial-aid/).
- To view the SRU policy on senior undergraduate students earning graduate credit, click here (https://catalog.sru.edu/academic-policies/senior-undergraduate-students-earning-graduate-credit/).

| Code | Title | Hours |
| :--- | :--- | ---: |
| Biology Core Requirements |  |  |
| BIOL 104 | Principles of Biology with Lab |  |
| BIOL 201 | General Botany with Lab $^{1,3}$ | 4 |
| BIOL 212 | General Zoology with Lab $^{1,3}$ | 4 |
| BIOL 250 | Genetics with Lab $^{1,3}$ | 4 |
| Subtotal |  | 4 |


| Required Upper-Level Biology |  |  |
| :---: | :---: | :---: |
| BIOL 492 | Biology Seminar ${ }^{1}$ | 1 |

Subtotal 1
Upper Level Biology Electives
Select nine credits of the following:

| BIOL 330 | Microbiology/Lab $^{1}$ |
| :--- | :--- |
| BIOL 340 | Vertebrate Anatomy with Lab $^{1}$ |
| or BIOL 465 | Plant Anatomy with Lab |
| BIOL 370 | Molecular Biology with Lab $^{1}$ |
| BIOL 401 | Ecology with Lab $^{1}$ |
| BIOL 410 | Animal Physiology with Lab $^{1}$ |
| or BIOL 451 | Plant Physiology/Lab $^{2}$ |

## Subtotal

## Additional Upper-Level Biology Electives

Select 6 credits from courses not chosen above, or any 300/400
level course listed below. Additional electives may be selected from the Marine Science offerings listed below. PLE courses are only offered during the summer months through our affiliation with Pymatuning Laboratory of Ecology.
Upper-Level Biology Electives (p. 296)
Subtotal
Related Sciences - Chemistry
CHEM 112 General Chemistry II Lab ${ }^{2}$ 1
CHEM 201 Organic Chemistry ${ }^{2} \quad 3$
CHEM 211 Organic Chemistry Laboratory I ${ }^{2} \quad 1$
Subtotal 8

## Required Major Field Test before Graduation

Field Test

## Total Hours

${ }^{1}$ Course counts for 50\% of Major and Major GPA
2 Course counts for $50 \%$ of Major requirements but not for Major GPA
3 Course counts in Core GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Recommended Courses for Biology Pre-Masters in Education Courses

Listed below are the recommended courses for Biology Pre-Masters of Education majors. You will need to take these courses prior to obtaining your M. Ed.

| Code | Title | Hours |
| :--- | :--- | ---: |
| SEFE 338 | Standards-Based Instruction \& Assessment <br> in the Inclusionary Classroom | 3 |
| SPED 121 | Overview of Special Education | 3 |


| One EGEO with Lab |  |  |
| :---: | :---: | :---: |
| Two Math courses (one must be Calculus) 6 |  |  |
| Must take the following as part of your upper class Biology Electives: |  |  |
| BIOL 370 | Molecular Biology with Lab |  |
| BIOL 401 | Ecology with Lab |  |
| BIOL 410 | Animal Physiology with Lab |  |

## Natural Science and Math College-Wide Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| MATH 125 | Precalculus | 4 |
| or MATH 225 | Calculus I | 4 |
| PHYS 201 | Elements of Physics I with Lab |  |
| or PHYS 211 | General Physics I with Lab |  |


| Total Hours | 12 |
| :--- | :--- |

## Electives

| Code | Title | Hours |
| :--- | :--- | ---: |
| Recommended by the Biology Department |  |  |
| CHEM 202 | Organic Chemistry II | 3 |
| CHEM 212 | Organic Chemistry Laboratory II | 1 |

## Additional Upper-Level Biology Electives

| Code | Title | Hours |
| :---: | :---: | :---: |
| BIOL 301 | Forest Ecology ${ }^{1}$ | 3 |
| BIOL 302 | Ecology of Amphibians \& Reptiles/Lab ${ }^{1}$ | 3 |
| BIOL 303 | Behavioral Ecology/Lab ${ }^{1}$ | 3 |
| BIOL 305 | Wetlands and Aquatic Plants/Lab ${ }^{1}$ | 3 |
| BIOL 306 | Freshwater Biomonitoring/Lab ${ }^{1}$ | 3 |
| BIOL 307 | Vertebrate Ecology/Lab ${ }^{1}$ | 3 |
| BIOL 308 | Aquatic Ecosystem Management / Lab ${ }^{1}$ | 3 |
| BIOL 310 | Plant Systematics with Lab ${ }^{1}$ | 3 |
| BIOL 311 | Entomology/Lab ${ }^{1}$ | 3 |
| BIOL 313 | Herpetology/Lab ${ }^{1}$ | 3 |
| BIOL 314 | Medical Parasitology with Lab ${ }^{1}$ | 1 |
| BIOL 315 | Medical Mycology/Lab ${ }^{1}$ | 1 |
| BIOL 316 | Medical Immunology with Lab ${ }^{1}$ | 1 |
| BIOL 317 | Ecology and Fungi ${ }^{1}$ | 3 |
| BIOL 319 | Medical Virology with a Lab ${ }^{1}$ | 1 |
| BIOL 320 | Ornithology/Lab ${ }^{1}$ | 3 |
| BIOL 321 | Wildlife Management/Lab ${ }^{1}$ | 3 |
| BIOL 322 | Conservation Biology/Lab ${ }^{1}$ | 3 |
| BIOL 323 | Stream Ecology/Lab ${ }^{1}$ | 3 |
| BIOL 325 | Biometry with Lab ${ }^{1}$ | 3 |
| BIOL 326 | Field Methods in Biogeography/Lab ${ }^{1}$ | 3 |
| BIOL 327 | Limnology/Lab ${ }^{1}$ | 3 |
| BIOL 330 | Microbiology/Lab ${ }^{1}$ | 3 |
| BIOL 331 | Mammology/Lab ${ }^{1}$ | 3 |
| BIOL 343 | Embryology with Lab ${ }^{1}$ | 3 |
| BIOL 345 | Introduction to Biological Electron Microscopy ${ }^{1}$ | 2 |


| BIOL 350 | Evolution ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| BIOL 356 | Field Ecology / Lab ${ }^{1}$ | 3 |
| BIOL 357 | Environmental Microbiology with Lab ${ }^{1}$ | 4 |
| BIOL 360 | Field Botany ${ }^{1}$ | 3 |
| BIOL 361 | Flora of Western Pennsylvania ${ }^{1}$ | 3 |
| BIOL 370 | Molecular Biology with Lab ${ }^{1}$ | 3 |
| BIOL 371 | Vertebrate Field Zoology ${ }^{1}$ | 3 |
| BIOL 373 | Ichthyology/Lab ${ }^{1}$ | 3 |
| BIOL 375 | Ecology of Fish / Lab ${ }^{1}$ | 3 |
| BIOL 400 | Disease Ecology ${ }^{1}$ | 3 |
| BIOL 401 | Ecology with Lab ${ }^{1}$ | 3 |
| BIOL 402 | Biogeography/Lab ${ }^{1}$ | 3 |
| BIOL 405 | Animal Physiological Ecology with Lab ${ }^{1}$ | 4 |
| BIOL 410 | Animal Physiology with Lab ${ }^{1}$ | 3 |
| BIOL 412 | Population Biology ${ }^{1}$ | 3 |
| BIOL 430 | Pathogenic Microbiology with Lab ${ }^{1}$ | 3 |
| BIOL 450 | Biology Internship ${ }^{1}$ | 3 |
| BIOL 451 | Plant Physiology/Lab ${ }^{1}$ | 3 |
| BIOL 465 | Plant Anatomy with Lab ${ }^{1}$ | 3 |
| BIOL 470 | Histology with Lab ${ }^{1}$ | 3 |
| BIOL 498 | Selected Topics ${ }^{1}$ | 3 |
| MARS 221 | Marine Invertebrates ${ }^{1}$ | 3 |
| MARS 241 | Marine Biology ${ }^{1}$ | 3 |
| MARS 250 | Wetland Ecology ${ }^{1}$ | 3 |
| MARS 260 | Marine Ecology ${ }^{1}$ | 3 |
| MARS 270 | Coastal Vegetation ${ }^{1}$ | 3 |
| MARS 298 | Selected Topics ${ }^{1}$ | 3 |
| MARS 300 | Behavior of Marine Organisms ${ }^{1}$ | 3 |
| MARS 310 | The Mammals of Coastal Ecosystems ${ }^{1}$ | 3 |
| MARS 320 | Marine Microbiology ${ }^{1}$ | 3 |
| MARS 330 | Tropical Invertebrates ${ }^{1}$ | 3 |
| MARS 342 | Marine Botany ${ }^{1}$ | 3 |
| MARS 343 | Marine Ichthyology ${ }^{1}$ | 3 |
| MARS 344 | Anatomy of Marine Chordates ${ }^{1}$ | 3 |
| MARS 345 | Ornithology ${ }^{1}$ | 3 |
| MARS 350 | Physiology of Marine Invertebrates ${ }^{1}$ | 3 |
| MARS 398 | Selected Topics ${ }^{1}$ | 3 |
| MARS 420 | Marine Micropaleontology ${ }^{1}$ | 3 |
| MARS 431 | Ecology of Marine Plankton ${ }^{1}$ | 3 |
| MARS 458 | Exploration Methods in Marine Geology ${ }^{1}$ | 3 |
| MARS 490 | Independent Study ${ }^{1}$ | 3 |
| MARS 491 | Coral Reef Ecology ${ }^{1}$ | 3 |
| MARS 492 | Marine Mammals ${ }^{1}$ | 3 |
| MARS 498 | Selected Topics ${ }^{1}$ | 3 |
| MARS 500 | Problems in Marine Science ${ }^{1}$ | 3 |

1 Course counts for $50 \%$ of Major requirements and Major GPA

## Co-Curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Student-faculty research
2. Internships
3. Volunteering
4. Job Shadowing

BIOLOGY - BA (6 08)
w/ optional Pre Masters in Education (7-12) (PX)
This program is effective as of Fall 2019.
Revised 12.14.20
UCC 2.5.2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| ENGL 102 | Critical Writing | 3 |
| BIOL 104 | Principles of Biology with Lab | 4 |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| INDS 101 | FYRST Seminar * | 1 |
|  | Hours | 15 |
| Spring |  |  |
| ENGL 104 | Critical Reading | 3 |
| CHEM 108 | General Chemistry II | 3 |
| CHEM 112 | General Chemistry II Lab | 1 |
| Select one 200-level Core Course: |  | 4 |
| BIOL 201 | General Botany with Lab |  |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab |  |
| Language 10 |  | 3 |
|  | Hours | 14 |
| Second Year |  |  |
| Fall |  |  |
| Select one of | wing: | 3 |


| Select one of the following: | 3 |  |
| :--- | :--- | :--- |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy | 4 |
| Select one 200-level | Core Course: |  |
| BIOL 201 | General Botany with Lab |  |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab |  |


| CHEM 201 | Organic Chemistry I | 3 |
| :---: | :---: | :---: |
| CHEM 211 | Organic Chemistry Laboratory I | 1 |
| Language 102 |  | 3 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 14 |
| Spring |  |  |
| Language 103 |  | 3 |
| Select one 200-level Core Course: |  | 4 |
| BIOL 201 | General Botany with Lab |  |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab |  |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
| MATH 225 | Calculus I (Recommended MATH) | 4 |
|  | Hours | 14 |
| Third Year |  |  |
| Fall |  |  |
| Humanities Inquiry |  | 3 |
| Social Science Inquiry |  | 3 |
| BIOL 370 | Molecular Biology with Lab ${ }^{3}$ | 3 |
| SPED 121 | Overview of Special Education (Recommended Elective) | 3 |
| $\begin{aligned} & \text { PHYS } 201 \\ & \text { or PHYS } 211 \end{aligned}$ | Elements of Physics I with Lab or General Physics I with Lab | 4 |
|  | Hours | 16 |
| Spring |  |  |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| EGEO/Lab (Recommended Elective) |  | 3 |
| Free Elective |  | 3 |
|  | Hours | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| BIOL 401 | Ecology with Lab ${ }^{3}$ | 3 |
| BIOL 410 | Animal Physiology with Lab ${ }^{3}$ | 3 |
| 2nd Math Class |  | 3 |
| Free Elective |  | 3 |
| Free Elective |  | 1 |
|  | Hours | 16 |
| Spring |  |  |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| SEFE 338 |  <br> Assessment in the Inclusionary Classroom (Recommended Elective) | 3 |
| Free Elective |  | 3 |
| Free Elective |  | 3 |
| BIOL 492 | Biology Seminar | 1 |
|  | Hours | 16 |
|  | Total Hours** | 120 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread.
3 Recommended BIOL 300+ Upper Level Elective

* Students are encouraged to take INDS 101 as a Free Elective.

Major Code: 608
Concentration Code: PX
Revised date: 07.15.2021
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Biology, Bachelor of Science (BS) - Concentration in Biomedical Sciences <br> Program Learning Outcomes

- Critical Thinking/Problem Solving: Respective program graduates should demonstrate synthetic, analytical, and interpretive skills.
- Knowledge/Content: Graduates should demonstrate that they are founded in the discipline at the molecular, cellular, organismal, population, community, and ecosystem levels and that they have a fundamental understanding of chemistry, physics, and mathematics.
- Practical Skills: Graduates will demonstrate proficiency in laboratory related skills.
- Communication Skills: Respective program graduates should demonstrate strong oral, digital, and written communication skills.
- Professional Attitude: Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures.
- Degree Program Writing Competency: Graduates will demonstrate proficiency in writing based on longitudinal data as opposed to point in time data.


## Related Links

Biology - Biomedical Sciences, BS Program Page (https://www.sru.edu/ academics/majors-and-minors/biology-biomedical-sciences/)

Biology Department Page (https://www.sru.edu/academics/colleges-anddepartments/ches/departments/biology/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

Curriculum Guide<br>GPA Requirement<br>Major GPA: 2.0 or higher<br>Overall GPA: 2.0 or higher<br>Core GPA: 2.0 or higher

| Summary* $\quad$ Title |  |
| :--- | ---: |
| Code | Hours |
| Rock Studies Requirements | 45 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major/Concentration Requirements | 59 |
| Natural Science and Math College-Wide Requirements | 12 |
| Electives | 16 |
| All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

## Rock Studies Requirements

Code Title Hours

## The Rock

| SUBJ 139 | University Seminar $^{1}$ | 3 |
| :--- | :--- | :--- |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 225 | Calculus I | 4 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |

Subtotal ..... 16
Integrated Inquiry
Select 3 Credits (p. 1378) ..... 3
Humanities Inquiry
Select 3 Credits (p. 1378) ..... 3
Social Science Inquiry
Select 3 Credits (p. 1378) ..... 3
Natural Sciences Inquiry

| CHEM 107 | General Chemistry I | 3 |
| :--- | :--- | :--- |
| CHEM 111 | General Chemistry I Lab | 1 |

Physical Sciences Inquiry
Subtotal General Physics I with Lab ..... 4
Thematic Thread
Total Hours ..... 45
1 Course offered in multiple subjects; cannot take course in first majorsubject.

2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code Title | Hours |
| :--- | ---: |
| Complete one of the following: | $0-3$ |
| Meet required minimum SAT or ACT math score OR |  |

ESAP $110 \quad$ Beginning Algebra

## Total Hours

## Computer Competency

| Code | Title | Hours |
| :--- | :--- | ---: |
| Demonstrate "computer competency" by one of the following: | $0-3$ |  | | Pass Computer Competency Exam OR |
| :--- | :--- |

## Major/Concentration Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above
- Students desiring a Biology Major must maintain at least a 2.000 average in Biology.
- Before progressing to a 200 -level course, students must achieve a 2.000 average in Principles of Biology -BIOL 104.
- Students may register in 200-level courses in any order, but must maintain a Biology average of 2.000 or better and must complete the 200 core sequence before progressing to 300 and 400 -level courses in the major.
- A student must repeat any 200-level course that brings the Biology average below a 2.000 .
- Students should complete all 200-level Biology requirements by the end of their sophomore year.
- If you have questions about Financial Aid, visit their website (https:// www.sru.edu/admissions/financial-aid/).
- To view the SRU policy on senior undergraduate students earning graduate credit, click here (https://catalog.sru.edu/undergraduate/ academic-policies/senior-undergraduate-students-earning-graduatecredit//).

| Code | Title | Hours |
| :--- | :--- | ---: |
| Biology Core Requirements |  |  |
| BIOL 104 | Principles of Biology with Lab |  |
| BIOL 201 | General Botany with Lab | 4 |
| BIOL 212 | General Zoology with Lab $^{1,3}$ | 4 |
| BIOL 250 | Genetics with Lab $^{1,3}$ | 4 |
| Subtotal |  | 4 |
| R |  | 16 |

Required Upper-Level Biology

| BIOL 492 | Biology Seminar ${ }^{1}$ | 1 |
| :--- | :--- | :--- |
| Subtotal |  | 1 |

Upper-Level Biology Electives
Select 24 credits from the following:

| BIOL 314 | Medical Parasitology with Lab ${ }^{1}$ |
| :--- | :--- |
| BIOL 315 | Medical Mycology/Lab ${ }^{1}$ |
| BIOL 316 | Medical Immunology with Lab ${ }^{1}$ |
| BIOL 319 | Medical Virology with a Lab ${ }^{1}$ |
| BIOL 325 | Biometry with Lab $^{1}$ |


| BIOL 330 | Microbiology/Lab ${ }^{1}$ | Recommended Free Electives |  |  |
| :---: | :---: | :---: | :---: | :---: |
| BIOL 335 | Cell Biology/Lab ${ }^{1}$ | Elective courses may be selected with your adviser based on your chosen medical specialization |  |  |
| BIOL 340 | Vertebrate Anatomy with Lab ${ }^{1}$ |  |  |  |
| BIOL 343 | Embryology with Lab ${ }^{1}$ | Code | Title | Hours |
| BIOL 370 | Molecular Biology with Lab ${ }^{1}$ |  | Title Anatomy and Physiology I with Lab |  |
| BIOL 410 | Animal Physiology with Lab ${ }^{1}$ | BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| BIOL 430 | Pathogenic Microbiology with Lab ${ }^{1}$ | OL 2 | ysiology II with Lab | 3 |
| BIOL 451 | Plant Physiology/Lab ${ }^{1}$ | M 425 | Instrumental Analysis | 3 |
| BIOL 465 | Plant Anatomy with Lab ${ }^{1}$ | HCAM 250 | Medical Terminology for Healthcare | 3 |
| BIOL 470 | Histology with Lab ${ }^{1}$ | or ERS 250 | Medical Terminology |  |
| Subtotal | 24 | HLTH 314 | Nutrition and Health | 3 |
| Related Sciences - Chemistry |  | PHIL 325 | Medical/Health Care Ethic | 3 |
| CHEM 108 | General Chemistry II ${ }^{2} 3$ | HYS 213 | n | 4 |
| CHEM 112 | General Chemistry II Lab ${ }^{2}$ ( | Pry 213 |  |  |
| CHEM 201 | Organic Chemistry ${ }^{2}$ 2 3 | Additional Upper-Level Biology Electives |  |  |
| CHEM 202 | Organic Chemistry II ${ }^{2}$ 3 | Code | Title | Hours |
| CHEM 211 | Organic Chemistry Laboratory ${ }^{2}{ }^{2} 1$ | BIOL 301 | Forest Ecology ${ }^{1}$ | 3 |
| CHEM 212 | Organic Chemistry Laboratory II ${ }^{2} 1$ | BIOL 302 | Ecology of Amphibians \& Reptiles/Lab ${ }^{1}$ | 3 |
| Subtotal | 12 | BIOL 303 | Behavioral Ecology/Lab ${ }^{1}$ | 3 |
| Related Sciences - Chemistry Advanced Elective |  | BIOL 305 | Wetlands and Aquatic Plants/Lab ${ }^{1}$ | 3 |
| Select one of the following: |  | BIOL 306 | Freshwater Biomonitoring/Lab ${ }^{1}$ | 3 |
| CHEM 335 | Biochemistry ${ }^{2}$ | BIOL 307 | Vertebrate Ecology/Lab ${ }^{1}$ | 3 |
| CHEM 350 | Analytical Chemistry ${ }^{2}$ | BIOL 308 | Aquatic Ecosystem Management / Lab ${ }^{1}$ | 3 |
| Subtotal | 3 | BIOL 310 | Plant Systematics with Lab ${ }^{1}$ | 3 |
| Independent Study Options |  | BIOL 311 | Entomology/Lab ${ }^{1}$ | 3 |
| Select one of the following options: 3 |  | BIOL 313 | Herpetology/Lab ${ }^{1}$ | 3 |
| Independent Study Option |  | BIOL 314 | Medical Parasitology with Lab ${ }^{1}$ | 1 |
| BIOL 490 | Independent Study | BIOL 315 | Medical Mycology/Lab ${ }^{1}$ | 1 |
| Non-Independent Study Option |  | BIOL 316 | Medical Immunology with Lab ${ }^{1}$ | 1 |
| Select 3 credits in BIOL or MARS course from Additional UpperLevel Biology Electives below. |  | BIOL 317 | Ecology and Fungi ${ }^{1}$ | 3 |
|  |  | BIOL 320 | Ornithology/Lab ${ }^{1}$ | 3 |
| Upper-Level Biology Electives (p. 300) |  | BIOL 321 | Wildlife Management/Lab ${ }^{1}$ | 3 |
| Subtotal 3 |  | BIOL 322 | Conservation Biology/Lab ${ }^{1}$ | 3 |
| Major Field Test |  | BIOL 323 | Stream Ecology/Lab ${ }^{1}$ | 3 |
| Field Test required of all Biology students before graduation. |  | BIOL 326 | Field Methods in Biogeography/Lab ${ }^{1}$ | 3 |
| Total Hours 59 |  | BIOL 327 | Limnology/Lab ${ }^{1}$ | 3 |
| 1 Course counts for 50\% of Major requirements and Major GPA |  | BIOL 331 | Mammology/Lab ${ }^{1}$ | 3 |
| 2 Course counts for 50\% of Major requirements but not for Major GPA |  | BIOL 343 | Embryology with Lab ${ }^{1}$ | 3 |
| 3 Course counts in Core GPA |  | BIOL 345 | Introduction to Biological Electron Microscopy ${ }^{1}$ | 2 |
| Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course. |  | BIOL 350 | Evolution ${ }^{1}$ | 3 |
|  |  | BIOL 356 | Field Ecology / Lab ${ }^{1}$ | 3 |
|  |  | BIOL 357 | Environmental Microbiology with Lab ${ }^{1}$ | 4 |
| Natural Science and Math College-Wide Requirements |  | BIOL 360 | Field Botany ${ }^{1}$ | 3 |
| Code | Title Hours | BIOL 361 | Flora of Western Pennsylvania ${ }^{1}$ | 3 |
| CHEM 107 | General Chemistry I 3 | BIOL 371 | Vertebrate Field Zoology ${ }^{1}$ | 3 |
| CHEM 111 | General Chemistry I Lab 1 | BIOL 373 | Ichthyology/Lab ${ }^{1}$ | 3 |
| MATH 225 | Calculus I 4 | BIOL 375 | Ecology of Fish / Lab ${ }^{1}$ | 3 |
| PHYS 211 | General Physics I with Lab 4 | BIOL 400 | Disease Ecology ${ }^{1}$ | 3 |
|  |  | BIOL 402 | Biogeography/Lab ${ }^{1}$ | 3 |
|  |  | BIOL 405 | Animal Physiological Ecology with Lab ${ }^{1}$ | 4 |
|  |  | BIOL 412 | Population Biology ${ }^{1}$ | 3 |


| BIOL 430 | Pathogenic Microbiology with Lab ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| BIOL 450 | Biology Internship ${ }^{1}$ | 3 |
| BIOL 465 | Plant Anatomy with Lab ${ }^{1}$ | 3 |
| BIOL 470 | Histology with Lab ${ }^{1}$ | 3 |
| BIOL 498 | Selected Topics ${ }^{1}$ | 3 |
| MARS 300 | Behavior of Marine Organisms ${ }^{1}$ | 3 |
| MARS 310 | The Mammals of Coastal Ecosystems ${ }^{1}$ | 3 |
| MARS 320 | Marine Microbiology ${ }^{1}$ | 3 |
| MARS 330 | Tropical Invertebrates | 3 |
| MARS 342 | Marine Botany ${ }^{1}$ | 3 |
| MARS 343 | Marine Ichthyology ${ }^{1}$ | 3 |
| MARS 344 | Anatomy of Marine Chordates ${ }^{1}$ | 3 |
| MARS 345 | Ornithology ${ }^{1}$ | 3 |
| MARS 350 | Physiology of Marine Invertebrates ${ }^{1}$ | 3 |
| MARS 398 | Selected Topics ${ }^{1}$ | 3 |
| MARS 420 | Marine Micropaleontology ${ }^{1}$ | 3 |
| MARS 431 | Ecology of Marine Plankton ${ }^{1}$ | 3 |
| MARS 441 | Biology of Molluscs ${ }^{1}$ | 3 |
| MARS 490 | Independent Study ${ }^{1}$ | 3 |
| MARS 491 | Coral Reef Ecology ${ }^{1}$ | 3 |
| MARS 492 | Marine Mammals ${ }^{1}$ | 3 |
| MARS 498 | Selected Topics ${ }^{1}$ | 3 |
| MARS 500 | Problems in Marine Science ${ }^{1}$ | 3 |

## Co-Curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Student-faculty research
2. Internships
3. Volunteering
4. Job Shadowing

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
BIOLOGY - BS (6108)
Concentration in Biomedical Sciences (BMDS)
This program is effective as of Fall 2019.
Revised 08.19.2021
UCC 2.5.2019

Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall | Critical Writing | 3 |
| ENGL 102 | Principles of Biology with Lab | 4 |
| BIOL 104 | General Chemistry I | 3 |
| CHEM 107 | General Chemistry I Lab | 1 |
| CHEM 111 | University Seminar | 3 |
| SUBJ 139 | FYRST Seminar |  |
| INDS 101 | Hours | 1 |
|  |  | $\mathbf{1 5}$ |
| Spring | Critical Reading | 3 |
| ENGL 104 | Cere Course: | 4 |


| BIOL 201 | General Botany with Lab |  |
| :---: | :---: | :---: |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab |  |
| CHEM 108 | General Chemistry II | 3 |
| CHEM 112 | General Chemistry II Lab | 1 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
|  | Hours | 14 |
| Second Year |  |  |
| Fall |  |  |
| Select one of the following: |  | 3 |



## Spring

Select one 200-level Core Course: 4

| BIOL 201 | General Botany with Lab |  |
| :---: | :--- | ---: |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab |  |
| MATH 225 | Calculus I | 4 |
| CHEM 202 | Organic Chemistry II | 3 |
| CHEM 212 | Organic Chemistry Laboratory II | 1 |
| Social Science Inquiry (p. 1378) | 3 |  |
|  | Hours | $\mathbf{1 5}$ |

## Third Year

Fall

| CHEM 335 <br> or CHEM 350 | Biochemistry I <br> or Analytical Chemistry | 3 |
| :--- | ---: | :--- |
| PHYS 211 | General Physics I with Lab | 4 |
| BIOL 300+ | Upper Level BIOL Elective | 3 |


| BIOL 300+ | Upper Level BIOL Elective | 3 |
| :--- | :--- | ---: |
| Thematic Thread Requirement (p. 1378) | $\mathbf{3}$ |  |
| Spring | Hours | $\mathbf{1 6}$ |
| PHYS 213 | General Physics III/ Lab (Recommended) | $\mathbf{4}$ |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| Thematic Thread Requirement (p. 1378) | $\mathbf{3}$ |  |
| Free Elective |  | $\mathbf{3}$ |
|  | $\mathbf{1 6}$ |  |

## Fourth Year

Fall

| BIOL 300+ | Upper Level BIOL Elective | 3 |
| :--- | ---: | ---: |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| Free Elective |  | $\mathbf{3}$ |
|  | Hours | $\mathbf{1 5}$ |

## Spring

| BIOL 300+ | Upper Level BIOL Elective | 3 |
| :--- | :--- | ---: |
| BIOL 490 | Independent Study ${ }^{3}$ | 3 |
| BIOL 492 | Biology Seminar | 1 |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| Free Elective |  | 3 |
| Free Elective | Hours | $\mathbf{2}$ |
|  | Total Hours** | $\mathbf{1 5}$ |
|  | $\mathbf{1 2 0}$ |  |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread.
3 or BIOL 300+:Upper Level BIOL Elective

* Students are encouraged to take INDS 101 as a Free Elective.

Major Code: 6108
Concentration Code: BMDS
Revised date: 07.15.2021
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Biology, Bachelor of Science (BS) Concentration in Histotechnology Program Learning Outcomes

- Critical Thinking/Problem Solving: Respective program graduates should demonstrate synthetic, analytical, and interpretive skills.
- Knowledge/Content: Graduates should demonstrate that they are founded in the discipline at the molecular, cellular, organismal,
population, community, and ecosystem levels and that they have a fundamental understanding of chemistry, physics, and mathematics.
- Practical Skills: Graduates will demonstrate proficiency in laboratory related skills.
- Communication Skills: Respective program graduates should demonstrate strong oral, digital, and written communication skills.
- Professional Attitude: Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures.
- Degree Program Writing Competency: Graduates will demonstrate proficiency in writing based on longitudinal data as opposed to point in time data.


## Related Links <br> Biology - Histotechnology, BS Program Page (https://www.sru.edu/ academics/majors-and-minors/biology-histotechnology/) <br> Biology Department Page (https://www.sru.edu/academics/colleges-anddepartments/ches/departments/biology/) <br> Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/) <br> Curriculum Guide GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher
Core GPA: 2.0 or higher

## Summary*

Code Title Hours
Rock Studies Requirements 44
Other Basic Requirements 0-3
Computer Competency 0-3
Major/Concentration Requirements 60
Natural Science and Math College-Wide Requirements 12
Electives 16

* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aes | Inquiry |  |


| Select 3 Credits (p. 1378) | 3 |  |
| :--- | ---: | ---: |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) | 3 |  |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) | 3 |  |
| Natural Sciences Inquiry |  |  |
| CHEM 107 | General Chemistry I | 3 |
| CHEM $111 \quad$ General Chemistry I Lab | 1 |  |
| Physical Sciences Inquiry |  |  |
| PHYS 211 | General Physics I with Lab | 4 |
| Subtotal | 17 |  |
| Thematic Thread |  |  |
| Select 12 Credits (p. 1378) ${ }^{2}$ | 12 |  |
| Total Hours | 44 |  |

1 Course offered in multiple subjects; cannot take course in first major subject
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one | following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Ar |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |

## Total Hours

## Major/Concentration Requirements

- 60 credits $=42$ coursework credits; 18 clinical credits
- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above
- Students desiring a Biology Major must maintain at least a 2.000 average in Biology.
- Before progressing to a 200-level course, students must achieve a 2.000 average in Principles of Biology - BIOL 104.
- Students may register in 200-level courses in any order, but must maintain a Biology average of 2.000 or better and must complete the

200 core sequence before progressing to 300 and 400 -level courses in the major.

- A student must repeat any 200-level course that brings the Biology average below a 2.000 .
- Students should complete all 200-level Biology requirements by the end of their sophomore year.
- If you have questions about Financial Aid, visit their website (https:// www.sru.edu/admissions/financial-aid/).
- To view the SRU policy on senior undergraduate students earning graduate credit, click here (https://catalog.sru.edu/academic-policies/senior-undergraduate-students-earning-graduate-credit/).

| Code | Title | Hours |
| :---: | :---: | :---: |
| Biology Core Requirements |  |  |
| BIOL 104 | Principles of Biology with Lab ${ }^{1,2}$ | 4 |
| BIOL 210 | Medical Microbiology with Lab ${ }^{1,2}$ | 3 |
| BIOL 216 | Anatomy and Physiology I with Lab ${ }^{1,2}$ | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab ${ }^{1,2}$ | 3 |
| BIOL 250 | Genetics with Lab ${ }^{1,2}$ | 4 |
| Subtotal |  | 17 |

Required Upper-Level Biology

| BIOL 316 | Medical Immunology with Lab $^{1}$ | 1 |
| :--- | :--- | :--- |
| BIOL 335 | Cell Biology/Lab $^{1}$ | 3 |
| BIOL $470^{\text {Subtotal }}$ | Histology with Lab $^{1}$ | 3 |
|  |  | 7 |

Upper-Level Biology Elective
Students must take 2 of the following courses: 2

| BIOL 314 | Medical Parasitology with Lab ${ }^{1}$ |  |
| :--- | :--- | ---: |
| BIOL 315 | Medical Mycology/Lab ${ }^{1}$ |  |
| BIOL 319 | Medical Virology with a Lab ${ }^{1}$ |  |
| Subtotal |  |  |
| Related Sciences | Chemistry | 3 |
| CHEM 108 | General Chemistry II ${ }^{3}$ | 1 |
| CHEM 112 | General Chemistry II Lab $^{3}$ | 3 |
| CHEM 201 | Organic Chemistry I $^{3}$ | 3 |
| CHEM 202 | Organic Chemistry II $^{3}$ | 1 |
| CHEM 211 | Organic Chemistry Laboratory I $^{3}$ | 1 |
| CHEM 212 | Organic Chemistry Laboratory II $^{3}$ | 3 |
| CHEM 335 | Biochemistry I $^{3}$ | 1 |
| CHEM 336 | Biochemistry Laboratory I $^{3}$ | 16 |
| Subtotal |  |  |

Clinical Experience ( 18 credits to complete 120 hrs in degree)
Minimum of 91 hrs on campus plus 1 yr ( 12 months) at an affiliated School of Histotechnology or one acceptable to SRU

| NSM 390 | Experimental $^{3}$ | 18 |
| :--- | :--- | :--- |
| Total Hours |  | $\mathbf{6 0}$ |

1 Course counts for $50 \%$ of Major requirements and Major GPA
2 Core GPA
3 Course counts for $50 \%$ of Major requirements but not for Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Natural Science and Math College-Wide Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| MATH 225 | Calculus I | 4 |
| PHYS 211 | General Physics I with Lab | 4 |

## Electives

| Code | Title | Hours |
| :--- | :--- | ---: |
| NSM 390 | Clinical Experience | 14 |

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Career education and development
2. Student-faculty research
3. Volunteering
4. Job Shadowing

BIOLOGY - BS (6108)
Concentration in Histotechnology (HTEC)
This program is effective as of Fall 2019.
Revised 12.14.2020
UCC 2.5.2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall |  |  |
| ENGL 102 | Critical Writing | 3 |
| BIOL 104 | Principles of Biology with Lab | 4 |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab $^{\text {SUBJ 139 }}$ | University Seminar $^{\text {1 }}$ |


| BIOL 250 | Genetics with Lab | 4 |
| :---: | :---: | :---: |
|  | Hours | 14 |
| Second Year |  |  |
| Fall |  |  |
| BIOL 210 | Medical Microbiology with Lab | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| CHEM 201 | Organic Chemistry I | 3 |
| CHEM 211 | Organic Chemistry Laboratory I | 1 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Humanities Inquiry (p. 1378) |  | 3 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 16 |
| Spring |  |  |
| BIOL 335 | Cell Biology/Lab | 3 |
| CHEM 202 | Organic Chemistry II | 3 |
| CHEM 212 | Organic Chemistry Laboratory II | 1 |
| STAT 152 | Elementary Statistics I | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
| Social Science Inquiry (p. 1378) |  | 3 |
|  | Hours | 16 |
| Third Year |  |  |
| Fall |  |  |
| MATH 225 | Calculus I | 4 |
| CHEM 335 | Biochemistry I | 3 |
| CHEM 336 | Biochemistry Laboratory I | 1 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 14 |
| Spring |  |  |
| Select two of the following: |  | 2 |
| BIOL 314 | Medical Parasitology with Lab |  |
| BIOL 315 | Medical Mycology/Lab |  |
| BIOL 319 | Medical Virology with a Lab |  |
| BIOL 316 | Medical Immunology with Lab | 1 |
| BIOL 470 | Histology with Lab | 3 |
| PHYS 211 | General Physics I with Lab | 4 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 16 |
| Fourth Year |  |  |
| Fall |  |  |
| NSM 390 | School of Histology | 16 |
|  | Hours | 16 |
| Spring |  |  |
| NSM 390 | School of Histology | 16 |
|  | Hours | 16 |
|  | Total Hours** | 123 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2
Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.

Major Code: 6018
Concentration Code: HTEC
Revised date: 07.15.2021
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Biology, Bachelor of Science (BS) Concentration in Medical Technology

## Program Learning Outcomes

- Critical Thinking/Problem Solving: Respective program graduates should demonstrate synthetic, analytical, and interpretive skills.
- Knowledge/Content: Graduates should demonstrate that they are founded in the discipline at the molecular, cellular, organismal, population, community, and ecosystem levels and that they have a fundamental understanding of chemistry, physics, and mathematics.
- Practical Skills: Graduates will demonstrate proficiency in laboratory related skills.
- Communication Skills: Respective program graduates should demonstrate strong oral, digital, and written communication skills.
- Professional Attitude: Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures.
- Degree Program Writing Competency: Graduates will demonstrate proficiency in writing based on longitudinal data as opposed to point in time data.


## Related Links

Biology - Medical Technology, BS Program Page (https://www.sru.edu/ academics/majors-and-minors/biology-medical-technology/)

Biology Department Page (https://www.sru.edu/academics/colleges-anddepartments/ches/departments/biology/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher
Core GPA: 2.0 or higher

## Summary*

| Title | Hours |
| :--- | ---: |
| Code | 44 |
| Rock Studies Requirements | $0-3$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | 60 |
| Major/Concentration Requirements | 12 |
| Natural Science and Math College-Wide Requirements | 16 |
| Electives |  |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Sciences Inquiry |  |  |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| Physical Sciences Inquiry |  |  |
| PHYS 211 | General Physics I with Lab | 4 |
| Subtotal |  | 17 |
| Thematic Thread |  |  |
| Select 12 Credits (p. 1378) ${ }^{2}$ |  | 12 |
| Total Hours |  | 44 |

1 Course offered in multiple subjects; cannot take course in first major subject
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code Title | Hours |
| :--- | ---: |
| Complete one of the following: | $0-3$ |
| Meet required minimum SAT or ACT math score OR |  |


| ESAP 110 | Beginning Algebra |  |
| :---: | :---: | :---: |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate "computer competency" by one of the following: |  | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Ar |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major/Concentration Requirements

- 60 credits $=42$ coursework credits; 18 clinical credits
- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above
- Students desiring a Biology Major must maintain at least a 2.000 average in Biology.
- Before progressing to a 200-level course, students must achieve a 2.000 average in Principles of Biology - BIOL 104.
- Students may register in 200-level courses in any order, but must maintain a Biology average of 2.000 or better and must complete the 200 core sequence before progressing to 300 and 400-level courses in the major.
- A student must repeat any 200-level course that brings the Biology average below a 2.000 .
- Students should complete all 200-level Biology requirements by the end of their sophomore year.
- If you have questions about Financial Aid, visit their website (https:// www.sru.edu/admissions/financial-aid/).
- To view the SRU policy on senior undergraduate students earning graduate credit, click here (https://catalog.sru.edu/academic-policies/senior-undergraduate-students-earning-graduate-credit/).

| Code | Title | Hours |
| :--- | :--- | ---: |
| Biology Core Requirements |  |  |
| BIOL 104 | Principles of Biology with Lab ${ }^{1,2}$ | 4 |
| BIOL 210 | Medical Microbiology with Lab ${ }^{1,2}$ | 3 |
| BIOL 216 | Anatomy and Physiology I with Lab |  |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| BIOL 250 | Genetics with Lab $^{1,2}$ | 3 |
| Subtotal |  | 4 |

## Required Upper-Level Biology

| BIOL $316^{\text {BIOL } 330}$ | Medical Immunology with Lab $^{1}$ | 1 |
| :---: | :--- | :---: |
| BIOL 335 | Microbiology/Lab $^{1}$ | 3 |
| or BIOL 370 | Cell Biology/Lab $^{1}$ | 3 |

Subtotal 7

Upper-Level Biology Elective
Students must take 2 of the following courses:

| BIOL 315 | Medical Mycology/Lab ${ }^{1}$ |  |
| :--- | :--- | :--- |
| BIOL 319 | Medical Virology with a Lab ${ }^{1}$ |  |
| Subtotal |  | 2 |

Related Sciences - Chemistry

| CHEM 108 | General Chemistry II $^{3}$ | 3 |
| :--- | :--- | ---: |
| CHEM 112 | General Chemistry II Lab $^{3}$ | 1 |
| CHEM 201 | Organic Chemistry I $^{3}$ | 3 |
| CHEM 202 | Organic Chemistry II $^{3}$ | 3 |
| CHEM 211 | Organic Chemistry Laboratory I $^{3}$ | 1 |
| CHEM 212 | Organic Chemistry Laboratory II $^{3}$ | 1 |
| CHEM 335 | Biochemistry I $^{3}$ | 3 |
| CHEM 336 | Biochemistry Laboratory I $^{3}$ | 1 |
| Subtotal |  | 16 |

Clinical Experience ( 18 credits to complete 120 hrs in degree)
Minimum of 91 hrs on campus plus 1 yr (12 months) at an affiliated School of Medical Technology or one acceptable to SRU

| NSM 390 | Experimental $^{3}$ | 18 |
| :--- | :--- | :--- |

Total Hours
Course counts for 50\% of Major requirements and Major GPA
2 Core GPA
3 Course counts for $50 \%$ of Major requirements but not for Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Natural Science and Math College-Wide Requirements

Code Title Hours

| CHEM 107 | General Chemistry I | 3 |
| :--- | :--- | :--- |
| CHEM 111 | General Chemistry I Lab | 1 |
| MATH 225 | Calculus I | 4 |
| PHYS 211 | General Physics I with Lab | 4 |

## Electives

| Code | Title | Hours |
| :--- | :--- | ---: |
| NSM 390 | Clinical Experience | 14 |

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Career education and development
2. Student-faculty research
3. Volunteering
4. Job Shadowing

BIOLOGY - BS (6108)
Concentration in Medical Technology (MEDT)
This program is effective as of Fall 2019.
Revised 07.15.2021
UCC 2.5.2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| ENGL 102 | Critical Writing | 3 |
| BIOL 104 | Principles of Biology with Lab | 4 |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| INDS 101 | FYRST Seminar * | 1 |
|  | Hours | 15 |
| Spring |  |  |
| ENGL 104 | Critical Reading | 3 |
| CHEM 108 | General Chemistry II | 3 |
| CHEM 112 | General Chemistry II Lab | 1 |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| BIOL 250 | Genetics with Lab | 4 |
|  | Hours | 14 |

## Second Year

Fall

| Select one of the following: | 3 |  |
| :--- | :--- | :--- |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy | 3 |
| BIOL 210 | Medical Microbiology with Lab | 3 |
| CHEM 201 | Organic Chemistry I | 1 |
| CHEM 211 | Organic Chemistry Laboratory I | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |

Declare a Thematic Thread ${ }^{2}$

## Hours

Spring

| BIOL 335 | Cell Biology/Lab | 3 |
| :--- | :--- | ---: |
| CHEM 202 | Organic Chemistry II | 3 |
| CHEM 212 | Organic Chemistry Laboratory II | 1 |
| STAT 152 | Elementary Statistics I | 3 |
| Humanities Inquiry (p. 1378) | 3 |  |
| Social Science Inquiry (p. 1378) | 3 |  |
| Hours | $\mathbf{1 6}$ |  |


| Third Year |  |  |
| :---: | :---: | :---: |
| Fall |  |  |
| MATH 225 | Calculus I | 4 |
| CHEM 335 | Biochemistry I | 3 |
| CHEM 336 | Biochemistry Laboratory I | 1 |
| Thematic Thread Requirement (p. 1378) 3 |  |  |
| Thematic Thread Requirement (p. 1378) 3 |  |  |
|  | Hours | 14 |
| Spring |  |  |
| Select two of the following: 2 |  |  |
| BIOL 314 Medical Parasitology with Lab |  |  |
| BIOL 315 Medical Mycology/Lab |  |  |
| BIOL 319 | Medical Virology with a Lab |  |
| BIOL 316 | Medical Immunology with Lab | 1 |
| BIOL 330 | Microbiology/Lab | 3 |
| PHYS 211 | General Physics I with Lab | 4 |
| Thematic Thread Requirement (p. 1378) 3 |  |  |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Hours |  | 16 |
| Fourth Year |  |  |
| Fall |  |  |
| NSM 390 | School of Medical Technology | 16 |
|  | Hours | 16 |
| Spring |  |  |
| NSM 390 | School of Medical Technology | 16 |
|  | Hours | 16 |
| Total Hours** |  | 123 |
| 2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread. |  |  |
| * Students are encouraged to take INDS 101 as a Free Elective. |  |  |
| Major Code: 6108 |  |  |
| Concentration Code: MEDT |  |  |
| Revised date: 07.15.2021 |  |  |
| ** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year. |  |  |
| Biology, Bachelor of Science (BS) - |  |  |
| Program Learning Outcomes |  |  |
| - Critical Thinking/Problem Solving: Respective program graduates should demonstrate synthetic, analytical, and interpretive skills. <br> - Knowledge/Content: Graduates should demonstrate that they are founded in the discipline at the molecular, cellular, organismal, |  |  |

population, community, and ecosystem levels and that they have a fundamental understanding of chemistry, physics, and mathematics.

- Practical Skills: Graduates will demonstrate proficiency in laboratory related skills.
- Communication Skills: Respective program graduates should demonstrate strong oral, digital, and written communication skills.
- Professional Attitude: Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures.
- Degree Program Writing Competency: Graduates will demonstrate proficiency in writing based on longitudinal data as opposed to point in time data.


## Related Links

Biology - Professional, BS Program Page (https://www.sru.edu/ academics/majors-and-minors/biology-professional/)

Biology Department Page (https://www.sru.edu/academics/colleges-anddepartments/ches/departments/biology/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement - Biology

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher
Core GPA: 2.0 or higher

## Summary*

Code Title Hours

Rock Studies Requirements 45
Other Basic Requirements 0-3
Computer Competency 0-3

Major Requirements/Concentration 59-60
Natural Science and Math College-Wide Requirements 12
Electives16

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 225 | Calculus I | 4 |
| Select one of the following: | 3 |  |
| COMM 200 |  | Civil Discourse: Theory \& Practice |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 |  | Civil Discourse and Democracy |
| Subtotal |  | 16 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |


| Select 3 Credits (p. 1378) | 3 |
| :---: | :---: |
| Humanities Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Social Science Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Natural Sciences Inquiry |  |
| CHEM 107 General Chemistry I | 3 |
| CHEM 111 General Chemistry I Lab | 1 |
| Physical Sciences Inquiry |  |
| PHYS 211 General Physics I with Lab | 4 |
| Subtotal | 17 |
| Thematic Thread |  |
| Select 12 Credits (p.1378) ${ }^{2}$ | 12 |
| Total Hours | 45 |
| Course offered in multiple subjects; cannot subject |  |
| 2 From at least 3 categories; no more than 6 cr department; 6 credits must be 300 -level or ab |  |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra | $\mathbf{0 - 3}$ |
| Total Hours |  |  |

## Computer Competency

Code Title Hours
Demonstrate "computer competency" by one of the following: 0-3
Pass Computer Competency Exam OR
Select one of the following at SRU or another post-secondary institution:

| CPSC 100 | Introduction to Computing for Liberal Arts |
| :--- | :--- |
| CPSC 110 | Computer Concepts |
| CPSC 130 | Introduction to Computing and |
|  | Programming |

PE 202 Technology for Wellness
Total Hours

## Major Requirements/Concentration

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above
- Students desiring a Biology Major must maintain at least a 2.000 average in Biology.
- Before progressing to a 200-level course, students must achieve a 2.000 average in Principles of Biology - BIOL 104.
- Students may register in 200-level courses in any order, but must maintain a Biology average of 2.000 or better and must complete the 200 core sequence before progressing to 300 and 400-level courses in the major.
- A student must repeat any 200-level course that brings the Biology average below a 2.000 .
- Students should complete all 200-level Biology requirements by the end of their sophomore year.
- If you have questions about Financial Aid, visit their website (https:// www.sru.edu/admissions/financial-aid/).
- To view the SRU policy on senior undergraduate students earning graduate credit, click here (https://catalog.sru.edu/undergraduate/ academic-policies/senior-undergraduate-students-earning-graduatecredit/).

| Code | Title | Hours |
| :---: | :---: | :---: |
| Biology Core Requirements |  |  |
| BIOL 104 | Principles of Biology with Lab ${ }^{1,2}$ | 4 |
| BIOL 201 | General Botany with Lab ${ }^{1,2}$ | 4 |
| BIOL 212 | General Zoology with Lab ${ }^{1,2}$ | 4 |
| BIOL 250 | Genetics with Lab ${ }^{1,2}$ | 4 |
| Subtotal |  | 16 |
| Required Upper-Level Biology |  |  |
| BIOL 492 | Biology Seminar ${ }^{1}$ | 1 |
| Subtotal |  | 1 |
| Upper-Level Biology Electives |  |  |
| Select five cour | the following: | 15 |
| BIOL 325 | Biometry with Lab ${ }^{1}$ |  |
| BIOL 330 | Microbiology/Lab ${ }^{1}$ |  |
| BIOL 335 | Cell Biology/Lab ${ }^{1}$ |  |
| BIOL 340 | Vertebrate Anatomy with Lab ${ }^{1}$ |  |
| BIOL 370 | Molecular Biology with Lab ${ }^{1}$ |  |
| BIOL 401 | Ecology with Lab ${ }^{1}$ |  |
| BIOL 410 | Animal Physiology with Lab ${ }^{1}$ |  |
| BIOL 451 | Plant Physiology/Lab ${ }^{1}$ |  |

Subtotal 15

## Additional Upper-Level Biology Electives

Select 6 credits which can come from courses not chosen above, or any 300/400 level course listed below. Additional electives may be selected from the Marine Science offerings listed below. PLE courses are only offered during the summer months through our affiliation with Pymatuning Laboratory of Ecology.

Upper-Level Biology Electives (p. 309)

| Subtotal |  | 6 |
| :--- | :--- | ---: |
| Related Sciences | Chemistry |  |
| CHEM 108 | General Chemistry II $^{3}$ | 3 |
| CHEM 112 | General Chemistry I Lab $^{3}$ | 1 |
| CHEM 201 | Organic Chemistry I $^{3}$ | 3 |
| CHEM 202 | Organic Chemistry II $^{3}$ | 3 |
| CHEM 211 | Organic Chemistry Laboratory I $^{3}$ | 1 |
| CHEM 212 | Organic Chemistry Laboratory II $^{3}$ | 1 |
| Subtotal |  | 12 |

Related Sciences - Chemistry Advanced Elective
Select one of the following:
CHEM $301 \quad$ Physical Chemistry $1^{3}$
CHEM 335 Biochemistry I $^{3}$
Related Sciences - Physics
Select one of the following: 3-4

PHYS 213 General Physics III/ Lab ${ }^{3}$
Any 300/400 level BIOL elective ${ }^{4}$

## Independent Study Option

Select one of the following options: 3
Independent Study Option
BIOL 490 Independent Study ${ }^{3}$
Non-Independent Study Option
Select 3 credits in BIOL or MARS course from Additional Upper- 3
Level Biology Electives below.
Upper-Level Biology Electives (p. 309)

## Major Field Test

Field Test required of all Biology students before graduation

## Total Hours

Course counts for $50 \%$ of Major requirements and Major GPA
2 Core GPA
3 Course counts for $50 \%$ of Major requirements but not for Major GPA
4 With the exception of BIOL 300 , BIOL 314 , BIOL 315 , BIOL 316 , BIOL 319, BIOL 345

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

| Natural | Science and Math College-Wide Requirements |  |
| :--- | :--- | ---: |
| Code | Title | Hours |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| MATH 225 | Calculus I | 4 |
| PHYS 211 | General Physics I with Lab | 4 |

## Additional Upper-Level Biology Electives

| Code | Title | Hours |
| :---: | :---: | :---: |
| BIOL 301 | Forest Ecology ${ }^{1}$ | 3 |
| BIOL 302 | Ecology of Amphibians \& Reptiles/Lab ${ }^{1}$ | 3 |
| BIOL 303 | Behavioral Ecology/Lab ${ }^{1}$ | 3 |
| BIOL 305 | Wetlands and Aquatic Plants/Lab ${ }^{1}$ | 3 |
| BIOL 306 | Freshwater Biomonitoring/Lab ${ }^{1}$ | 3 |
| BIOL 307 | Vertebrate Ecology/Lab ${ }^{1}$ | 3 |
| BIOL 308 | Aquatic Ecosystem Management / Lab ${ }^{1}$ | 3 |
| BIOL 310 | Plant Systematics with Lab ${ }^{1}$ | 3 |
| BIOL 311 | Entomology/Lab ${ }^{1}$ | 3 |
| BIOL 313 | Herpetology/Lab ${ }^{1}$ | 3 |
| BIOL 314 | Medical Parasitology with Lab ${ }^{1}$ | 1 |
| BIOL 315 | Medical Mycology/Lab ${ }^{1}$ | 1 |
| BIOL 316 | Medical Immunology with Lab ${ }^{1}$ | 1 |
| BIOL 317 | Ecology and Fungi ${ }^{1}$ | 3 |
| BIOL 319 | Medical Virology with a Lab | 1 |
| BIOL 320 | Ornithology/Lab ${ }^{1}$ | 3 |
| BIOL 321 | Wildlife Management/Lab ${ }^{1}$ | 3 |
| BIOL 322 | Conservation Biology/Lab ${ }^{1}$ | 3 |
| BIOL 323 | Stream Ecology/Lab ${ }^{1}$ | 3 |
| BIOL 326 | Field Methods in Biogeography/Lab ${ }^{1}$ | 3 |
| BIOL 327 | Limnology/Lab ${ }^{1}$ | 3 |


| BIOL 331 | Mammology/Lab ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| BIOL 343 | Embryology with Lab ${ }^{1}$ | 3 |
| BIOL 345 | Introduction to Biological Electron Microscopy ${ }^{1}$ | 2 |
| BIOL 350 | Evolution ${ }^{1}$ | 3 |
| BIOL 356 | Field Ecology / Lab ${ }^{1}$ | 3 |
| BIOL 357 | Environmental Microbiology with Lab ${ }^{1}$ | 4 |
| BIOL 360 | Field Botany ${ }^{1}$ | 3 |
| BIOL 361 | Flora of Western Pennsylvania ${ }^{1}$ | 3 |
| BIOL 371 | Vertebrate Field Zoology ${ }^{1}$ | 3 |
| BIOL 373 | Ichthyology/Lab ${ }^{1}$ | 3 |
| BIOL 375 | Ecology of Fish / Lab ${ }^{1}$ | 3 |
| BIOL 402 | Biogeography/Lab ${ }^{1}$ | 3 |
| BIOL 405 | Animal Physiological Ecology with Lab ${ }^{1}$ | 4 |
| BIOL 412 | Population Biology ${ }^{1}$ | 3 |
| BIOL 430 | Pathogenic Microbiology with Lab ${ }^{1}$ | 3 |
| BIOL 450 | Biology Internship ${ }^{1}$ | 3 |
| BIOL 465 | Plant Anatomy with Lab ${ }^{1}$ | 3 |
| BIOL 470 | Histology with Lab ${ }^{1}$ | 3 |
| BIOL 498 | Selected Topics ${ }^{1}$ | 3 |
| MARS 221 | Marine Invertebrates ${ }^{1}$ | 3 |
| MARS 241 | Marine Biology ${ }^{1}$ | 3 |
| MARS 250 | Wetland Ecology ${ }^{1}$ | 3 |
| MARS 260 | Marine Ecology ${ }^{1}$ | 3 |
| MARS 270 | Coastal Vegetation ${ }^{1}$ | 3 |
| MARS 298 | Selected Topics ${ }^{1}$ | 3 |
| MARS 300 | Behavior of Marine Organisms ${ }^{1}$ | 3 |
| MARS 310 | The Mammals of Coastal Ecosystems ${ }^{1}$ | 3 |
| MARS 320 | Marine Microbiology ${ }^{1}$ | 3 |
| MARS 330 | Tropical Invertebrates ${ }^{1}$ | 3 |
| MARS 342 | Marine Botany ${ }^{1}$ | 3 |
| MARS 343 | Marine Ichthyology ${ }^{1}$ | 3 |
| MARS 344 | Anatomy of Marine Chordates ${ }^{1}$ | 3 |
| MARS 345 | Ornithology ${ }^{1}$ | 3 |
| MARS 350 | Physiology of Marine Invertebrates ${ }^{1}$ | 3 |
| MARS 398 | Selected Topics ${ }^{1}$ | 3 |
| MARS 420 | Marine Micropaleontology ${ }^{1}$ | 3 |
| MARS 431 | Ecology of Marine Plankton ${ }^{1}$ | 3 |
| MARS 441 | Biology of Molluscs ${ }^{1}$ | 3 |
| MARS 490 | Independent Study ${ }^{1}$ | 3 |
| MARS 491 | Coral Reef Ecology ${ }^{1}$ | 3 |
| MARS 492 | Marine Mammals ${ }^{1}$ | 3 |
| MARS 498 | Selected Topics ${ }^{1}$ | 3 |
| MARS 500 | Problems in Marine Science ${ }^{1}$ | 3 |

1 Course counts for $50 \%$ of Major requirements and Major GPA

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Student-faculty research
2. Internships
3. Volunteering
4. Job Shadowing

BIOLOGY - Professional (PRFL) - BS (6108)
This program is effective as of Fall 2019.
Revised 12.14.2020
UCC 2.5.2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| ENGL 102 | Critical Writing | 3 |
| BIOL 104 | Principles of Biology with Lab | 4 |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| INDS 101 | FYRST Seminar | 1 |
|  | Hours | 15 |
| Spring |  |  |
| ENGL 104 | Critical Reading | 3 |
| CHEM 108 | General Chemistry II | 3 |
| CHEM 112 | General Chemistry II Lab | 1 |
| Select one 200-level Core Course: |  | 4 |
| BIOL 201 | General Botany with Lab |  |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab |  |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
|  | Hours | 14 |
| Second Year |  |  |
| Fall |  |  |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Select one 200-level Core Course: |  | 4 |
| BIOL 201 | General Botany with Lab |  |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab |  |
| CHEM 201 | Organic Chemistry I | 3 |



| Summary* |  |
| :--- | ---: |
| Code |  |
| Rock Studies Requirements | Hours |
| Other Basic Requirements | 45 |
| Computer Competency | $0-3$ |
| Major Requirements/Concentration | $0-3$ |
| Natural Science and Math College-Wide Requirements | 12 |
| Electives | 25 |
| All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

## Rock Studies Requirements

Code Title Hours

## The Rock

| SUBJ 139 | University Seminar $^{1}$ | 3 |
| :--- | :--- | :--- |
| ENGL 102 | Critical Writing $^{102}$ | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 225 | Calculus I | 4 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |

Subtotal 16
Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378)
Humanities Inquiry
Select 3 Credits (p. 1378) 3

## Social Science Inquiry

Select 3 Credits (p. 1378) 3

| Natural Sciences Inquiry |  |  |
| :--- | :--- | :--- |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |

## Physical Sciences Inquiry

| PHYS 211 | General Physics I with Lab | 4 |
| :--- | ---: | ---: |
| Subtotal | 17 |  |


| Thematic Thread | 12 |
| :--- | ---: |
| Select 12 Credits $\left(\right.$ p. 1378) ${ }^{2}$ |  |

Total Hours ..... 45

1 Course offered in multiple subjects; cannot take course in first major subject
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code Title | Hours |
| :--- | ---: |
| Complete one of the following: | $0-3$ |
| Meet required minimum SAT or ACT math score OR |  |

ESAP 110
Beginning Algebra
Total Hours

## Computer Competency

| Code | Title | Hours |
| :--- | :--- | ---: |
| Demonstrate "computer competency" by one of the following: | $0-3$ |  |$|$| Pass Computer Competency Exam OR |
| :--- | :--- |

## Major Requirements/Concentration

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above
- Students desiring a Biology Major must maintain at least a 2.000 average in Biology.
- Before progressing to a 200-level course, students must achieve a 2.000 average in Principles of Biology - BIOL 104.
- Students may register in 200-level courses in any order, but must maintain a Biology average of 2.000 or better and must complete the 200 core sequence before progressing to 300 and 400 -level courses in the major.
- A student must repeat any 200-level course that brings the Biology average below a 2.000 .
- Students should complete all 200-level Biology requirements by the end of their sophomore year.
- If you have questions about Financial Aid, visit their website (https:// www.sru.edu/admissions/financial-aid/).
- To view the SRU policy on senior undergraduate students earning graduate credit, click here (https://catalog.sru.edu/undergraduate/ academic-policies/senior-undergraduate-students-earning-graduatecredit//).

| Code | Title | Hours |
| :--- | :--- | ---: |
| Biology Core Requirements |  |  |
| BIOL 104 | Principles of Biology with Lab |  |
| BIOL 201 | General Botany with Lab |  |
| BIOL 212 | General Zoology with Lab $^{1,2}$ | 4 |
| BIOL 250 | Genetics with Lab $^{1,2}$ | 4 |
| Subtotal |  | 4 |
| R |  | 16 |


| Required Upper-Level Biology |  |
| :--- | :--- |
| BIOL 492 | Biology Seminar $^{1}$ |
| Subtotal | 1 |

Subtotal 1

Upper-Level Biology Electives
Select five courses of the following:

| BIOL 325 | Biometry with Lab $^{1}$ |
| :--- | :--- |
| BIOL 330 | Microbiology/Lab ${ }^{1}$ |
| BIOL 335 | Cell Biology/Lab $^{1}$ |
| BIOL 340 | Vertebrate Anatomy with Lab $^{1}$ |
| BIOL 370 | Molecular Biology with Lab $^{1}$ |



| BIOL 412 | Population Biology ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| BIOL 430 | Pathogenic Microbiology with Lab ${ }^{1}$ | 3 |
| BIOL 450 | Biology Internship ${ }^{1}$ | 3 |
| BIOL 465 | Plant Anatomy with Lab ${ }^{1}$ | 3 |
| BIOL 470 | Histology with Lab ${ }^{1}$ | 3 |
| BIOL 498 | Selected Topics ${ }^{1}$ | 3 |
| MARS 221 | Marine Invertebrates ${ }^{1}$ | 3 |
| MARS 241 | Marine Biology ${ }^{1}$ | 3 |
| MARS 250 | Wetland Ecology ${ }^{1}$ | 3 |
| MARS 260 | Marine Ecology ${ }^{1}$ | 3 |
| MARS 270 | Coastal Vegetation ${ }^{1}$ | 3 |
| MARS 298 | Selected Topics ${ }^{1}$ | 3 |
| MARS 300 | Behavior of Marine Organisms ${ }^{1}$ | 3 |
| MARS 310 | The Mammals of Coastal Ecosystems ${ }^{1}$ | 3 |
| MARS 320 | Marine Microbiology ${ }^{1}$ | 3 |
| MARS 330 | Tropical Invertebrates | 3 |
| MARS 342 | Marine Botany ${ }^{1}$ | 3 |
| MARS 343 | Marine Ichthyology ${ }^{1}$ | 3 |
| MARS 344 | Anatomy of Marine Chordates ${ }^{1}$ | 3 |
| MARS 345 | Ornithology ${ }^{1}$ | 3 |
| MARS 350 | Physiology of Marine Invertebrates ${ }^{1}$ | 3 |
| MARS 398 | Selected Topics ${ }^{1}$ | 3 |
| MARS 420 | Marine Micropaleontology ${ }^{1}$ | 3 |
| MARS 431 | Ecology of Marine Plankton ${ }^{1}$ | 3 |
| MARS 441 | Biology of Molluscs ${ }^{1}$ | 3 |
| MARS 490 | Independent Study ${ }^{1}$ | 3 |
| MARS 491 | Coral Reef Ecology ${ }^{1}$ | 3 |
| MARS 492 | Marine Mammals ${ }^{1}$ | 3 |
| MARS 498 | Selected Topics ${ }^{1}$ | 3 |
| MARS 500 | Problems in Marine Science ${ }^{1}$ | 3 |

1 Course counts for $50 \%$ of Major requirements and Major GPA

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Student-faculty research
2. Internships
3. Volunteering
4. Job Shadowing

BIOLOGY - BS (6108)
Concentration in Professional (PRFL)
w/optional Concentration in Bioinformatics (BIIF)
This program is effective as of Fall 2019.
Revised 12.14.2020
UCC 2.5.2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum

## categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University. <br> PASSHE - Pennsylvania State System of Higher Education Institutions <br> Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| ENGL 102 | Critical Writing | 3 |
| BIOL 104 | Principles of Biology with Lab | 4 |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| INDS 101 | FYRST Seminar | 1 |
|  | Hours | 15 |
| Spring |  |  |
| ENGL 104 | Critical Reading | 3 |
| Select one 200-level Core Course: |  | 4 |
| BIOL 201 | General Botany with Lab |  |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab |  |
| CHEM 108 | General Chemistry II | 3 |
| CHEM 112 | General Chemistry II Lab | 1 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
|  | Hours | 14 |
| Second Year |  |  |
| Fall |  |  |
| Select one o | wing: | 3 |

Select one of the following:
COMM $200 \quad$ Civil Discourse: Theory \& Practice

| PHIL 110 | Ethics and Civil Discourse |
| :--- | :--- |
| POLS 235 | Civil Discourse and Democracy |

Select one 200-level Core Course: 4

| BIOL 201 | General Botany with Lab |  |
| :--- | :--- | :--- |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab | 3 |
| CHEM 201 | Organic Chemistry I | 1 |
| CHEM 211 | Organic Chemistry Laboratory I | 3 |
| Humanities Inquiry (p. 1378) | 3 |  |
| Social Science Inquiry (p. 1378) |  |  |


| Declare a Thematic Thread $^{2}$ | $\mathbf{1 7}$ |
| :---: | :---: |

Spring
Select one 200-level Core Course: 4

| BIOL 201 | General Botany with Lab |  |
| :--- | :--- | :--- |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab | 3 |
| CHEM 202 | Organic Chemistry II | 1 |
| CHEM 212 | Organic Chemistry Laboratory II | 3 |
| Thematic Thread Requirement (p. 1378) |  |  |


| Thematic Thread Requirement (p. 1378) |  | 3 |
| :---: | :---: | :---: |
|  | Hours | 14 |
| Third Year |  |  |
| Fall |  |  |
| $\begin{aligned} & \text { CHEM } 335 \\ & \text { or CHEM } 301 \end{aligned}$ | Biochemistry I or Physical Chemistry 1 | 3 |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| MATH 225 | Calculus I | 4 |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| Free Elective |  | 3 |
| Free Elective |  | 2 |
|  | Hours | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| PHYS 211 | General Physics I with Lab | 4 |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| Free Elective |  | 3 |
| Free Elective |  | 3 |
|  | Hours | 16 |
| Spring |  |  |
| Free Elective |  | 3 |
| PHYS 213 | General Physics III/ Lab ${ }^{3}$ | 4 |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| BIOL 490 | Independent Study ${ }^{4}$ | 3 |
| BIOL 492 | Biology Seminar | 1 |
|  | Hours | 14 |
|  | Total Hours** | 120 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread.
${ }^{3}$ or BIOL 300/400 level (except BIOL 300, BIOL 314, BIOL 315, BIOL 316, BIOL 319, or BIOL 345.
4
or BIOL 300+:Upper Level BIOL Elective

* Students are encouraged to take INDS 101 as a Free Elective.


## Major Code: 6108

Concentration Code: PRFL
Revised date: 07.15.2021
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Biology, Bachelor of Science (BS) - Concentration in Professional / Antigua Medicine (4+4) <br> Program Learning Outcomes <br> - Critical Thinking/Problem Solving: Respective program graduates should demonstrate synthetic, analytical, and interpretive skills. <br> - Knowledge/Content: Graduates should demonstrate that they are founded in the discipline at the molecular, cellular, organismal, population, community, and ecosystem levels and that they have a fundamental understanding of chemistry, physics, and mathematics. <br> - Practical Skills: Graduates will demonstrate proficiency in laboratory related skills. <br> - Communication Skills: Respective program graduates should demonstrate strong oral, digital, and written communication skills. <br> - Professional Attitude: Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures. <br> - Degree Program Writing Competency: Graduates will demonstrate proficiency in writing based on longitudinal data as opposed to point in time data. <br> Related Links <br> Biology - Antigua Medicine, BS Program Page (https://www.sru.edu/ academics/majors-and-minors/biology-pre-medicine-(44)/) <br> Biology Department Page (https://www.sru.edu/academics/colleges-anddepartments/ches/departments/biology/) <br> Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/) <br> Curriculum Guide <br> GPA Requirement <br> ```Overall GPA: 3.0 or higher \\ Major GPA: 2.0 \\ Pre-requisite GPA: 3.0 or higher \\ No "F" or "D" grade in any pre-requisite course```

## Summary*

Code Title Hours
Rock Studies Requirements 45
Other Basic Requirements 0-3
Computer Competency 0-3
Major Requirements/Concentration 59-60
Natural Science and Math College-Wide Requirements 12
Electives 16

* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |


| ENGL 102 | Critical Writing | 3 |
| :---: | :---: | :---: |
| ENGL 104 | Critical Reading | 3 |
| MATH 225 | Calculus I | 4 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 16 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Science Inquiry |  |  |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| Physical Science Inquiry |  |  |
| PHYS 211 | General Physics I with Lab | 4 |
| Subtotal |  | 17 |
| Thematic Thread |  |  |
| Select 12 Credits (p.1378) ${ }^{2}$ |  | 12 |
| Total Hours |  | 45 |

1 Course offered in multiple subjects; cannot take course in first major subject
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | uter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |

## Major Requirements/Concentration <br> - 30 major credits must be taken at SRU or PASSHE <br> - 30 major credits must be taken at the 300 level or above <br> - Students desiring a Biology Major must maintain at least a 2.000 average in Biology. <br> - Before progressing to a 200 -level course, students must achieve a 2.000 average in Principles of Biology - BIOL 104. <br> - Students may register in 200-level courses in any order, but must maintain a Biology average of 2.000 or better and must complete the 200 core sequence before progressing to 300 and 400 -level courses in the major. <br> - A student must repeat any 200-level course that brings the Biology average below a 2.000 . <br> - Students should complete all 200-level Biology requirements by the end of their sophomore year. <br> - If you have questions about Financial Aid, visit their website (https:// www.sru.edu/admissions/financial-aid/). <br> - To view the SRU policy on senior undergraduate students earning graduate credit, click here (https://catalog.sru.edu/academic-policies/senior-undergraduate-students-earning-graduate-credit/).

| Code | Title | Hours |
| :--- | :--- | ---: |
| Biology Core Requirements |  |  |
| BIOL 104 | Principles of Biology with Lab |  |
| BIOL 201 | General Botany with Lab $^{1,2}$ | 4 |
| BIOL 212 | General Zoology with Lab $^{1,2}$ | 4 |
| BIOL 250 | Genetics with Lab $^{1,2}$ | 4 |
| Subtotal |  | 4 |

## Required Upper-Level Biology

| BIOL 492 | Biology Seminar $^{1}$ | 1 |
| :--- | ---: | ---: |
| Subtotal | 1 |  |
| Upper-Level Biology Electives |  |  |
| Select five courses of the following: | 15 |  |


| BIOL 325 | Biometry with Lab $^{1}$ |
| :--- | :--- |
| BIOL 330 | Microbiology/Lab $^{1}$ |
| BIOL 335 | Cell Biology/Lab $^{1}$ |
| BIOL 340 | Vertebrate Anatomy with Lab $^{1}$ |
| BIOL 370 | Molecular Biology with Lab $^{1}$ |
| BIOL 401 | Ecology with Lab $^{1}$ |
| BIOL 410 | Animal Physiology with Lab $^{1}$ |
| BIOL 451 | Plant Physiology/Lab $^{1}$ |

Subtotal
Additional Upper-Level Biology Electives
Select six credits from courses not chosen above, or any 300/400 6
level course listed below. Additional electives may be selected from the Marine Science offerings listed below. PLE courses are only offered during the summer months through our affiliation with Pymatuning Laboratory of Ecology.

Upper-Level Biology Electives (p. 317)
Subtotal
6

| Related Sciences - Chemistry |  |  |
| :---: | :---: | :---: |
| CHEM 108 | General Chemistry II 4,5 | 3 |
| CHEM 112 | General Chemistry II Lab ${ }^{4}$ | 1 |
| CHEM 201 | Organic Chemistry ${ }^{4}$ | 3 |
| CHEM 202 | Organic Chemistry II ${ }^{4}$ | 3 |



| MARS 420 | Marine Micropaleontology $^{1}{ }^{1}{ }^{1}$ | 3 |
| :--- | :--- | :--- |
| MARS 431 | Ecology of Marine Plankton ${ }^{1}$ | 3 |
| MARS 441 | ${\text { Biology of Molluscs }{ }^{1}}^{{ }^{1}}$ | 3 |
| MARS 490 | Independent Study $^{1}$ | 3 |
| MARS 491 | Coral Reef Ecology $^{1}$ | 3 |
| MARS 492 | Marine Mammals $^{1}$ | 3 |
| MARS 498 | Selected Topics $^{1}$ | 3 |
| MARS 500 | Problems in Marine Science ${ }^{1}$ | 3 |

1 Course counts for $50 \%$ of Major requirements and Major GPA

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Student-faculty research
2. Internships
3. Volunteering
4. Job Shadowing

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
BIOLOGY - PROFESSIONAL - BS
American University of Antigua College of Medicine (4+4) (61AM)
This program is effective as of Fall 2019
Revised 11.01.2021
UCC 2.5.2019
Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall | Critical Writing |  |
| ENGL 102 | Principles of Biology with Lab | 3 |
| BIOL 104 | General Chemistry I | 4 |
| CHEM 107 | General Chemistry I Lab | 3 |
| CHEM 111 | University Seminar ${ }^{1}$ | 1 |
| SUBJ 139 | FYRST Seminar ${ }^{*}$ | 3 |
| INDS 101 | Hours | 1 |
|  | Critical Reading | 15 |
| Spring | General Chemistry II | 3 |
| ENGL 104 | General Chemistry II Lab | 3 |
| CHEM 108 | CHEM 112 |  |
| Select one 200-level Core Course: | $\mathbf{1}$ |  |


| BIOL 201 | General Botany with Lab |  |
| :---: | :---: | :---: |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab |  |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
|  | Hours | 14 |
| Second Year |  |  |
| Fall |  |  |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Select one 200-level Core Course: |  | 4 |
| BIOL 201 | General Botany with Lab |  |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab |  |
| CHEM 201 | Organic Chemistry I | 3 |
| CHEM 211 | Organic Chemistry Laboratory I | 1 |
| Humanities Inquiry (p. 1378) |  | 3 |
| Social Science Inquiry (p.1378) |  | 3 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |

Hours
17

## Spring

| Select one 200-level Core Course: | 4 |  |
| :--- | :--- | :--- |
| BIOL 201 | General Botany with Lab |  |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab | 3 |
| CHEM 202 | Organic Chemistry II | $\mathbf{1}$ |
| CHEM 212 | Organic Chemistry Laboratory II | 3 |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| Thematic Thread Requirement (p. 1378) | $\mathbf{1 4}$ |  |

## Third Year

Fall

| CHEM 335 <br> or CHEM 301 | Biochemistry I <br> or Physical Chemistry 1 | 3 |
| :--- | :---: | ---: |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| Hours | $\mathbf{1 5}$ |  |


| Spring |  |  |
| :--- | :--- | ---: |
| MATH 225 | Calculus I | 4 |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| Free Elective |  | 3 |
| Free Elective |  | $\mathbf{2}$ |
|  | Hours | $\mathbf{1 5}$ |

## Fourth Year

Fall
PHYS 211 General Physics I with Lab 4

| BIOL 300+ | Upper Level BIOL Elective | 3 |
| :--- | :--- | :--- |
| BIOL 300+ | Upper Level BIOL Elective | 3 |


| Free Elective |  | 3 |
| :--- | :--- | ---: |
| Free Elective | Hours | 3 |
|  |  | $\mathbf{1 6}$ |
| Spring | General Physics III/ Lab |  |
| PHYS 213 | Upper Level BIOL Elective | $\mathbf{4}$ |
| BIOL 300+ | Independent Study ${ }^{3}$ | 3 |
| BIOL 490 | Biology Seminar | 3 |
| BIOL 492 |  | $\mathbf{1}$ |
| Free Elective | Hours | $\mathbf{3}$ |
|  | Total Hours** | $\mathbf{1 4}$ |
|  |  | $\mathbf{1 2 0}$ |

Course offered in multiple subjects; cannot take course in first major subject
Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread.
3 or BIOL 300/400 level (except BIOL 300, BIOL 314, BIOL 315, BIOL 316, BIOL 319, or BIOL 345).
4 Students may elect to take a 300 or 400 Level Biology course

* Students are encouraged to take INDS 101 as a Free Elective.

Major Code: 608
Concentration Code: 61AM
Revised date: 07.15.2021
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Biology, Bachelor of Science (BS) Concentration in Professional / Pre Master of Education (7-12)

Students seeking state certification in secondary education must also complete requirements for a Master of Education degree, a one-year program at SRU. All of our programs are designed to steadily develop the quantitative, deductive and inductive reasoning skills that biologists must have.

All candidates completing this program and student teaching are eligible to receive Pennsylvania certification after achieving a passing or qualifying score on Pennsylvania Department of Education required exam(s). If you are interested in teaching in another state, please contact the Department of Education in that state.

## Requirements for the Certification

Teacher certification is earned through the master of education degree at Slippery Rock University. Students seeking secondary school teaching certification in biology must earn a bachelor of arts or a bachelor of science degree in biology and contact the Department of Secondary Education/Foundations of Education concerning its graduate program in education. Information about this program, including prerequisites for
admission, may be obtained from the Secondary Education/Foundations of Education office in 114 McKay Education Building.

## Program Learning Outcomes

- Critical Thinking/Problem Solving: Respective program graduates should demonstrate synthetic, analytical, and interpretive skills.
- Knowledge/Content: Graduates should demonstrate that they are founded in the discipline at the molecular, cellular, organismal, population, community, and ecosystem levels and that they have a fundamental understanding of chemistry, physics, and mathematics.
- Practical Skills: Graduates will demonstrate proficiency in laboratory related skills.
- Communication Skills: Respective program graduates should demonstrate strong oral, digital, and written communication skills.
- Professional Attitude: Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures.
- Degree Program Writing Competency: Graduates will demonstrate proficiency in writing based on longitudinal data as opposed to point in time data.


## Related Links

Biology - Pre-Masters of Education, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/biology-pre-masters-ofeducation/)

Biology Department Page (https://www.sru.edu/academics/colleges-anddepartments/ches/departments/biology/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher
Core GPA: 2.0 or higher

## Summary*

Code Title Hours
Rock Studies Requirements 45
Other Basic Requirements 0-3
Computer Competency 0-3

Major Requirements/Concentration 59-60
Natural Science and Math College-Wide Requirements 12
Electives

* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |



## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate "computer competency" by one of the following: |  | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |

## Total Hours

 0-3
## Major Requirements/Concentration

- 30 major credits must be taken at SRU or PASSHE
- 28 major credits must be taken at the 300 level or above
- Students desiring a Biology Major must maintain at least a 2.000 average in Biology.
- Before progressing to a 200 -level course, students must achieve a 2.000 average in Principles of Biology - BIOL 104.
- Students may register in 200-level courses in any order, but must maintain a Biology average of 2.000 or better and must complete the 200 core sequence before progressing to 300 and 400 -level courses in the major.
- A student must repeat any 200-level course that brings the Biology average below a 2.000 .
- Students should complete all 200-level Biology requirements by the end of their sophomore year.
- If you have questions about Financial Aid, visit their website (https:// www.sru.edu/admissions/financial-aid/).
- To view the SRU policy on senior undergraduate students earning graduate credit, click here (https://catalog.sru.edu/academic-policies/senior-undergraduate-students-earning-graduate-credit/).

| Code | Title | Hours |
| :--- | :--- | ---: |
| Biology Core Requirements |  |  |
| BIOL 104 | Principles of Biology with Lab ${ }^{1,2}$ | 4 |
| BIOL 201 | General Botany with Lab $^{1,2}$ | 4 |
| BIOL 212 | General Zoology with Lab $^{1,2}$ | 4 |
| BIOL 250 | Genetics with Lab $^{1,2}$ | 4 |
| Subtotal |  | 16 |

## Required Upper-Level Biology

| BIOL 492 | Biology Seminar $^{1}$ | 1 |
| :--- | :--- | :--- |
| Subtotal |  | 1 |

## Upper-Level Biology Electives

Select five courses of the following: 15

| BIOL 325 | Biometry with Lab $^{1}$ |
| :--- | :--- |
| BIOL 330 | Microbiology/Lab $^{1}$ |
| BIOL 335 | Cell Biology/Lab $^{1}$ |
| BIOL 340 | Vertebrate Anatomy with Lab $^{1}$ |
| BIOL 370 | ${\text { Molecular Biology } \text { with Lab }^{1}}^{\text {EIOL 401 }}$ |
| Ecology with Lab |  |
|  |  |
| BIOL 410 | Animal Physiology with Lab $^{1}$ |
| BIOL 451 | Plant Physiology/Lab $^{1}$ |

## Additional Upper-Level Biology Electives

Select 6 credits which can come from courses not chosen above, 6 or any 300/400 level course listed below. Additional electives may be selected from the Marine Science offerings listed below. PLE courses are only offered during the summer months through our affiliation with Pymatuning Laboratory of Ecology.

Upper-Level Biology Electives (p. 321)
Subtotal
6

| Related Sciences | Chemistry |  |
| :--- | :--- | :--- |
| CHEM 108 | General Chemistry II |  |
| CHEM 112 | General Chemistry II Lab $^{3}$ | 1 |
| CHEM 201 | Organic Chemistry I $^{3}$ | 3 |
| CHEM 202 | Organic Chemistry II $^{3}$ | 3 |


| CHEM 211 | Organic Chemistry Laboratory $\mathrm{I}^{3}$ | Natural Science and Math College-Wide Requirements |  |  |
| :---: | :---: | :---: | :---: | :---: |
| CHEM 212 | Organic Chemistry Laboratory II ${ }^{3} 1$ | Code | Title | Hours |
| Subtotal |  | CHEM 107 | General Chemistry I | 3 |
| Related Sciences - Chemistry Advanced Elective |  | CHEM 111 | General Chemistry I Lab | 1 |
| Select one of the following: |  | MATH 225 | Calculus I | 4 |
| CHEM 301 | Physical Chemistry $1^{3}$ | PHYS 211 | General Physics I with Lab | 4 |
| CHEM 335 | Biochemistry ${ }^{3}$ | Additional Upper-Level Biology Electives |  |  |
| Subtotal 3 |  |  |  |  |
| Related Sciences - Physics |  | Code | Title | Hours |
| Select one of the following: 3-4 |  | BIOL 301 | Forest Ecology ${ }^{1}$ | 3 |
| PHYS 213 | General Physics III/ Lab ${ }^{3}$ | BIOL 302 | Ecology of Amphibians \& Reptiles/Lab ${ }^{1}$ | 3 |
| Any 300/400 level BIOL elective ${ }^{4}$ |  | BIOL 303 | Behavioral Ecology/Lab ${ }^{1}$ | 3 |
| Subtotal 3-4 |  | BIOL 305 | Wetlands and Aquatic Plants/Lab ${ }^{1} 3$ |  |
| Independent Study Options |  | BIOL 306 | Freshwater Biomonitoring/Lab ${ }^{1}$ | 3 |
| Select one of the following options: 3 |  | BIOL 307 | Vertebrate Ecology/Lab ${ }^{1}$ | 3 |
| Independent Study Option |  | BIOL 308 | Aquatic Ecosystem Management / Lab ${ }^{1}$ | 3 |
| BIOL 490 | Independent Study | BIOL 310 | Plant Systematics with Lab ${ }^{1}$ | 3 |
| Non-Independent Study Option |  | BIOL 311 | Entomology/Lab ${ }^{1}$ | 3 |
| Select 3 credits in BIOL or MARS course from Additional UpperLevel Biology Electives below. |  | BIOL 313 | Herpetology/Lab ${ }^{1}$ | 3 |
|  |  | BIOL 314 | Medical Parasitology with Lab ${ }^{1}$ | 1 |
| Upper-Level Biology Electives (p. 321) |  | BIOL 315 | Medical Mycology/Lab ${ }^{1}$ | 1 |
| Subtotal 3 |  | BIOL 316 | Medical Immunology with Lab ${ }^{1}$ | 1 |
| Major Field Test |  | BIOL 317 | Ecology and Fungi ${ }^{1}$ | 3 |
| Field Test required of all Biology students before graduation |  | BIOL 319 | Medical Virology with a Lab | 1 |
| Total Hours 59-60 |  | BIOL 320 | Ornithology/Lab ${ }^{1}$ | 3 |
|  |  | BIOL 321 | Wildlife Management/Lab ${ }^{1}$ | 3 |
| Course counts for 50\% of Major requirements and Major GPA2 Core GPA3 |  | BIOL 322 | Conservation Biology/Lab ${ }^{1}$ | 3 |
|  |  | BIOL 323 | Stream Ecology/Lab ${ }^{1}$ | 3 |
| Course counts for 50\% of Major requirements but not for Major GPA |  | BIOL 326 | Field Methods in Biogeography/Lab ${ }^{1}$ | 3 |
| 4 With the exception of BIOL 300, BIOL 314, BIOL 315, BIOL 316, BIOL 319, BIOL 345 <br> * Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course. |  | BIOL 327 | Limnology/Lab ${ }^{1}$ | 3 |
|  |  | BIOL 331 | Mammology/Lab ${ }^{1}$ | 3 |
|  |  | BIOL 343 | Embryology with Lab ${ }^{1}$ | 3 |
|  |  | BIOL 345 | Introduction to Biological Electron Microscopy ${ }^{1}$ | 2 |
| Recommended Courses for Biology Pre-Masters in Education Majors |  | BIOL 350 | Evolution ${ }^{1}$ | 3 |
|  |  | BIOL 356 | Field Ecology / Lab ${ }^{1}$ | 3 |
| Listed below are the recommended courses for Biology Pre-Masters in Education majors. You will need to take these courses prior to obtaining your M. Ed. |  | BIOL 357 | Environmental Microbiology with Lab ${ }^{1}$ | 4 |
|  |  | BIOL 360 | Field Botany ${ }^{1}$ | 3 |
|  |  | BIOL 361 | Flora of Western Pennsylvania ${ }^{1}$ | 3 |
| Code <br> SEFE 338 | Title Hours | BIOL 371 | Vertebrate Field Zoology ${ }^{1}$ | 3 |
|  | Standards-Based Instruction \& Assessment | BIOL 373 | Ichthyology/Lab ${ }^{1}$ | 3 |
|  | in the Inclusionary Classroom | BIOL 375 | Ecology of Fish / Lab ${ }^{1}$ | 3 |
| SPED 121 | Overview of Special Education 3 | BIOL 400 | Disease Ecology ${ }^{1}$ | 3 |
| One EGEO with Lab 4 |  | BIOL 402 | Biogeography/Lab ${ }^{1}$ | 3 |
| Two Math courses (one must be Calculus) 6-8 |  | BIOL 405 | Animal Physiological Ecology with Lab ${ }^{1}$ | 4 |
| Must take the following as part of your Upper-Class Biology |  | BIOL 412 | Population Biology ${ }^{1}$ | 3 |
| Electives: |  | BIOL 430 | Pathogenic Microbiology with Lab ${ }^{1}$ | 3 |
| BIOL 370 | Molecular Biology with Lab | BIOL 450 | Biology Internship ${ }^{1}$ | 3 |
| BIOL 401 | Ecology with Lab | BIOL 465 | Plant Anatomy with Lab ${ }^{1}$ | 3 |
| BIOL 410 | Animal Physiology with Lab | BIOL 470 | Histology with Lab ${ }^{1}$ | 3 |
|  |  | BIOL 498 | Selected Topics ${ }^{1}$ | 3 |
|  |  | MARS 221 | Marine Invertebrates ${ }^{1}$ | 3 |


| MARS 241 | Marine Biology ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| MARS 250 | Wetland Ecology | 3 |
| MARS 260 | Marine Ecology | 3 |
| MARS 270 | Coastal Vegetation | 3 |
| MARS 298 | Selected Topics | 1-3 |
| MARS 300 | Behavior of Marine Organisms ${ }^{1}$ | 3 |
| MARS 310 | The Mammals of Coastal Ecosystems ${ }^{1}$ | 3 |
| MARS 320 | Marine Microbiology ${ }^{1}$ | 3 |
| MARS 330 | Tropical Invertebrates | 3 |
| MARS 342 | Marine Botany ${ }^{1}$ | 3 |
| MARS 343 | Marine Ichthyology ${ }^{1}$ | 3 |
| MARS 344 | Anatomy of Marine Chordates ${ }^{1}$ | 3 |
| MARS 345 | Ornithology ${ }^{1}$ | 3 |
| MARS 350 | Physiology of Marine Invertebrates ${ }^{1}$ | 3 |
| MARS 398 | Selected Topics ${ }^{1}$ | 3 |
| MARS 420 | Marine Micropaleontology ${ }^{1}$ | 3 |
| MARS 431 | Ecology of Marine Plankton ${ }^{1}$ | 3 |
| MARS 441 | Biology of Molluscs ${ }^{1}$ | 3 |
| MARS 490 | Independent Study ${ }^{1}$ | 3 |
| MARS 491 | Coral Reef Ecology ${ }^{1}$ | 3 |
| MARS 492 | Marine Mammals ${ }^{1}$ | 3 |
| MARS 498 | Selected Topics ${ }^{1}$ | 3 |
| MARS 500 | Problems in Marine Science ${ }^{1}$ | 3 |

1 Course counts for $50 \%$ of Major requirements and Major GPA

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Student-faculty research
2. Internships
3. Volunteering
4. Job Shadowing

BIOLOGY - BS (6108)
w/optional Pre Masters in Education (7-12) (PX)
This program is effective as of Fall 2019.
Revised 12.14.2020
UCC 2.5.2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall | Critical Writing | 3 |
| ENGL 102 | Principles of Biology with Lab | 4 |
| BIOL 104 | General Chemistry I | 3 |
| CHEM 107 | General Chemistry I Lab | 1 |
| CHEM 111 | University Seminar | 3 |
| SUBJ 139 | FYRST Seminar | 1 |
| INDS 101 | Hours | $\mathbf{1 5}$ |
|  |  | 3 |
| Spring | Critical Reading | 4 |


| BIOL 201 | General Botany with Lab |  |
| :--- | :--- | ---: |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab | 3 |
| CHEM 108 | General Chemistry II | 1 |
| CHEM 112 | General Chemistry II Lab | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) | $\mathbf{1 4}$ |  |
| Hours |  |  |
| Second Year |  |  |
| Fall |  |  |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :---: | :---: | :---: |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Select one 200-level Core Course |  | 4 |
| BIOL 201 | General Botany with Lab |  |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab |  |
| CHEM 201 | Organic Chemistry I | 3 |
| CHEM 211 | Organic Chemistry Laboratory I | 1 |
| Humanities Inquiry (p. 1378) |  | 3 |
| Social Science Inquiry (p. 1378) |  | 3 |
|  | Hours | 17 |
| Spring |  |  |
| Select one 200-level Core Course |  | 4 |
| BIOL 201 | General Botany with Lab |  |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab |  |
| CHEM 202 | Organic Chemistry II | 3 |
| CHEM 212 | Organic Chemistry Laboratory II | 1 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |

## Third Year

Fall
CHEM 335 Biochemistry I 3
or CHEM 301
or Physical Chemistry 1
BIOL $370 \quad$ Molecular Biology with Lab ((recommended 3 300+ Upper Level Biology elective))


1 Course offered in multiple subjects; cannot take course in first major subject.
2

3
or BIOL 300/400 level (Except BIOL 300, BIOL 314, BIOL 315, BIOL 316, BIOL 319, BIOL 345)
or BIOL 300+:Upper Level BIOL Elective

* Students are encouraged to take INDS 101 as a Free Elective.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6108
Concentration Code: PX
Revised date: 08.19.2021

## Biology, Bachelor of Science (BS) Concentration in Professional / PreChiropractic (Logan) (3+3) Program Learning Outcomes <br> - Critical Thinking/Problem Solving: Respective program graduates should demonstrate synthetic, analytical, and interpretive skills. <br> - Knowledge/Content: Graduates should demonstrate that they are founded in the discipline at the molecular, cellular, organismal, population, community, and ecosystem levels and that they have a fundamental understanding of chemistry, physics, and mathematics. <br> - Practical Skills: Graduates will demonstrate proficiency in laboratory related skills. <br> - Communication Skills: Respective program graduates should demonstrate strong oral, digital, and written communication skills. <br> - Professional Attitude: Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures. <br> - Degree Program Writing Competency: Graduates will demonstrate proficiency in writing based on longitudinal data as opposed to point in time data.

## Related Links

Biology - Logan Pre-Chiropractic, BS Program Page (https://www.sru.edu/ academics/majors-and-minors/biology-pre-chiropractic-33/)

Biology Department Page (https://www.sru.edu/academics/colleges-anddepartments/ches/departments/biology/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Overall GPA: 3.0 or higher
Core GPA: 2.0 or higher

## Summary*

Code Title Hours
Rock Studies Requirements 45

Other Basic Requirements 0-3
Computer Competency 0-3
Major/Concentration Requirements 42
Natural Science and Math College-Wide Requirement 12
Electives 32

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the $1^{\text {st }}$ year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.

Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 225 | Calculus I | 4 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 16 |

Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378)

## Humanities Inquiry

Select 3 Credits (p. 1378) 3

## Social Science Inquiry

Select 3 Credits (p. 1378) 3

| Natural Sciences Inquiry |  |
| :--- | :--- |
| CHEM 107 | General Chemistry I |

CHEM 111 General Chemistry I Lab 1

Physical Sciences Inquiry

| PHYS 211 | General Physics I with Lab | 4 |
| :--- | ---: | ---: |
| Subtotal | 17 |  |

## Thematic Thread

| Select 12 Credits $(\mathrm{p} .1378)^{2}$ | 12 |
| :--- | :--- |
| Total Hours | 45 |

1 Course offered in multiple subjects; cannot take course in first major subject
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP $110 \quad$ Beginning Algebra |  |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Ar |  |
| CPSC 110 | Computer Concepts |  |


| CPSC 130 | Introduction to Computing and <br> Programming |  |
| :---: | :--- | :--- |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | $\mathbf{0 - 3}$ |

## Major/Concentration Requirements

- Students desiring a Biology Major must maintain at least a 2.000 average in Biology.
- Before progressing to a 200-level course, students must achieve a 2.000 average in Principles of Biology - BIOL 104.
- Students may register in 200-level courses in any order, but must maintain a Biology average of 2.000 or better and must complete the 200 core sequence before progressing to 300 and 400-level courses in the major.
- A student must repeat any 200-level course that brings the Biology average below a 2.000 .
- Students should complete all 200-level Biology requirements by the end of their sophomore year.
- If you have questions about Financial Aid, visit their website (https:// www.sru.edu/admissions/financial-aid/).
- To view the SRU policy on senior undergraduate students earning graduate credit, click here (https://catalog.sru.edu/academic-policies/senior-undergraduate-students-earning-graduate-credit/).

| Code | Title | Hours |
| :--- | :--- | ---: |
| Biology Core Requirements |  |  |
| BIOL 104 | Principles of Biology with Lab ${ }^{1}$ | 4 |
| BIOL 201 | General Botany with Lab $^{1}$ | 4 |
| BIOL 212 | General Zoology with Lab $^{1}$ | 4 |
| BIOL 250 | Genetics with Lab $^{1}$ | 4 |
| Subtotal |  | 16 |

Required Upper-Level Biology
BIOL $330 \quad 3$
BIOL $340 \quad$ Vertebrate Anatomy with Lab 3
or BIOL 410 Animal Physiology with Lab
BIOL 492 Biology Seminar 1
Subtotal 7

Required Chemistry Courses
CHEM 108 General Chemistry II 3
CHEM 112 General Chemistry II Lab 1
CHEM 201 Organic Chemistry I 3
CHEM 202 Organic Chemistry II 3
CHEM 211 Organic Chemistry Laboratory I 1
CHEM 212 Organic Chemistry Laboratory II 1
CHEM 335 Biochemistry I 3
Subtotal 15
Required Physics Course
PHYS 213 General Physics III/ Lab 4
Major Field Test
Field Test required of all Biology students before graduation
Total Hours
42

1 Core GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Natural Science and Math College-Wide Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| MATH 225 | Calculus I | 4 |
| PHYS 211 | General Physics I with Lab | 4 |

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Volunteering
2. Job Shadowing

BIOLOGY - PROFESSIONAL - BS (6108)
Logan Chiropractic (3+3.3) (61LC)
This program is effective as of Fall 2019.
Revised 07.27.2021
UCC 2.5.2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Recommended Three-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| ENGL 102 | Critical Writing | 3 |
| BIOL 104 | Principles of Biology with Lab | 4 |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| INDS 101 | FYRST Seminar * | 1 |
|  | Hours | 15 |
| Spring |  |  |
| ENGL 104 | Critical Reading | 3 |
| Select one 200-Level Course: ${ }^{3}$ |  | 4 |
| BIOL 201 | General Botany with Lab |  |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab |  |


| CHEM 108 | General Chemistry II | 3 |
| :--- | :--- | ---: |
| CHEM 112 | General Chemistry II Lab | 1 |
| Creative \& Aesthetic Inquiry (p. 1378) | 3 |  |
| Humanities Inquiry (p. 1378) | 3 |  |
| Hours | $\mathbf{1 7}$ |  |

## Second Year

Fall
Select one of the following: 3

| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |

Select one 200-Level Course: 4

| BIOL 201 | General Botany with Lab |  |
| :--- | :--- | :--- |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab | 3 |
| CHEM 201 | Organic Chemistry I | 1 |
| CHEM 211 | Organic Chemistry Laboratory I | 3 |
| Social Science Inquiry (p. 1378) | 3 |  |
| Thematic Thread Requirement (p. 1378) |  |  |
| Declare a Thematic Thread |  |  |

Hours 17

## Spring

| Select one 200-Level Course: |  | 4 |
| :---: | :--- | ---: |
| BIOL 201 | General Botany with Lab |  |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab |  |
| CHEM 202 | Organic Chemistry II | 3 |
| CHEM 212 | Organic Chemistry Laboratory II | 1 |
| MATH 225 | Calculus I | 4 |
| Thematic Thread Requirement (p. 1378) | 3 |  |
|  | Hours | $\mathbf{1 5}$ |


| Select one 200-Level Course: |  | 4 |
| :---: | :--- | ---: |
| BIOL 201 | General Botany with Lab |  |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab | 3 |
| CHEM 202 | Organic Chemistry II | 1 |
| CHEM 212 | Organic Chemistry Laboratory II | 4 |
| MATH 225 | Calculus I | 3 |
| Thematic Thread Requirement (p. 1378) | Hours | $\mathbf{1 5}$ |

Third Year
Fall

| CHEM 335 | Biochemistry I | 3 |
| :--- | :--- | ---: |
| BIOL 340 | Vertebrate Anatomy with Lab |  |
| or BIOL 410 | or Animal Physiology with Lab | 3 |
| PHYS 211 | General Physics I with Lab |  |
| Thematic Thread Requirement (p. 1378) | 4 |  |
|  | Hours | $\mathbf{3}$ |


| Spring |  |  |
| :--- | :--- | ---: |
| BIOL 330 | Microbiology/Lab | 3 |
| BIOL 492 | Biology Seminar | 1 |
| PHYS 213 | General Physics III/ Lab | 4 |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| Free Elective |  | 3 |
|  | Hours | $\mathbf{1 4}$ |

## Fourth Year

Fall
Logan Chiropractic School
CHEM 335 Biochemistry I 3 or Animal Physiology with Lab

-

## Spring

Logan Chiropractic School

| Hours | 0 |
| :--- | ---: |
| Total Hours** | 91 |

1 Course offered in multiple subjects; cannot take course in first major subject

2
Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.

Major Code: 6108
Concentration Code: 61LC
Revised date: 07.15.2021
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Biology, Bachelor of Science (BS) Concentration in Professional / PreChiropractic (Palmer) (3+3)

## Program Learning Outcomes

- Critical Thinking/Problem Solving: Respective program graduates should demonstrate synthetic, analytical, and interpretive skills.
- Knowledge/Content: Graduates should demonstrate that they are founded in the discipline at the molecular, cellular, organismal, population, community, and ecosystem levels and that they have a fundamental understanding of chemistry, physics, and mathematics.
- Practical Skills: Graduates will demonstrate proficiency in laboratory related skills.
- Communication Skills: Respective program graduates should demonstrate strong oral, digital, and written communication skills.
- Professional Attitude: Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures.
- Degree Program Writing Competency: Graduates will demonstrate proficiency in writing based on longitudinal data as opposed to point in time data.


## Related Links

Biology - Palmer Pre-Chiropractic Program Page (https://www.sru.edu/ academics/majors-and-minors/biology-pre-chiropractic-33/)

Biology Department Page (https://www.sru.edu/academics/colleges-anddepartments/ches/departments/biology/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Overall GPA: 3.0 or higher
Core GPA: 2.0 or higher

## Summary*

Code Title Hours
Rock Studies Requirements 45
Other Basic Requirements 0-3
Computer Competency 0-3

Major/Concentration Requirements 42
Natural Science and Math College-Wide Requirements 12
Electives 32

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the $1^{\text {st }}$ year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.


## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 225 | Calculus I | 4 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 16 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Sciences Inquiry |  |  |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| Physical Sciences Inquiry |  |  |
| PHYS 211 | General Physics I with Lab | 4 |
| Subtotal |  | 17 |
| Thematic Thread |  |  |
| Select 12 Credits (p.1378) ${ }^{2}$ |  | 12 |
| Total Hours |  | 45 |

1 Course offered in multiple subjects; cannot take course in first major subject
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal A |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major/Concentration Requirements

- Students desiring a Biology Major must maintain at least a 2.000 average in Biology.
- Before progressing to a 200-level course, students must achieve a 2.000 average in Principles of Biology - BIOL 104.
- Students may register in 200-level courses in any order, but must maintain a Biology average of 2.000 or better and must complete the 200 core sequence before progressing to 300 and 400 -level courses in the major.
- A student must repeat any 200-level course that brings the Biology average below a 2.000 .
- Students should complete all 200-level Biology requirements by the end of their sophomore year.
- If you have questions about Financial Aid, visit their website (https:// www.sru.edu/admissions/financial-aid/).
- To view the SRU policy on senior undergraduate students earning graduate credit, click here (https://catalog.sru.edu/academic-policies/senior-undergraduate-students-earning-graduate-credit/).

| Code | Title | Hours |
| :---: | :---: | :---: |
| Biology Core Requirements |  |  |
| BIOL 104 | Principles of Biology with Lab ${ }^{1}$ | 4 |
| BIOL 201 | General Botany with Lab ${ }^{1}$ | 4 |
| BIOL 212 | General Zoology with Lab ${ }^{1}$ | 4 |
| BIOL 250 | Genetics with Lab ${ }^{1}$ | 4 |
| Subtotal |  | 16 |
| Required Upper-Level Biology |  |  |
| BIOL 330 | Microbiology/Lab | 3 |
| BIOL 340 | Vertebrate Anatomy with Lab | 3 |
| or BIOL 410 | Animal Physiology with Lab |  |
| BIOL 492 | Biology Seminar | 1 |



## Natural Science and Math College-Wide Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | $\mathbf{1}$ |
| MATH 225 | Calculus I | 4 |
| PHYS 211 | General Physics I with Lab | $\mathbf{4}$ |
| Total Hours |  | $\mathbf{1 2}$ |

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Volunteering
2. Job Shadowing

BIOLOGY - BS
Palmer Chiropractic $(3+3.3)$ ( 61 PC )
This program is effective as of Fall 2019.
Revised 7.2019
UCC 2.5.2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Recommended Three-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| ENGL 102 | Critical Writing | 3 |
| BIOL 104 | Principles of Biology with Lab | 4 |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| INDS 101 | FYRST Seminar * | 1 |
|  | Hours | 15 |
| Spring |  |  |
| ENGL 104 | Critical Reading | 3 |
| Select one 200-Level Course: ${ }^{23}$ |  | 4 |
| BIOL 201 | General Botany with Lab |  |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab |  |
| CHEM 108 | General Chemistry II | 3 |
| CHEM 112 | General Chemistry II Lab | 1 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
|  | Hours | 17 |

## Second Year

Fall
Select one of the following: 3

| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |


| Select one 200-level Core Course: | 4 |  |
| :---: | :--- | :---: |
| BIOL 201 | General Botany with Lab |  |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab | 3 |
| CHEM 201 | Organic Chemistry I | 1 |

Social Science Inquiry (p. 1378) 3
Thematic Thread Requirement (p. 1378) 3

| Declare a Thematic Thread $^{2}$ | $\mathbf{1 7}$ |
| ---: | ---: |

## Spring

Select one 200-level Core Course:

| BIOL 201 | General Botany with Lab |  |
| :---: | :--- | :---: |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab |  |
| CHEM 202 | Organic Chemistry II | 3 |
| CHEM 212 | Organic Chemistry Laboratory II | 1 |
| MATH 225 | Calculus I | 4 |
| Thematic Thread Requirement (p. 1378) | 3 |  |
|  | Hours | $\mathbf{1 5}$ |

## Third Year

Fall
CHEM 335 Biochemistry I 3
$\left.\begin{array}{ccc}\text { BIOL 340 } & \text { Vertebrate Anatomy with Lab } \\ \text { or BIOL 410 } & \text { or Animal Physiology with Lab }\end{array}\right] 3$
PHYS 211 General Physics I with Lab 4

| Thematic Thread Requirement (p. 1378) | 3 |
| :---: | ---: |
| Hours | 13 |

Spring
BIOL 330 Microbiology/Lab 3
BIOL 492 Biology Seminar 1
PHYS $213 \quad$ General Physics III/ Lab 4
Thematic Thread Requirement (p. 1378) 3
Free Elective 3
Hours 14

## Fourth Year

Fall
Palmer Chiropractic School

| Hours | 0 |
| :--- | ---: |
| Spring |  |
| Palmer Chiropractic School | $\mathbf{0}$ |
| Hours | $\mathbf{9 1}$ |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.

Major Code: 6108
Concentration Code: 61PC
Revised date: 07.15.2021
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Biology, Bachelor of Science (BS) Concentration in Professional / PreDental (LECOM) (4+4)

This agreement establishes an Early Acceptance Program to which Slippery Rock University undergraduate students are enrolled jointly by Slippery Rock University and by the Lake Erie College of Osteopathic Medicine (LECOM). The Early Acceptance Program is designed to facilitate the admission of Slippery Rock University students into LECOM's Doctor of Dental Medicine program. LECOM will interview the student prior to their enrollment at Slippery Rock University or within the first two years of study at Slippery Rock University. Students interviewing successfully will be offered a provisional acceptance to LECOM's Doctor of Dental Medicine program. Upon meeting the criteria
for final acceptance, they will matriculate at the LECOM Bradenton, FL campus.

For more information on admission requirements: https://lecom.edu/ admissions/entrance-requirements/early-acceptance-programs/

## Program Learning Outcomes

- Critical Thinking/Problem Solving: Respective program graduates should demonstrate synthetic, analytical, and interpretive skills.
- Knowledge/Content: Graduates should demonstrate that they are founded in the discipline at the molecular, cellular, organismal, population, community, and ecosystem levels and that they have a fundamental understanding of chemistry, physics, and mathematics.
- Practical Skills: Graduates will demonstrate proficiency in laboratory related skills.
- Communication Skills: Respective program graduates should demonstrate strong oral, digital, and written communication skills.
- Professional Attitude: Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures.
- Degree Program Writing Competency: Graduates will demonstrate proficiency in writing based on longitudinal data as opposed to point in time data.


## Related Links

Biology - LECOM Dental Program Page (https://www.sru.edu/academics/ majors-and-minors/biology-dental-44-(lecom)/)

Biology Department Page (https://www.sru.edu/academics/colleges-anddepartments/ches/departments/biology/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Per Term GPA: 3.0 or higher
Overall GPA: 3.4 or higher
Science GPA: 3.2 or higher
Core GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 45 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements/Concentration | 12 |
| Natural Science and Math College-Wide Requirements | 15 |
| Electives |  |
| * All undergraduate degree programs require a minimum of | 120 credits. |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |



## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra | $\mathbf{0 - 3}$ |
| Total Hours |  |  |

## Computer Competency



## Major Requirements/Concentration

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above
- Students desiring a Biology Major must maintain at least a 2.000 average in Biology.
- Before progressing to a 200-level course, students must achieve a 2.000 average in Principles of Biology - BIOL 104
- Students may register in 200-level courses in any order, but must maintain a Biology average of 2.000 or better and must complete the 200 core sequence before progressing to 300 and 400-level courses in the major.
- A student must repeat any 200-level course that brings the Biology average below a 2.000 .
- Students should complete all 200-level Biology requirements by the end of their sophomore year.
- If you have questions about Financial Aid, visit their website (https:// www.sru.edu/admissions/financial-aid/).
- To view the SRU policy on senior undergraduate students earning graduate credit, click here (https://catalog.sru.edu/academic-policies/senior-undergraduate-students-earning-graduate-credit/).

| Code | Title | Hours |
| :--- | :--- | ---: |
| Biology Core Requirements |  |  |
| BIOL 104 | Principles of Biology with Lab |  |
| BIOL 201 | General Botany with Lab $^{1,2}$ | 4 |
| BIOL 212 | General Zoology with Lab $^{1,2}$ | 4 |
| BIOL 250 | Genetics with Lab $^{1,2}$ | 4 |
| Subtotal |  | 4 |

Required Upper-Level Biology

| BIOL 492 | Biology Seminar $^{1}$ | 1 |
| :--- | :--- | :--- |
| Subtotal | 1 |  |

## Upper-Level Biology Electives

| Select five courses of the following: |  | 15 |
| :---: | :---: | :---: |
| BIOL 325 | Biometry with Lab ${ }^{1}$ |  |
| BIOL 330 | Microbiology/Lab ${ }^{1}$ |  |
| BIOL 335 | Cell Biology/Lab ${ }^{1}$ |  |
| BIOL 340 | Vertebrate Anatomy with Lab ${ }^{1}$ |  |
| BIOL 370 | Molecular Biology with Lab ${ }^{1}$ |  |
| BIOL 401 | Ecology with Lab ${ }^{1}$ |  |
| BIOL 410 | Animal Physiology with Lab ${ }^{1}$ |  |
| BIOL 451 | Plant Physiology/Lab ${ }^{1}$ |  |
| Subtotal |  | 15 |

Additional Upper-Level Biology Electives
Select six credits from courses not chosen above, or any 300/400 6
level course listed below. Additional electives may be selected from the Marine Science offerings listed below. PLE courses are only offered during the summer months through our affiliation with Pymatuning Laboratory of Ecology.

Upper-Level Biology Electives (p. 330)
Subtotal
Related Sciences - Chemistry
CHEM 108 General Chemistry II ${ }^{3} 3$
CHEM 112 General Chemistry II Lab ${ }^{3} 1$
CHEM 201 Organic Chemistry I ${ }^{3}$ 3
CHEM 202 Organic Chemistry II ${ }^{3} 3$

| CHEM 211 | Organic Chemistry Laboratory I ${ }^{3}$ | 1 |
| :--- | :--- | ---: |
| CHEM 212 | Organic Chemistry Laboratory II | 1 |
| Subtotal |  | 12 |

Related Sciences - Chemistry Advanced Elective
CHEM 301 Physical Chemistry $1^{3} 3$

$$
\text { or CHEM } 335 \quad \text { Biochemistry I }
$$

Related Sciences - Physics
Select one of the following: 3-4
PHYS 213 General Physics III/ Lab ${ }^{3}$
Any 300/400 level BIOL elective ${ }^{4}$
Independent Study Option
Select one of the following options: 3

Independent Study Option
BIOL 490 Independent Study
Non-Independent Study Option
Select 3 credits in BIOL or MARS course from Additional Upper-
Level Biology Electives below.
Upper-Level Biology Electives (p. 330)

## Major Field Test

Field Test required of all Biology students before graduation
Total Hours
1 Course counts for 50\% of Major requirements and Major GPA
2 Core GPA
3 Course counts for $50 \%$ of Major requirements but not for Major GPA
4 With the exception of BIOL 300, BIOL 314, BIOL 315, BIOL 316, BIOL 319, BIOL 345

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

| Natural Science and Math College-Wide Requirements |  |  |
| :--- | :--- | ---: |
| Code | Title | Hours |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| MATH 225 | Calculus I | 4 |
| PHYS 211 | General Physics I with Lab | 4 |

## Additional Upper-Level Biology Electives

| Code | Title | Hours |
| :---: | :---: | :---: |
| BIOL 301 | Forest Ecology ${ }^{1}$ | 3 |
| BIOL 302 | Ecology of Amphibians \& Reptiles/Lab ${ }^{1}$ | 3 |
| BIOL 303 | Behavioral Ecology/Lab ${ }^{1}$ | 3 |
| BIOL 305 | Wetlands and Aquatic Plants/Lab ${ }^{1}$ | 3 |
| BIOL 306 | Freshwater Biomonitoring/Lab ${ }^{1}$ | 3 |
| BIOL 307 | Vertebrate Ecology/Lab ${ }^{1}$ | 3 |
| BIOL 308 | Aquatic Ecosystem Management / Lab ${ }^{1}$ | 3 |
| BIOL 310 | Plant Systematics with Lab ${ }^{1}$ | 3 |
| BIOL 311 | Entomology/Lab ${ }^{1}$ | 3 |
| BIOL 313 | Herpetology/Lab ${ }^{1}$ | 3 |
| BIOL 314 | Medical Parasitology with Lab ${ }^{1}$ | 1 |
| BIOL 315 | Medical Mycology/Lab ${ }^{1}$ | 1 |
| BIOL 316 | Medical Immunology with Lab ${ }^{1}$ | 1 |


| BIOL 317 | Ecology and Fungi ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| BIOL 319 | Medical Virology with a Lab | 1 |
| BIOL 320 | Ornithology/Lab ${ }^{1}$ | 3 |
| BIOL 321 | Wildlife Management/Lab ${ }^{1}$ | 3 |
| BIOL 322 | Conservation Biology/Lab ${ }^{1}$ | 3 |
| BIOL 323 | Stream Ecology/Lab ${ }^{1}$ | 3 |
| BIOL 326 | Field Methods in Biogeography/Lab ${ }^{1}$ | 3 |
| BIOL 327 | Limnology/Lab ${ }^{1}$ | 3 |
| BIOL 331 | Mammology/Lab ${ }^{1}$ | 3 |
| BIOL 343 | Embryology with Lab ${ }^{1}$ | 3 |
| BIOL 345 | Introduction to Biological Electron Microscopy ${ }^{1}$ | 2 |
| BIOL 350 | Evolution ${ }^{1}$ | 3 |
| BIOL 356 | Field Ecology / Lab ${ }^{1}$ | 3 |
| BIOL 357 | Environmental Microbiology with Lab ${ }^{1}$ | 4 |
| BIOL 360 | Field Botany ${ }^{1}$ | 3 |
| BIOL 361 | Flora of Western Pennsylvania ${ }^{1}$ | 3 |
| BIOL 371 | Vertebrate Field Zoology ${ }^{1}$ | 3 |
| BIOL 373 | Ichthyology/Lab ${ }^{1}$ | 3 |
| BIOL 375 | Ecology of Fish / Lab ${ }^{1}$ | 3 |
| BIOL 402 | Biogeography/Lab ${ }^{1}$ | 3 |
| BIOL 405 | Animal Physiological Ecology with Lab ${ }^{1}$ | 4 |
| BIOL 412 | Population Biology ${ }^{1}$ | 3 |
| BIOL 430 | Pathogenic Microbiology with Lab ${ }^{1}$ | 3 |
| BIOL 450 | Biology Internship ${ }^{1}$ | 3 |
| BIOL 465 | Plant Anatomy with Lab ${ }^{1}$ | 3 |
| BIOL 470 | Histology with Lab ${ }^{1}$ | 3 |
| BIOL 498 | Selected Topics ${ }^{1}$ | 3 |
| MARS 221 | Marine Invertebrates ${ }^{1}$ | 3 |
| MARS 241 | Marine Biology ${ }^{1}$ | 3 |
| MARS 250 | Wetland Ecology ${ }^{1}$ | 3 |
| MARS 260 | Marine Ecology ${ }^{1}$ | 3 |
| MARS 270 | Coastal Vegetation ${ }^{1}$ | 3 |
| MARS 298 | Selected Topics ${ }^{1}$ | 3 |
| MARS 300 | Behavior of Marine Organisms ${ }^{1}$ | 3 |
| MARS 310 | The Mammals of Coastal Ecosystems ${ }^{1}$ | 3 |
| MARS 320 | Marine Microbiology ${ }^{1}$ | 3 |
| MARS 330 | Tropical Invertebrates | 3 |
| MARS 342 | Marine Botany ${ }^{1}$ | 3 |
| MARS 343 | Marine Ichthyology ${ }^{1}$ | 3 |
| MARS 344 | Anatomy of Marine Chordates ${ }^{1}$ | 3 |
| MARS 345 | Ornithology ${ }^{1}$ | 3 |
| MARS 350 | Physiology of Marine Invertebrates ${ }^{1}$ | 3 |
| MARS 398 | Selected Topics ${ }^{1}$ | 3 |
| MARS 420 | Marine Micropaleontology ${ }^{1}$ | 3 |
| MARS 431 | Ecology of Marine Plankton ${ }^{1}$ | 3 |
| MARS 441 | Biology of Molluscs ${ }^{1}$ | 3 |
| MARS 490 | Independent Study ${ }^{1}$ | 3 |
| MARS 491 | Coral Reef Ecology ${ }^{1}$ | 3 |
| MARS 492 | Marine Mammals ${ }^{1}$ | 3 |
| MARS 498 | Selected Topics ${ }^{1}$ | 3 |
| MARS 500 | Problems in Marine Science ${ }^{1}$ | 3 |

1 Course counts for $50 \%$ of Major requirements and Major GPA

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Student-faculty research
2. Internships
3. Volunteering
4. Job Shadowing

BIOLOGY - PROFESSIONAL - BS (6108)
LECOM DENTAL (4+4) (61LD)
This program is effective as of Fall 2019.
Revised 12.14.2020
UCC 2/5/2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| ENGL 102 | Critical Writing | 3 |
| BIOL 104 | Principles of Biology with Lab | 4 |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| INDS 101 | FYRST Seminar * | 1 |
|  | Hours | 15 |
| Spring |  |  |
| ENGL 104 | Critical Reading | 3 |
| CHEM 108 | General Chemistry II | 3 |
| CHEM 112 | General Chemistry II Lab | 1 |
| Select one 200-level Core Course: |  | 4 |
| BIOL 201 | General Botany with Lab |  |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab |  |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
|  | Hours | 14 |
| Second Year |  |  |
| Fall |  |  |
| Select one of | wing: | 3 |

COMM 200 Civil Discourse: Theory \& Practice

| PHIL 110 | Ethics and Civil Discourse |  |
| :---: | :---: | :---: |
| POLS 235 | Civil Discourse and Democracy |  |
| Select one 200-level Core Course: |  | 4 |
| BIOL 201 | General Botany with Lab |  |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab |  |
| CHEM 201 | Organic Chemistry I | 3 |
| CHEM 211 | Organic Chemistry Laboratory I | 1 |
| Humanities Inquiry (p. 1378) |  | 3 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 14 |
| Spring |  |  |
| Select one 200-level Core Course: |  | 4 |
| BIOL 201 | General Botany with Lab |  |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab |  |
| CHEM 202 | Organic Chemistry II | 3 |
| CHEM 212 | Organic Chemistry Laboratory II | 1 |
| MATH 225 | Calculus I | 4 |
| Social Science Inquiry (p. 1378) |  | 3 |
|  | Hours | 15 |


| Third Year |  |  |
| :---: | :---: | :---: |
| Fall |  |  |
| CHEM 335 <br> or CHEM 301 | Biochemistry I or Physical Chemistry 1 | 3 |
| PHYS 211 | General Physics I with Lab | 4 |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |


| Spring |  |  |
| :--- | :--- | :--- |
| PHYS 213 | General Physics III/ Lab |  |
|  |  |  |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| BIOL 300+ | Upper Level BIOL Elective | 3 |

Thematic Thread Requirement (p. 1378) 3

| Free Elective | 3 |
| :--- | ---: |
|  | $\mathbf{1 6}$ |

Fourth Year
Fall

| BIOL 300+ | Upper Level BIOL Elective | 3 |
| :--- | :--- | ---: |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| Free Elective |  | 3 |
| Free Elective |  | 3 |
|  | Hours | $\mathbf{1 5}$ |

## Spring

| BIOL 300+ | Upper Level BIOL Elective | 3 |
| :--- | :--- | :--- |
| BIOL 490 | Independent Study ${ }^{4}$ | 3 |
| BIOL 492 | Biology Seminar | 1 |
| Thematic Thread (\#4) | 3 |  |
| Free Elective | 3 |  |


| Free Elective | 2 |  |
| :--- | :--- | ---: |
|  | Hours | 15 |
|  | Total Hours** | 120 |

1 Course offered in multiple subjects; cannot take course in first major subject
or BIOL 300+:Upper Level BIOL Elective

* Students are encouraged to take INDS 101 as a Free Elective.

Major Code: 6108
Concentration Code: 61LD
Revised date: 12.14.2020
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Biology, Bachelor Of Science (BS) Concentration In Professional / PreDental (WVU) (4+4) <br> PROGRAM LEARNING OUTCOMES

Critical Thinking/Problem Solving: Respective program graduates should demonstrate synthetic, analytical, and interpretive skills.

- Knowledge/Content: Graduates should demonstrate that they are founded in the discipline at the molecular, cellular, organismal, population, community, and ecosystem levels and that they have a fundamental understanding of chemistry, physics, and mathematics.
- Practical Skills: Graduates will demonstrate proficiency in laboratory related skills.
- Communication Skills: Respective program graduates should demonstrate strong oral, digital, and written communication skills.
- Professional Attitude: Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures.
- Degree Program Writing Competency: Graduates will demonstrate proficiency in writing based on longitudinal data as opposed to point in time data.


## RELATED LINKS

Biology - WVU Dental Program Page (https://www.sru.edu/academics/ majors-and-minors/biology-dental-44-(wvu)/)

Biology Department Page (https://www.sru.edu/academics/colleges-anddepartments/ches/departments/biology/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## CURRICULUM GUIDE GPA REQUIREMENT

Overall GPA: 3.6<br>Major GPA: 2.0<br>Core GPA: 2.0

## SUMMARY*

Code Title Hours

Rock Studies Requirements
Other Basic Requirements ..... 0-3
Computer Competency ..... 0-3
Major Requirements/Concentration ..... 60
Natural Science and Math College-Wide Requirements ..... 12
Electives ..... 15

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## ROCK STUDIES REQUIREMENTS



## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one | following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 Beginning Algebra |  |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | er competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 Introduction to Computing for Liberal Arts |  |  |
| CPSC 110 Computer Concepts |  |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 Technology for Wellness |  |  |
| Total Hours |  |  |
| MAJOR REQUIREMENTS |  |  |
| - Students desiring a Biology Major must maintain at least a 2.000 average in Biology. <br> - Before progressing to a 200-level course, students must achieve a 2.000 average in Principles of Biology - BIOL 104 (https:// catalog.sru.edu/search/?P=BIOL\%20104). |  |  |
| - Students may register in 200-level courses in any order, but must maintain a Biology average of 2.000 or better and must complete the 200 core sequence before progressing to 300 and 400 -level courses in the major. |  |  |
| - A student must repeat any 200-level course that brings the Biology average below a 2.000 . |  |  |
| - Students should complete all 200-level Biology requirements by the end of their sophomore year. |  |  |



| BIOL 370 | Molecular Biology with Lab ${ }^{1}$ |
| :--- | :--- |
| BIOL 401 | Ecology with Lab ${ }^{1}$ |
| BIOL 410 | Animal Physiology with Lab ${ }^{1}$ |
| BIOL 451 | Plant Physiology/Lab ${ }^{1}$ |
| Subtotal |  |

## Additional Upper-Level Biology Electives

Select six credits from courses not chosen above, or any 300/400 6 level course listed below. Additional electives may be selected from the Marine Science offerings listed below. PLE courses are only offered during the summer months through our affiliation with Pymatuning Laboratory of Ecology.

Upper-Level Biology Electives (p. 334)
Subtotal
6
Independent Study Option
Select one of the following options:

| BIOL $490 \quad$ Independent Study |
| :--- | :--- |
| Upper-Level Biology Electives (p. 334) |

## Major Field Test

Field Test required of all Biology students before graduation

| Related Sciences |  |  |
| :--- | :--- | ---: |
| CHEM 108 | General Chemistry II | 3 |
| CHEM 112 | General Chemistry II Lab | 1 |
| CHEM 201 | Organic Chemistry I | 3 |
| CHEM 202 | Organic Chemistry II | 3 |
| CHEM 211 | Organic Chemistry Laboratory I | 1 |
| CHEM 212 | Organic Chemistry Laboratory II | 1 |
| CHEM 335 | Biochemistry I | 3 |
| PHYS 213 | General Physics III/ Lab | 4 |
| Subtotal |  | 19 |
| Total Hours |  | $\mathbf{6 0}$ |

1 Course counts for $50 \%$ of Major requirements and Major GPA
2 Core GPA
3 Course counts for 50\% of Major requirements but not for Major GPA
4 With the exception
of BIOL 300, BIOL 314, BIOL 315, BIOL 316, BIOL 319, BIOL 345

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## NATURAL SCIENCE AND MATH COLLEGE-WIDE REQUIREMENTS

| Code | Title | Hours |
| :--- | :--- | ---: |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| MATH 225 | Calculus I | 4 |
| PHYS 211 | General Physics I with Lab | 4 |

## Upper-Level Biology Electives

| Code | Title | Hours |
| :--- | :--- | ---: |
| BIOL 301 | Forest Ecology ${ }^{1}$ | 3 |
| BIOL 302 | Ecology of Amphibians \& Reptiles/Lab ${ }^{1}$ | 3 |
| BIOL 303 | Behavioral Ecology/Lab $^{1}$ | 3 |


| BIOL 305 | Wetlands and Aquatic Plants/Lab ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| BIOL 306 | Freshwater Biomonitoring/Lab ${ }^{1}$ | 3 |
| BIOL 307 | Vertebrate Ecology/Lab ${ }^{1}$ | 3 |
| BIOL 308 | Aquatic Ecosystem Management / Lab ${ }^{1}$ | 3 |
| BIOL 310 | Plant Systematics with Lab ${ }^{1}$ | 3 |
| BIOL 311 | Entomology/Lab ${ }^{1}$ | 3 |
| BIOL 313 | Herpetology/Lab ${ }^{1}$ | 3 |
| BIOL 314 | Medical Parasitology with Lab ${ }^{1}$ | 1 |
| BIOL 315 | Medical Mycology/Lab ${ }^{1}$ | 1 |
| BIOL 316 | Medical Immunology with Lab ${ }^{1}$ | 1 |
| BIOL 317 | Ecology and Fungi ${ }^{1}$ | 3 |
| BIOL 319 | Medical Virology with a Lab | 1 |
| BIOL 320 | Ornithology/Lab ${ }^{1}$ | 3 |
| BIOL 321 | Wildlife Management/Lab ${ }^{1}$ | 3 |
| BIOL 322 | Conservation Biology/Lab ${ }^{1}$ | 3 |
| BIOL 323 | Stream Ecology/Lab ${ }^{1}$ | 3 |
| BIOL 326 | Field Methods in Biogeography/Lab ${ }^{1}$ | 3 |
| BIOL 327 | Limnology/Lab ${ }^{1}$ | 3 |
| BIOL 331 | Mammology/Lab ${ }^{1}$ | 3 |
| BIOL 343 | Embryology with Lab ${ }^{1}$ | 3 |
| BIOL 345 | Introduction to Biological Electron Microscopy ${ }^{1}$ | 2 |
| BIOL 350 | Evolution ${ }^{1}$ | 3 |
| BIOL 356 | Field Ecology / Lab ${ }^{1}$ | 3 |
| BIOL 357 | Environmental Microbiology with Lab ${ }^{1}$ | 4 |
| BIOL 360 | Field Botany ${ }^{1}$ | 3 |
| BIOL 361 | Flora of Western Pennsylvania ${ }^{1}$ | 3 |
| BIOL 371 | Vertebrate Field Zoology ${ }^{1}$ | 3 |
| BIOL 373 | Ichthyology/Lab ${ }^{1}$ | 3 |
| BIOL 375 | Ecology of Fish / Lab ${ }^{1}$ | 3 |
| BIOL 402 | Biogeography/Lab ${ }^{1}$ | 3 |
| BIOL 405 | Animal Physiological Ecology with Lab ${ }^{1}$ | 4 |
| BIOL 412 | Population Biology ${ }^{1}$ | 3 |
| BIOL 430 | Pathogenic Microbiology with Lab ${ }^{1}$ | 3 |
| BIOL 450 | Biology Internship ${ }^{1}$ | 3 |
| BIOL 465 | Plant Anatomy with Lab ${ }^{1}$ | 3 |
| BIOL 470 | Histology with Lab ${ }^{1}$ | 3 |
| BIOL 498 | Selected Topics ${ }^{1}$ | 3 |
| MARS 221 | Marine Invertebrates ${ }^{1}$ | 3 |
| MARS 241 | Marine Biology ${ }^{1}$ | 3 |
| MARS 250 | Wetland Ecology ${ }^{1}$ | 3 |
| MARS 260 | Marine Ecology ${ }^{1}$ | 3 |
| MARS 270 | Coastal Vegetation ${ }^{1}$ | 3 |
| MARS 298 | Selected Topics ${ }^{1}$ | 3 |
| MARS 300 | Behavior of Marine Organisms ${ }^{1}$ | 3 |
| MARS 310 | The Mammals of Coastal Ecosystems ${ }^{1}$ | 3 |
| MARS 320 | Marine Microbiology ${ }^{1}$ | 3 |
| MARS 330 | Tropical Invertebrates | 3 |
| MARS 342 | Marine Botany ${ }^{1}$ | 3 |
| MARS 343 | Marine Ichthyology ${ }^{1}$ | 3 |
| MARS 344 | Anatomy of Marine Chordates ${ }^{1}$ | 3 |
| MARS 345 | Ornithology ${ }^{1}$ | 3 |


| MARS 350 | Physiology of Marine Invertebrates ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| MARS 398 | Selected Topics ${ }^{1}$ | 3 |
| MARS 420 | Marine Micropaleontology ${ }^{1}$ | 3 |
| MARS 431 | Ecology of Marine Plankton ${ }^{1}$ | 3 |
| MARS 441 | Biology of Molluscs ${ }^{1}$ | 3 |
| MARS 490 | Independent Study ${ }^{1}$ | 3 |
| MARS 491 | Coral Reef Ecology ${ }^{1}$ | 3 |
| MARS 492 | Marine Mammals ${ }^{1}$ | 3 |
| MARS 498 | Selected Topics ${ }^{1}$ | 3 |
| MARS 500 | Problems in Marine Science ${ }^{1}$ | 3 |

1 Course counts for $50 \%$ of Major requirements and Major GPA

## CO-CURRICULAR AND EXPERIENTIAL LEARNING

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Volunteering
2. Job Shadowing

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
BIOLOGY - PROFESSIONAL - BS (6108)
West Virginia University Dental (4+4) (61WD)
This program is effective as of Fall 2021
Revised 09.21.2021
UCC 09.07.2021
RECOMMENDED FOUR-YEAR PLAN

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| ENGL 102 | Critical Writing | 3 |
| BIOL 104 | Principles of Biology with Lab | 4 |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| INDS 101 | FYRST Seminar* | 1 |
|  | Hours | 15 |
| Spring |  |  |
| ENGL 104 | Critical Reading | 3 |
| CHEM 108 | General Chemistry II | 3 |
| CHEM 112 | General Chemistry II Lab | 1 |
| MATH 225 | Calculus I | 4 |


| Select one 200-level Core Course: |  | 4 |
| :---: | :---: | :---: |
| BIOL 201 | General Botany with Lab |  |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab |  |
|  | Hours | 15 |
| Second Year |  |  |
| Fall |  |  |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Select one 200-level Core Course: |  | 4 |
| BIOL 201 | General Botany with Lab |  |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab |  |
| CHEM 201 | Organic Chemistry I | 3 |
| CHEM 211 | Organic Chemistry Laboratory I | 1 |
| PHYS 211 | General Physics I with Lab | 4 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |

Spring

| Select one 200-level Core Course: | 4 |  |
| :---: | :--- | ---: |
| BIOL 201 | General Botany with Lab |  |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab |  |
| CHEM 202 | Organic Chemistry II | 3 |
| CHEM 212 | Organic Chemistry Laboratory II | 1 |
| PHYS 213 | General Physics III/ Lab |  |
| Humanities Inquiry (p. 1378) | 4 |  |
|  | Hours | 3 |

## Third Year

Fall

| BIOL 340 | Vertebrate Anatomy with Lab | 3 |
| :--- | :--- | ---: |
| CHEM 335 | Biochemistry I | 3 |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| Creative \& Aesthetic | Inquiry (p. 1378) | 3 |
| Social Science $\operatorname{Inquiry~(p.~1378)~}$ | 3 |  |
|  | Hours | $\mathbf{1 5}$ |
| Spring |  |  |
| BIOL 325 | Biometry with Lab | 3 |

BIOL 300+ Upper Level BIOL Elective 3
Thematic Thread Requirement (p. 1378) 3
Thematic Thread Requirement (p. 1378) 3
Free Elective 3

## Fourth Year

Fall
BIOL 300+ Upper Level BIOL Elective 3
BIOL 300+ Upper Level BIOL Elective 3
Thematic Thread Requirement (p. 1378) 3
Thematic Thread Requirement (p. 1378) 3

| Free Elective |  | 3 |
| :--- | :--- | ---: |
|  | Hours | $\mathbf{1 5}$ |
| Spring |  |  |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| BIOL 490 | Independent Study ${ }^{4}$ | 3 |
| BIOL 492 | Biology Seminar | $\mathbf{1}$ |
| Free Elective |  | 3 |
| Free Elective |  | 3 |
| Free Elective | Hours | $\mathbf{2}$ |
|  | Total Hours** | $\mathbf{1 5}$ |
|  |  | $\mathbf{1 2 0}$ |

Course offered in multiple subjects; cannot take course in first major subject
Work with your Academic Adviser to declare a Thematic
Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/ ResponsePage.aspx?id=ul1 VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UIdNTi4u)to declare a thread.

3
or BIOL 300/400 level elective
(except BIOL 300, BIOL 314, BIOL 315, BIOL 316, BIOL 319, BIOL 345)
4
or BIOL 300+:Upper Level BIOL Elective

* Students are encouraged to take INDS 101 as a Free Elective.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6108
Concentration Code: 61WD
Revised date: 09.22.2021

## Biology, Bachelor of Science (BS) Concentration in Professional / PreOsteopathy (LECOM) (3+4)

Under this joint agreement between Lake Erie College of Osteopathic Medicine (LECOM) and Slippery Rock University (SRU), select undergraduate students who have successfully completed specific course work at SRU may continue their education in osteopathic medicine at LECOM. For this program, students complete three years of undergraduate education at SRU and then complete their four years of medical school education at LECOM and its associated clinical sites.
Slippery Rock University will confer the Bachelor of Science degree in
Biology to Slippery Rock students who have successfully completed the Slippery Rock courses at SRU and the first four semesters (pre-clinical) of LECOM's Academic curriculum.

For more information on admission requirements: https://lecom.edu/ admissions/entrance-requirements/early-acceptance-programs/

## Program Learning Outcomes

- Critical Thinking/Problem Solving: Respective program graduates should demonstrate synthetic, analytical, and interpretive skills.
- Knowledge/Content: Graduates should demonstrate that they are founded in the discipline at the molecular, cellular, organismal, population, community, and ecosystem levels and that they have a fundamental understanding of chemistry, physics, and mathematics.
- Practical Skills: Graduates will demonstrate proficiency in laboratory related skills.
- Communication Skills: Respective program graduates should demonstrate strong oral, digital, and written communication skills.
- Professional Attitude: Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures.
- Degree Program Writing Competency: Graduates will demonstrate proficiency in writing based on longitudinal data as opposed to point in time data.


## Related Links

Biology - LECOM Pre-Osteopathy 3+4, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/biology-pre-osteopath-34(lecom)/)

Biology Department Page (https://www.sru.edu/academics/colleges-anddepartments/ches/departments/biology/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Overall GPA: 3.4 or higher
Science GPA: 3.2 or higher
Core GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 45 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major/Concentration Requirements | 44 |
| Natural Science and Math College-Wide Requirements | 12 |
| Electives | 19 |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. However, because this |  |
| is a pre-professional program, credits taken during the 1 |  |

## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 225 | Calculus I | 4 |
| Select one of the following: | 3 |  |

COMM 200 Civil Discourse: Theory \& Practice

| PHIL 110 | Ethics and Civil Discourse |  |
| :--- | :--- | :---: |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal | 16 |  |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry | 3 |  |
| Select 3 Credits (p. 1378) |  |  |
| Humanities Inquiry | 3 |  |
| Select 3 Credits (p. 1378) | 3 |  |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) | 3 |  |
| Natural Sciences Inquiry | General Chemistry I | 1 |
| CHEM 107 | General Chemistry I Lab |  |
| CHEM 111 |  |  |


| Physical Sciences Inquiry |  |
| :--- | ---: | ---: |
| PHYS $211 \quad$ General Physics I with Lab | 4 |

Subtotal 17

Thematic Thread

| Select 12 Credits $(\mathrm{p} .1378)^{2}$ | 12 |
| :--- | :--- |
| Total Hours | 45 |

1 Course offered in multiple subjects; cannot take course in first major subject
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra | $\mathbf{0 - 3}$ |
| Total Hours |  |  |

## Computer Competency

Code Title Hours

Demonstrate "computer competency" by one of the following: 0-3

| Pass Computer Competency Exam OR |
| :--- |
| Select one of the following at SRU or another post-secondary |
| institution: |
| CPSC 100 | | Introduction to Computing for Liberal Arts |  |
| :--- | :--- |
| CPSC 110 130 | Computer Concepts |
| Introduction to Computing and <br> Programming |  |
| Total Hours 202 | Technology for Wellness |
| $\mathbf{0 - 3}$ |  |

## Major Requirements

- Students desiring a Biology Major must maintain at least a 2.000 average in Biology.
- Before progressing to a 200-level course, students must achieve a 2.000 average in Principles of Biology - BIOL 104.
- Students may register in 200-level courses in any order, but must maintain a Biology average of 2.000 or better and must complete the 200 core sequence before progressing to 300 and 400-level courses in the major.
- A student must repeat any 200-level course that brings the Biology average below a 2.000 .
- Students should complete all 200-level Biology requirements by the end of their sophomore year.
- If you have questions about Financial Aid, visit their website (https:// www.sru.edu/admissions/financial-aid/).
- To view the SRU policy on senior undergraduate students earning graduate credit, click here (https://catalog.sru.edu/undergraduate/ academic-policies/senior-undergraduate-students-earning-graduatecredit/).

| Code | Title | Hours |
| :---: | :---: | :---: |
| Biology Core Requirements |  |  |
| BIOL 104 | Principles of Biology with Lab ${ }^{1}$ | 4 |
| BIOL 201 | General Botany with Lab ${ }^{1}$ | 4 |
| BIOL 212 | General Zoology with Lab ${ }^{1}$ | 4 |
| BIOL 250 | Genetics with Lab ${ }^{1}$ | 4 |
| Subtotal |  | 16 |
| Required Upper-Level Biology |  |  |
| BIOL 330 | Microbiology/Lab | 3 |
| BIOL 340 | Vertebrate Anatomy with Lab | 3 |
| BIOL 410 | Animal Physiology with Lab | 3 |
| Subtotal |  | 9 |
| Required Chemistry Courses |  |  |
| CHEM 108 | General Chemistry II | 3 |
| CHEM 112 | General Chemistry II Lab | 1 |
| CHEM 201 | Organic Chemistry I | 3 |
| CHEM 202 | Organic Chemistry II | 3 |
| CHEM 211 | Organic Chemistry Laboratory I | 1 |
| CHEM 212 | Organic Chemistry Laboratory II | 1 |
| CHEM 335 | Biochemistry I | 3 |
| Subtotal |  | 15 |
| Required Physics Course |  |  |
| PHYS 213 | General Physics III/ Lab | 4 |
| Major Field Test |  |  |
| Field Test required of all Biology students before graduation |  |  |
| Total Hours |  | 44 |
| Core GPA |  |  |
| Natural Science and Math College-Wide Requirements |  |  |
| Code | Title | Hours |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| MATH 225 | Calculus I | 4 |
| PHYS 211 | General Physics I with Lab | 4 |

## Additional LECOM Osteopathic Prerequisites

Code
Title
Hours
Select two of the following:
INDP $201 \quad$ Principles of Sociology

| INDP 202 | Introduction to Anthropology |
| :--- | :--- |
| PHIL 101 | Philosophical Inquiry |
| PHIL 325 | Medical/Health Care Ethics |
| PSYC XXX | Any PSYC Course |

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Volunteering
2. Job Shadowing

BIOLOGY - PROFESSIONAL - BS (6108)
LECOM Pre-Osteopath (3+4) (61LE)
This program is effective as of Fall 2019.
Revised 6.20.2020
UCC 2.5.2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Recommended Three-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| ENGL 102 | Critical Writing | 3 |
| BIOL 104 | Principles of Biology with Lab | 4 |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| INDS 101 | FYRST Seminar \% | 1 |
| MATH 225 | Calculus I | 4 |
|  | Hours | 16 |
| Spring |  |  |
| Select one 200-level Core Course: |  | 4 |
| BIOL 201 | General Botany with Lab |  |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab |  |
| CHEM 108 | General Chemistry II | 3 |
| CHEM 112 | General Chemistry II Lab | 1 |
| ENGL 104 | Critical Reading | 3 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
|  | Hours | 17 |


| Second Year |  |  |
| :---: | :---: | :---: |
| Fall |  |  |
| Select one 200-level Core Course: |  | 4 |
| BIOL 201 | General Botany with Lab |  |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab |  |
| CHEM 201 | Organic Chemistry I | 3 |
| CHEM 211 | Organic Chemistry Laboratory I | 1 |
| PSYC 105 | Introduction to Psychology (Recommended for Social Science Inquiry Requirement) | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Humanities In | .1378) | 3 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 17 |
| Spring |  |  |
| Behavioral Science |  | 3 |
| Select one 200-level Core Course: |  | 4 |
| BIOL 201 | General Botany with Lab |  |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab |  |
| CHEM 202 | Organic Chemistry II | 3 |
| CHEM 212 | Organic Chemistry Laboratory II | 1 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 14 |

## Third Year

Fall

| CHEM 335 | Biochemistry I | 3 |
| :--- | :--- | ---: |
| BIOL 340 | Vertebrate Anatomy with Lab | 3 |
| BIOL 410 | Animal Physiology with Lab | 3 |
| PHYS 211 | General Physics I with Lab | $\mathbf{4}$ |
| Thematic Thread Requirement (p. 1378) | 3 |  |
|  | Hours | $\mathbf{1 6}$ |
| Spring | Microbiology/Lab |  |
| BIOL 330 | General Physics III/ Lab | 3 |
| PHYS 213 | $\mathbf{4}$ |  |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| Thematic Thread Requirement (p. 1378) | $\mathbf{3}$ |  |
| Free Elective |  | $\mathbf{3}$ |

## Fourth Year

Fall
LECOM Osteopathic School
Hours
0

## Spring

LECOM Osteopathic School

| Hours | 0 |
| :--- | ---: |
| Total Hours** | 96 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6108
Concentration Code: 61LE
Revised date: 07.15.2021

## Biology, Bachelor of Science (BS) Concentration in Professional / PreOsteopathy (LECOM) (4+4)

This agreement establishes an Early Acceptance Program to which Slippery Rock University undergraduate students are enrolled jointly by Slippery Rock University and by the Lake Erie College of Osteopathic Medicine (LECOM). The Early Acceptance Program is designed to facilitate the admission of Slippery Rock University students into LECOM's Doctor of Osteopathic Medicine program. LECOM will interview the student prior to their enrollment at Slippery Rock University or within the first two years of study at Slippery Rock University. Students interviewing successfully will be offered a provisional acceptance to LECOM's Doctor of Osteopathic Medicine program. Upon meeting the criteria for final acceptance, they will enter LECOM.

For more information on admission requirements: https://lecom.edu/ admissions/entrance-requirements/early-acceptance-programs/

## Program Learning Outcomes

- Critical Thinking/Problem Solving: Respective program graduates should demonstrate synthetic, analytical, and interpretive skills.
- Knowledge/Content: Graduates should demonstrate that they are founded in the discipline at the molecular, cellular, organismal, population, community, and ecosystem levels and that they have a fundamental understanding of chemistry, physics, and mathematics.
- Practical Skills: Graduates will demonstrate proficiency in laboratory related skills.
- Communication Skills: Respective program graduates should demonstrate strong oral, digital, and written communication skills.
- Professional Attitude: Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures.
- Degree Program Writing Competency: Graduates will demonstrate proficiency in writing based on longitudinal data as opposed to point in time data.


## Related Links

Biology - LECOM Pre-Osteopathy 4+4, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/biology-pre-osteopathic-44(lecom)/)

Biology Department Page (https://www.sru.edu/academics/colleges-anddepartments/ches/departments/biology/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement - Biology

Overall GPA: 3.4 or higher
Science GPA: 3.2 or higher
Core GPA: 2.0 or higher

## Summary*

Code Title Hours
Rock Studies Requirements 45
Other Basic Requirements 0-3
Computer Competency 0-3

Major/Concentration Requirements 59-60
Natural Science and Math College-Wide Requirements 12
Electives 16

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 225 | Calculus I | 4 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |

Subtotal 16

Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378) 3

Humanities Inquiry
Select 3 Credits (p. 1378) 3
Social Science Inquiry
Select 3 Credits (p. 1378) 3
Natural Sciences Inquiry
CHEM $107 \quad$ General Chemistry I
CHEM 111 General Chemistry I Lab 1

Physical Sciences Inquiry
PHYS $211 \quad$ General Physics I with Lab 4

Subtotal

| Thematic Thread | 12 |
| :--- | ---: |
| Select 12 Credits (p. 1378) ${ }^{2}$ | 45 |
| Total Hours |  |
| 1 | Course offered in multiple subjects; cannot take course in first major <br> subject |
| 2 | From at least 3 categories; no more than 6 credits from one <br> department; 6 credits must be 300-level or above. |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Art |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major Requirements/Concentration

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above
- Students desiring a Biology Major must maintain at least a 2.000 average in Biology.
- Before progressing to a 200-level course, students must achieve a 2.000 average in Principles of Biology - BIOL 104.
- Students may register in 200-level courses in any order, but must maintain a Biology average of 2.000 or better and must complete the 200 core sequence before progressing to 300 and 400-level courses in the major.
- A student must repeat any 200-level course that brings the Biology average below a 2.000 .
- Students should complete all 200-level Biology requirements by the end of their sophomore year.
- If you have questions about Financial Aid, visit their website (https:// www.sru.edu/admissions/financial-aid/).
- To view the SRU policy on senior undergraduate students earning graduate credit, click here (https://catalog.sru.edu/academic-policies/senior-undergraduate-students-earning-graduate-credit/).

| Code | Title | Hours |
| :---: | :---: | :---: |
| Biology Core Requirements |  |  |
| BIOL 104 | Principles of Biology with Lab ${ }^{1,2}$ | 4 |
| BIOL 201 | General Botany with Lab ${ }^{1,2}$ | 4 |
| BIOL 212 | General Zoology with Lab ${ }^{\text {1,2 }}$ | 4 |
| BIOL 250 | Genetics with Lab ${ }^{1,2}$ | 4 |
| Subtotal |  | 16 |
| Required Upper-Level Biology |  |  |
| BIOL 492 | Biology Seminar ${ }^{1}$ | 1 |
| Subtotal |  | 1 |
| Upper-Level Biology Electives |  |  |
| Select five cour | the following: | 15 |
| BIOL 325 | Biometry with Lab ${ }^{1}$ |  |
| BIOL 330 | Microbiology/Lab ${ }^{1}$ |  |
| BIOL 335 | Cell Biology/Lab ${ }^{1}$ |  |
| BIOL 340 | Vertebrate Anatomy with Lab ${ }^{1}$ |  |
| BIOL 370 | Molecular Biology with Lab ${ }^{1}$ |  |
| BIOL 401 | Ecology with Lab ${ }^{1}$ |  |
| BIOL 410 | Animal Physiology with Lab ${ }^{1}$ |  |
| BIOL 451 | Plant Physiology/Lab ${ }^{1}$ |  |

Subtotal ..... 15

## Additional Upper-Level Biology Electives

Select six credits from courses not chosen above, or any 300/400 6 level course listed below. Additional electives may be selected from the Marine Science offerings listed below. PLE courses are only offered during the summer months through our affiliation with Pymatuning Laboratory of Ecology.

Upper-Level Biology Electives (p. 341)
Subtotal 6

| Related Sciences - Chemistry |  |  |
| :---: | :---: | :---: |
| CHEM 108 | General Chemistry II ${ }^{3}$ | 3 |
| CHEM 112 | General Chemistry II Lab ${ }^{3}$ | 1 |
| CHEM 201 | Organic Chemistry ${ }^{3}$ | 3 |
| CHEM 202 | Organic Chemistry II ${ }^{3}$ | 3 |
| CHEM 211 | Organic Chemistry Laboratory $\mathrm{I}^{3}$ | 1 |
| CHEM 212 | Organic Chemistry Laboratory II ${ }^{3}$ | 1 |
| Subtotal |  | 12 |

Related Sciences - Chemistry Advanced Elective
Select one of the following: 3

CHEM $301 \quad$ Physical Chemistry $1^{3}$
CHEM 335 Biochemistry ${ }^{3}$
Related Sciences - Physics
Select one of the following: 3-4
PHYS 213 General Physics III/ Lab ${ }^{3}$
Any 300/400 level BIOL elective ${ }^{4}$
Independent Study Option
Select one of the following options:
Independent Study Option
BIOL 490 Independent Study
Non-Independent Study Option
Select 3 credits in BIOL or MARS course from Additional Upper-
Level Biology Electives below.
Upper-Level Biology Electives (p. 341)

## Major Field Test

Field Test required of all Biology students before graduation

| Total Hours |  | 59-60 |
| :---: | :---: | :---: |
| ${ }^{1}$ Course counts for $50 \%$ of Major requirements and Major GP |  |  |
| 2 Core GPA |  |  |
| 3 Course counts for 50\% of Major requirements but not for Major GPA |  |  |
| With the exception of BIOL 300, BIOL 314, BIOL 315, BIOL 316, BIOL 319, BIOL 345 |  |  |
| * Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course. |  |  |
| Natural Science and Math College-Wide Requirements |  |  |
| Code | Title | Hours |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| MATH 225 | Calculus I | 4 |
| PHYS 211 | General Physics I with Lab | 4 |

## Additional LECOM Osteopathic Requirements

| Code | Title | Hours |
| :--- | :--- | :--- |
| Select two of the following: |  |  |
| INDP 201 | Principles of Sociology |  |
| INDP 202 | Introduction to Anthropology |  |
| PHIL 101 | Philosophical Inquiry |  |
| PHIL 325 | Medical/Health Care Ethics |  |
| PSYC XXX | Any PSYC Course |  |

## Additional Upper-Level Biology Electives

| Code | Title | Hours |
| :---: | :---: | :---: |
| BIOL 301 | Forest Ecology ${ }^{1}$ | 3 |
| BIOL 302 | Ecology of Amphibians \& Reptiles/Lab ${ }^{1}$ | 3 |
| BIOL 303 | Behavioral Ecology/Lab ${ }^{1}$ | 3 |
| BIOL 305 | Wetlands and Aquatic Plants/Lab ${ }^{1}$ | 3 |
| BIOL 306 | Freshwater Biomonitoring/Lab ${ }^{1}$ | 3 |
| BIOL 307 | Vertebrate Ecology/Lab ${ }^{1}$ | 3 |
| BIOL 308 | Aquatic Ecosystem Management / Lab ${ }^{1}$ | 3 |
| BIOL 310 | Plant Systematics with Lab ${ }^{1}$ | 3 |
| BIOL 311 | Entomology/Lab ${ }^{1}$ | 3 |
| BIOL 313 | Herpetology/Lab ${ }^{1}$ | 3 |
| BIOL 314 | Medical Parasitology with Lab ${ }^{1}$ | 1 |
| BIOL 315 | Medical Mycology/Lab ${ }^{1}$ | 1 |
| BIOL 316 | Medical Immunology with Lab ${ }^{1}$ | 1 |
| BIOL 317 | Ecology and Fungi ${ }^{1}$ | 3 |
| BIOL 319 | Medical Virology with a Lab | 1 |
| BIOL 320 | Ornithology/Lab ${ }^{1}$ | 3 |
| BIOL 321 | Wildlife Management/Lab ${ }^{1}$ | 3 |
| BIOL 322 | Conservation Biology/Lab ${ }^{1}$ | 3 |
| BIOL 323 | Stream Ecology/Lab ${ }^{1}$ | 3 |
| BIOL 326 | Field Methods in Biogeography/Lab ${ }^{1}$ | 3 |
| BIOL 327 | Limnology/Lab ${ }^{1}$ | 3 |
| BIOL 331 | Mammology/Lab ${ }^{1}$ | 3 |
| BIOL 343 | Embryology with Lab ${ }^{1}$ | 3 |


| BIOL 345 | Introduction to Biological Electron Microscopy ${ }^{1}$ | 2 |
| :---: | :---: | :---: |
| BIOL 350 | Evolution ${ }^{1}$ | 3 |
| BIOL 356 | Field Ecology / Lab ${ }^{1}$ | 3 |
| BIOL 357 | Environmental Microbiology with Lab ${ }^{1}$ | 4 |
| BIOL 360 | Field Botany ${ }^{1}$ | 3 |
| BIOL 361 | Flora of Western Pennsylvania ${ }^{1}$ | 3 |
| BIOL 371 | Vertebrate Field Zoology ${ }^{1}$ | 3 |
| BIOL 373 | Ichthyology/Lab ${ }^{1}$ | 3 |
| BIOL 375 | Ecology of Fish / Lab ${ }^{1}$ | 3 |
| BIOL 402 | Biogeography/Lab ${ }^{1}$ | 3 |
| BIOL 405 | Animal Physiological Ecology with Lab ${ }^{1}$ | 4 |
| BIOL 412 | Population Biology ${ }^{1}$ | 3 |
| BIOL 430 | Pathogenic Microbiology with Lab ${ }^{1}$ | 3 |
| BIOL 450 | Biology Internship ${ }^{1}$ | 3 |
| BIOL 465 | Plant Anatomy with Lab ${ }^{1}$ | 3 |
| BIOL 470 | Histology with Lab ${ }^{1}$ | 3 |
| BIOL 498 | Selected Topics ${ }^{1}$ | 3 |
| MARS 221 | Marine Invertebrates ${ }^{1}$ | 3 |
| MARS 241 | Marine Biology ${ }^{1}$ | 3 |
| MARS 250 | Wetland Ecology ${ }^{1}$ | 3 |
| MARS 260 | Marine Ecology ${ }^{1}$ | 3 |
| MARS 270 | Coastal Vegetation ${ }^{1}$ | 3 |
| MARS 298 | Selected Topics ${ }^{1}$ | 3 |
| MARS 300 | Behavior of Marine Organisms ${ }^{1}$ | 3 |
| MARS 310 | The Mammals of Coastal Ecosystems ${ }^{1}$ | 3 |
| MARS 320 | Marine Microbiology ${ }^{1}$ | 3 |
| MARS 330 | Tropical Invertebrates | 3 |
| MARS 342 | Marine Botany ${ }^{1}$ | 3 |
| MARS 343 | Marine Ichthyology ${ }^{1}$ | 3 |
| MARS 344 | Anatomy of Marine Chordates ${ }^{1}$ | 3 |
| MARS 345 | Ornithology ${ }^{1}$ | 3 |
| MARS 350 | Physiology of Marine Invertebrates ${ }^{1}$ | 3 |
| MARS 398 | Selected Topics ${ }^{1}$ | 3 |
| MARS 420 | Marine Micropaleontology ${ }^{1}$ | 3 |
| MARS 431 | Ecology of Marine Plankton ${ }^{1}$ | 3 |
| MARS 441 | Biology of Molluscs ${ }^{1}$ | 3 |
| MARS 490 | Independent Study ${ }^{1}$ | 3 |
| MARS 491 | Coral Reef Ecology ${ }^{1}$ | 3 |
| MARS 492 | Marine Mammals ${ }^{1}$ | 3 |
| MARS 498 | Selected Topics ${ }^{1}$ | 3 |
| MARS 500 | Problems in Marine Science ${ }^{1}$ | 3 |
| 1 Course counts for 50\% of Major requirements and Major GPA |  |  |
| Co-Curric | Experiential Learning |  |

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Student-faculty research
2. Internships
3. Volunteering
4. Job Shadowing

BIOLOGY - PROFESSIONAL - BS (6108)
LECOM OSTEOPATHIC $(4+4)$ (61LO)
This program is effective as of Fall 2019.
Revised 12.14.20
UCC 2/5/2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall | Critical Writing |  |
| ENGL 102 | Principles of Biology with Lab | 3 |
| BIOL 104 | General Chemistry I | 4 |
| CHEM 107 | General Chemistry I Lab $^{\text {CHEM 111 }} \boldsymbol{\text { University Seminar }}{ }^{1}$ | 3 |
| SUBJ 139 | FYRST Seminar ${ }^{*}$ | 1 |
| INDS 101 | Hours | 3 |
|  | $\mathbf{1 5}$ |  |


| Spring |  |  |
| :--- | :--- | ---: |
| ENGL 104 | Critical Reading | 3 |
| Select one 200-level Core Course: | 4 |  |
| BIOL 201 | General Botany with Lab |  |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab |  |
| CHEM 108 | General Chemistry II |  |
| CHEM 112 | General Chemistry II Lab | 3 |
| Creative \& Aesthetic | Inquiry (p. 1378) | $\mathbf{1}$ |
|  | Hours | $\mathbf{3}$ |

## Second Year

Fall

| Select one of the following: |  | 3 |
| :---: | :---: | :---: |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Select one 200-level Core Course: |  | 4 |
| BIOL 201 | General Botany with Lab |  |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab |  |
| CHEM 201 | Organic Chemistry I | 3 |
| CHEM 211 | Organic Chemistry Laboratory I | 1 |


| PSYC 105 | Introduction to Psychology (Rec for Social Science Inquiry Requir | 3 |
| :---: | :---: | :---: |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 14 |
| Spring |  |  |
| Humanities Inquiry (p. 1378) |  | 3 |
| Select one 200-level Core Course: |  | 4 |
| BIOL 201 General Botany with Lab |  |  |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab |  |
| CHEM 202 | Organic Chemistry II | 3 |
| CHEM 212 | Organic Chemistry Laboratory II | 1 |
| MATH 225 | Calculus I | 4 |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| CHEM 335 or CHEM 301 | Biochemistry I or Physical Chemistry 1 | 3 |
| PHYS 211 | General Physics I with Lab | 4 |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Hours |  | 16 |
| Spring |  |  |
| PHYS 213 | General Physics III/ Lab ${ }^{3}$ | 3-4 |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Behavioral Science Course |  | 3 |
| Hours |  | -16 |
| Fourth Year |  |  |
| Fall |  |  |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Free Elective |  | 3 |
| Free Elective |  | 3 |
| Hours |  | 15 |
| Spring |  |  |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| BIOL 490 | Independent Study ${ }^{4}$ | 3 |
| BIOL 492 | Biology Seminar | 1 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Free Elective |  | 3 |
| Free Elective |  | 2 |
| Hours |  | 15 |
| Total Hours** |  |  |
| 1 Course offered in multiple subjects; cannot take course in first major subject. |  |  |
| 2 Work with yo by the end of declare a thre | cademic Adviser to declare a Them fall semester in your second yea |  |

3 Any BIOL 300/400 Level (Except BIOL 300, BIOL 314, BIOL 315, BIOL 216, BIOL 345)
4 or BIOL 300+:Upper Level BIOL Elective

* Students are encouraged to take INDS 101 as a Free Elective.

Major Code: 6018
Concentration Code: 61LO
Revised date: 04.15.2021
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Biology, Bachelor of Science (BS) Concentration in Professional / PrePhysical Therapy (SRU) (3+3) Biology Program Learning Outcomes

- Critical Thinking/Problem Solving: Respective program graduates should demonstrate synthetic, analytical, and interpretive skills.
- Knowledge/Content: Graduates should demonstrate that they are founded in the discipline at the molecular, cellular, organismal, population, community, and ecosystem levels and that they have a fundamental understanding of chemistry, physics, and mathematics.
- Practical Skills: Graduates will demonstrate proficiency in laboratory related skills.
- Communication Skills: Respective program graduates should demonstrate strong oral, digital, and written communication skills.
- Professional Attitude: Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures.
- Degree Program Writing Competency: Graduates will demonstrate proficiency in writing based on longitudinal data as opposed to point in time data.


## What are your options?

Pre-Physical Therapy SRU 3+3: Earn a Doctor of Physical Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU DPT program. During your third undergraduate year, you apply for admission into the SRU DPT program. If accepted, your first year in the SRU DPT program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

Pre-Physical Therapy (SRU Traditional): Complete the requirements for your major and the pre-requisites for the SRU DPT program and apply to the SRU DPT program in your senior year.

## Related Links

Biology - Pre-Physical Therapy, BS Program Page (https://www.sru.edu/ academics/majors-and-minors/biology-pre-physical-therapy/)

Biology Department Page (https://www.sru.edu/academics/colleges-anddepartments/ches/departments/biology/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

1st Major: Biology

- Overall GPA: 2.00 or higher
- Major GPA (only includes Biology courses): 2.00 or higher

2nd Major. Pre-PT SRU 3+3 Biology

- Overall GPA: 3.00 or higher


## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 45 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 47 |
| Natural Science and Math College-Wide Requirements | 12 |
| Electives | 28 |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. However, because this |  |
| is a pre-professional program, credits taken during the $1^{\text {st }}$ year of the |  |
| graduate program are applied toward the undergraduate credit hours to |  |
| meet the 120 credits required for your undergraduate degree. |  |

## Rock Studies Requirements



Thematic Thread

Select 12 Credits (p. 1378) ${ }^{2}$

## Total Hours

1 Course offered in multiple subjects; cannot take course in first major subject
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major Requirements

- Students desiring a Biology Major must maintain at least a 2.000 average in Biology.
- Before progressing to a 200 -level course, students must achieve a 2.000 average in Principles of Biology - BIOL 104.
- Students may register in 200-level courses in any order, but must maintain a Biology average of 2.000 or better and must complete the 200 core sequence before progressing to 300 and 400 -level courses in the major.
- A student must repeat any 200-level course that brings the Biology average below a 2.000 .
- Students should complete all 200-level Biology requirements by the end of their sophomore year.
- If you choose to pursue Pre-Physical Therapy SRU 3+3 Biology and are not accepted into the DPT program, then additional coursework is required to complete a first major of Biology-Professional. Please refer to the Biology-Professional Curriculum Guide.
- If you have questions about Financial Aid, visit their website (https:// www.sru.edu/admissions/financial-aid/).
- To view the SRU policy on senior undergraduate students earning graduate credit, click here (https://catalog.sru.edu/academic-policies/senior-undergraduate-students-earning-graduate-credit/).

| Code | Title | Hours |
| :---: | :---: | :---: |
| Biology Core Requirements |  |  |
| BIOL 104 | Principles of Biology with Lab ${ }^{1}$ | 4 |
| BIOL 201 | General Botany with Lab ${ }^{1}$ | 4 |
| BIOL 212 | General Zoology with Lab ${ }^{1}$ | 4 |
| BIOL 250 | Genetics with Lab ${ }^{1}$ | 4 |
| Subtotal |  | 16 |
| Required Upper-Level Biology |  |  |
| BIOL 330 | Microbiology/Lab | 3 |
| BIOL 340 | Vertebrate Anatomy with Lab | 3 |
| BIOL 410 | Animal Physiology with Lab | 3 |
| Subtotal |  | 9 |
| Related Sciences - Chemistry |  |  |
| CHEM 201 | Organic Chemistry I | 3 |
| CHEM 202 | Organic Chemistry II | 3 |
| CHEM 211 | Organic Chemistry Laboratory I | 1 |
| CHEM 212 | Organic Chemistry Laboratory II | 1 |
| CHEM 335 | Biochemistry I | 3 |
| Subtotal |  | 11 |
| SRU DPT Program Requirements |  |  |
| CHEM 108 | General Chemistry II | 3 |
| CHEM 112 | General Chemistry II Lab | 1 |
| PHYS 213 | General Physics III/ Lab | 4 |
| BIOL 325 | Biometry with Lab | 3 |
| Subtotal |  | 11 |
| Major Field Test |  |  |
| Field Test required of all Biology students before graduation |  |  |
| Total Hours |  | 47 |
| 1 Core GPA |  |  |
| * Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course. |  |  |


| Natural Science and Math College-Wide Requirements |  |  |
| :--- | :--- | ---: |
| Code | Title | Hours |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| MATH 225 | Calculus I | 4 |
| PHYS 211 | General Physics I with Lab | 4 |

## Additional Physical Therapy Prerequisite Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| PSYC 105 | Introduction to Psychology | 3 |
| PSYC (additional) | See My Rock Audit for options |  |
| Total Hours |  | $\mathbf{3}$ |

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Volunteering
2. Job Shadowing

## Doctor of Physical Therapy (DPT) Prerequisite Admission Requirements - Pre-Physical Therapy SRU 3+3

## For Application Requirements

Please refer to Slippery Rock University's Physical Therapy (Doctor of Physical Therapy) website for requirements: www.sru.edu/PT (http:// www.sru.edu/PT/)

| Liberal Studies and Rock Studies <br> Code Title | Hours |
| :--- | ---: |
| Prerequisite Courses - SRU Physical Therapy |  |
| Select one of the following: | 6 |


| BIOL 216 | Anatomy and Physiology I with Lab |  |
| :--- | :--- | ---: |
| \& BIOL 217 | and Anatomy and Physiology II with Lab |  |
| BIOL 340 | Vertebrate Anatomy with Lab |  |
| \& BIOL 410 | and Animal Physiology with Lab |  |
| CHEM 107 | General Chemistry I | 4 |
| \& CHEM 111 | and General Chemistry I Lab |  |
| CHEM 108 | General Chemistry II <br> \& CHEM 112 | and General Chemistry II Lab |

Select one of the following: 8

| PHYS 201 <br> \& PHYS 202 | Elements of Physics I with Lab and Elements of Physics II/ Lab |  |
| :---: | :---: | :---: |
| PHYS 211 <br> \& PHYS 213 | General Physics I with Lab and General Physics III/ Lab |  |
| STAT 152 or BIOL 325 | Elementary Statistics I <br> Biometry with Lab | 3 |
| PSYC 105 | Introduction to Psychology | 3 |
| Additional Psychology Course ${ }^{1}$ |  | 3 |
| Total Hours |  | 31 |

1 See My Rock Audit for specific courses.

## Requirements for Pre-Physical Therapy SRU 3+3

If any of these requirements are not met, the $3+3$ designation will be removed from the student's record:

1. A 3.0 or higher overall GPA must be maintained by the student.
2. The student can only be enrolled in the Pre-Physical Therapy SRU $3+3$ program for a maximum of three (3) years, full-time continuous enrollment (fall/spring).

## Provision

Should a Pre-Physical Therapy SRU $3+3$ student be unsuccessful in completing the 1 st two semesters (fall or spring) of the Doctor of Physical Therapy Program and wants to complete the original undergraduate degree, it is solely up to the discretion of the undergraduate program Department Chair to determine which, if any, Physical Therapy courses will count toward the completion of his/ her undergraduate degree. In addition, students must complete any unfulfilled requirements of their undergraduate major. Students may still apply to the Doctor of Physical Therapy Program with an earned Bachelor's degree.

BIOLOGY - PROFESSIONAL - BS (6108)
PRE-PT SRU 3+3 (61P8)

This program is effective as of Fall 2019
Revisd 10.2019
UCC 2.5.2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Three-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| ENGL 102 | Critical Writing | 3 |
| BIOL 104 | Principles of Biology with Lab | 4 |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| INDS 101 | FYRST Seminar * | 1 |
|  | Hours | 15 |
| Spring |  |  |
| ENGL 104 | Critical Reading | 3 |
| Select one 200-level Core Course: |  | 4 |
| BIOL 201 | General Botany with Lab |  |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab |  |
| CHEM 108 | General Chemistry II | 3 |
| CHEM 112 | General Chemistry II Lab | 1 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
|  | Hours | 17 |
| Second Year |  |  |
| Fall |  |  |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Select one 200-level Core Course: |  | 4 |
| BIOL 201 | General Botany with Lab |  |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab |  |
| CHEM 201 | Organic Chemistry I | 3 |
| CHEM 211 | Organic Chemistry Laboratory I | 1 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| PSYC 105 | Introduction to Psychology (Recommended for Social Science Inquiry Requirement) | 3 |


| Declare a Thematic Thread ${ }^{2}$ |  |  |
| :---: | :---: | :---: |
|  | Hours | 17 |
| Spring |  |  |
| Select one 200-level Core Course: |  | 4 |
| BIOL 201 | General Botany with Lab |  |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab |  |
| CHEM 202 | Organic Chemistry II | 3 |
| CHEM 212 | Organic Chemistry Laboratory II | 1 |
| MATH 225 | Calculus I | 4 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| BIOL 340 | Vertebrate Anatomy with Lab | 3 |
| BIOL 410 | Animal Physiology with Lab | 3 |
| CHEM 335 | Biochemistry I | 3 |
| PHYS 211 | General Physics I with Lab | 4 |
| PSYC (Additional) -See My Rock Audit for Options |  | 3 |
|  | Hours | 16 |


| Spring |  |  |
| :--- | :--- | ---: |
| BIOL 325 | Biometry with Lab | 3 |
| BIOL 330 | Microbiology/Lab | 3 |
| PHYS 213 | General Physics III/ Lab | 4 |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| Thematic Thread Requirement (p. 1378) | 3 |  |
|  | Hours | $\mathbf{1 6}$ |

## Fourth Year

Fall
Physical Therapy Program

## Hours

## Spring

Physical Therapy Program

| Hours | 0 |
| :--- | ---: |
| Total Hours** | $\mathbf{9 6}$ |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.


## Major Code: 6108

Concentration Code: 61P8
Revised Date: 07.15.2021
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Biology, Bachelor of Science (BS) Concentration in Professional / PrePhysical Therapy (SRU) (Traditional) Biology Program Learning Outcomes

- Critical Thinking/Problem Solving: Respective program graduates should demonstrate synthetic, analytical, and interpretive skills.
- Knowledge/Content: Graduates should demonstrate that they are founded in the discipline at the molecular, cellular, organismal, population, community, and ecosystem levels and that they have a fundamental understanding of chemistry, physics, and mathematics.
- Practical Skills: Graduates will demonstrate proficiency in laboratory related skills.
- Communication Skills: Respective program graduates should demonstrate strong oral, digital, and written communication skills.
- Professional Attitude: Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures.
- Degree Program Writing Competency: Graduates will demonstrate proficiency in writing based on longitudinal data as opposed to point in time data.


## What are your options?

Pre-Physical Therapy SRU 3+3: Earn a Doctor of Physical Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU DPT program. During your third undergraduate year, you apply for admission into the SRU DPT program. If accepted, your first year in the SRU DPT program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

Pre-Physical Therapy (SRU Traditional): Complete the requirements for your major and the pre-requisites for the SRU DPT program and apply to the SRU DPT program in your senior year.

## Related Links

Biology - Pre-Physical Therapy, BS Program Page (https://www.sru.edu/ academics/majors-and-minors/biology-pre-physical-therapy/)

Biology Department Page (https://www.sru.edu/academics/colleges-anddepartments/ches/departments/biology/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 3.0 or higher
Core GPA: 2.0 or higher

## Summary*

Code Title Hours

Rock Studies Requirements 45
Other Basic Requirements 0-3
Computer Competency 0-3

| Major Requirements | $59-60$ |
| :--- | ---: |
| Natural Science and Math College-Wide Requirements | 12 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 225 | Calculus I | 4 |
| Select one of the following: | 3 |  |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |


| Subtotal | 16 |
| :--- | :--- |

Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378)
Humanities Inquiry
Select 3 Credits (p. 1378)

| Social Science Inquiry |  |
| :--- | :--- |
| Select 3 Credits (p. 1378) |  |


| Natural Sciences Inquiry |  |  |
| :--- | :--- | :--- |
| CHEM 107 | General Chemistry I | 3 |

CHEM 111 General Chemistry I Lab 1
Physical Sciences Inquiry
PHYS $211 \quad$ General Physics I with Lab

Subtotal17

## Thematic Thread

| Select 12 Credits $(\mathrm{p} .1378)^{2}$ | 12 |
| :--- | :--- |
| Total Hours | 45 |

1 Course offered in multiple subjects; cannot take course in first major subject
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra | $\mathbf{0 - 3}$ |
| Total Hours |  |  |

## Computer Competency

| Code | Title | Hours |
| :---: | :---: | :---: |
| Demonstrat | competency" by one of the followin | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 3 |
| Major Requirements |  |  |
| - 30 major credits must be taken at SRU or PASSHE |  |  |
| - 30 credits must be taken at the 300 level or above |  |  |
| - Students desiring a Biology Major must maintain at least a 2.000 average in Biology. |  |  |
| - Before progressing to a 200 -level course, students must achieve a 2.000 average in Principles of Biology - BIOL 104. |  |  |
| - Students may register in 200-level courses in any order, but must maintain a Biology average of 2.000 or better and must complete the 200 core sequence before progressing to 300 and 400 -level courses in the major. |  |  |
| - A student must repeat any 200-level course that brings the Biology average below a 2.000 . |  |  |
| - Students should complete all 200-level Biology requirements by the end of their sophomore year. |  |  |
| - If you have questions about Financial Aid, visit their website (https:// www.sru.edu/admissions/financial-aid/). |  |  |
| - To view the SRU policy on senior undergraduate students earning graduate credit, click here (https://catalog.sru.edu/academic-policies/senior-undergraduate-students-earning-graduate-credit/). |  |  |


| Code | Title | Hours |
| :---: | :---: | :---: |
| Biology Core Requirements |  |  |
| BIOL 104 | Principles of Biology with Lab ${ }^{1,2}$ | 4 |
| BIOL 201 | General Botany with Lab ${ }^{1,2}$ | 4 |
| BIOL 212 | General Zoology with Lab ${ }^{1,2}$ | 4 |
| BIOL 250 | Genetics with Lab ${ }^{1,2}$ | 4 |
| Subtotal |  | 16 |
| Required Upper-Level Biology |  |  |
| BIOL 492 | Biology Seminar ${ }^{1}$ | 1 |
| Subtotal |  | 1 |
| Upper-Level Biology Electives |  |  |
| Select five cour | the following: | 15 |
| BIOL 325 | Biometry with Lab ${ }^{1}$ |  |
| BIOL 330 | Microbiology/Lab ${ }^{1}$ |  |
| BIOL 335 | Cell Biology/Lab ${ }^{1}$ |  |
| BIOL 340 | Vertebrate Anatomy with Lab ${ }^{1}$ |  |
| BIOL 370 | Molecular Biology with Lab ${ }^{1}$ |  |
| BIOL 401 | Ecology with Lab ${ }^{1}$ |  |
| BIOL 410 | Animal Physiology with Lab ${ }^{1}$ |  |
| BIOL 451 | Plant Physiology/Lab ${ }^{1}$ |  |

## Subtotal

15

## Additional Upper-Level Biology Electives

Select 6 credits which can come from courses not chosen above, or any 300/400 level course listed below. Additional electives may be selected from the Marine Science offerings listed below. PLE courses are only offered during the summer months through our affiliation with Pymatuning Laboratory of Ecology.

Upper-Level Biology Electives (p. 348)
Subtotal 6

| Related Sciences | Chemistry |  |
| :--- | :--- | ---: |
| CHEM 108 | General Chemistry II $^{3}$ | 3 |
| CHEM 112 | General Chemistry II Lab $^{3}$ | 1 |
| CHEM 201 | Organic Chemistry I $^{3}$ | 3 |
| CHEM 202 | Organic Chemistry II $^{3}$ | 3 |
| CHEM 211 | Organic Chemistry Laboratory I $^{3}$ | 1 |
| CHEM 212 | Organic Chemistry Laboratory II $^{3}$ | 1 |
| Subtotal |  | 12 |

Related Sciences - Chemistry Advanced Elective
Select one of the following:

| CHEM 301 | Physical Chemistry $1^{3}$ |
| :--- | :--- |
| CHEM 335 | ${\text { Biochemistry }{ }^{3}}^{3}$ |

Related Sciences - Physics
Select one of the following: 3-4
PHYS 213 General Physics III/ Lab ${ }^{3}$
Any 300/400 level BIOL elective ${ }^{4}$
Independent Study Option
Select one of the following options: 3
Independent Study Option

## CHEM $490 \quad$ Independent Study

Non-Independent Study Option
Select 3 credits in BIOL or MARS course from Additional Upper-
Level Biology Electives below.
Upper-Level Biology Electives (p. 348)

## Major Field Test

Field Test required of all Biology students before graduation

## Total Hours

59-60
Course counts for $50 \%$ of Major requirements and Major GPA
2 Core GPA
3 Course counts for $50 \%$ of Major requirements but not for Major GPA
4 With the exception of BIOL 300, BIOL 314, BIOL 315, BIOL 316, BIOL 319, BIOL 345

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

| Natural Science and Math College-Wide Requirements |  |  |
| :--- | :--- | ---: |
| Code | Title | Hours |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| MATH 225 | Calculus I | 4 |
| PHYS 211 | General Physics I with Lab | 4 |

## Additional Physical Therapy Prerequisite Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| PSYC 105 | Introduction to Psychology | 3 |
| PSYC XXX | See My Rock Audit for options | 3 |

## Additional Upper-Level Biology Electives

| Code | Title | Hours |
| :---: | :---: | :---: |
| BIOL 301 | Forest Ecology ${ }^{1}$ | 3 |
| BIOL 302 | Ecology of Amphibians \& Reptiles/Lab ${ }^{1}$ | 3 |
| BIOL 303 | Behavioral Ecology/Lab ${ }^{1}$ | 3 |
| BIOL 305 | Wetlands and Aquatic Plants/Lab ${ }^{1}$ | 3 |
| BIOL 306 | Freshwater Biomonitoring/Lab ${ }^{1}$ | 3 |
| BIOL 307 | Vertebrate Ecology/Lab ${ }^{1}$ | 3 |
| BIOL 308 | Aquatic Ecosystem Management / Lab ${ }^{1}$ | 3 |
| BIOL 310 | Plant Systematics with Lab ${ }^{1}$ | 3 |
| BIOL 311 | Entomology/Lab ${ }^{1}$ | 3 |
| BIOL 313 | Herpetology/Lab ${ }^{1}$ | 3 |
| BIOL 314 | Medical Parasitology with Lab ${ }^{1}$ | 1 |
| BIOL 315 | Medical Mycology/Lab ${ }^{1}$ | 1 |
| BIOL 316 | Medical Immunology with Lab ${ }^{1}$ | 1 |
| BIOL 317 | Ecology and Fungi ${ }^{1}$ | 3 |
| BIOL 319 | Medical Virology with a Lab | 1 |
| BIOL 320 | Ornithology/Lab ${ }^{1}$ | 3 |
| BIOL 321 | Wildlife Management/Lab ${ }^{1}$ | 3 |
| BIOL 322 | Conservation Biology/Lab ${ }^{1}$ | 3 |
| BIOL 323 | Stream Ecology/Lab ${ }^{1}$ | 3 |
| BIOL 326 | Field Methods in Biogeography/Lab ${ }^{1}$ | 3 |
| BIOL 327 | Limnology/Lab ${ }^{1}$ | 3 |
| BIOL 331 | Mammology/Lab ${ }^{1}$ | 3 |
| BIOL 343 | Embryology with Lab ${ }^{1}$ | 3 |
| BIOL 345 | Introduction to Biological Electron Microscopy ${ }^{1}$ | 2 |
| BIOL 350 | Evolution ${ }^{1}$ | 3 |
| BIOL 356 | Field Ecology / Lab ${ }^{1}$ | 3 |
| BIOL 357 | Environmental Microbiology with Lab ${ }^{1}$ | 4 |
| BIOL 360 | Field Botany ${ }^{1}$ | 3 |
| BIOL 361 | Flora of Western Pennsylvania ${ }^{1}$ | 3 |
| BIOL 371 | Vertebrate Field Zoology ${ }^{1}$ | 3 |
| BIOL 373 | Ichthyology/Lab ${ }^{1}$ | 3 |
| BIOL 375 | Ecology of Fish / Lab ${ }^{1}$ | 3 |
| BIOL 402 | Biogeography/Lab ${ }^{1}$ | 3 |
| BIOL 405 | Animal Physiological Ecology with Lab ${ }^{1}$ | 4 |
| BIOL 412 | Population Biology ${ }^{1}$ | 3 |
| BIOL 430 | Pathogenic Microbiology with Lab ${ }^{1}$ | 3 |
| BIOL 450 | Biology Internship ${ }^{1}$ | 3 |
| BIOL 465 | Plant Anatomy with Lab ${ }^{1}$ | 3 |
| BIOL 470 | Histology with Lab ${ }^{1}$ | 3 |
| BIOL 498 | Selected Topics ${ }^{1}$ | 3 |
| MARS 221 | Marine Invertebrates ${ }^{1}$ | 3 |
| MARS 241 | Marine Biology ${ }^{1}$ | 3 |



## Co-Curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Volunteering
2. Job Shadowing

## Doctor of Physical Therapy (DPT) Prerequisite Admission Requirements

## For Application Requirements

Please refer to Slippery Rock University's Physical Therapy (Doctor of Physical Therapy) website for requirements: www.sru.edu/PT (http:// www.sru.edu/PT/)
Liberal Studies and Rock Studies
Code $\quad$ Title Hours

Prerequisite Courses - SRU Physical Therapy
Select one of the following:

| BIOL 216 | Anatomy and Physiology I with Lab |  |
| :--- | :--- | ---: |
| \& BIOL 217 | and Anatomy and Physiology II with Lab |  |
| BIOL 340 | Vertebrate Anatomy with Lab |  |
| \& BIOL 410 | and Animal Physiology with Lab |  |
| CHEM 107 | General Chemistry I | 4 |
| \& CHEM 111 | and General Chemistry I Lab |  |
| CHEM 108 | General Chemistry II | 4 |
| \& CHEM 112 | and General Chemistry II Lab |  |

Select one of the following:
PHYS 201 Elements of Physics I with Lab
\& PHYS 202 and Elements of Physics II/ Lab


## Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall |  |  |
| ENGL 102 | Critical Writing | 3 |
| BIOL 104 | Principles of Biology with Lab | 4 |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | $\mathbf{1}$ |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| INDS 101 | FYRST Seminar ${ }^{*}$ | 1 |
|  | Hours | $\mathbf{1 5}$ |

## Spring

ENGL 104 Critical Reading 3
Select one 200-level Core Course: 4

| BIOL 201 | General Botany with Lab |  |
| :---: | :--- | ---: |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab | 3 |
| CHEM 108 | General Chemistry II | $\mathbf{1}$ |
| CHEM 112 | General Chemistry II Lab | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) | $\mathbf{1 4}$ |  |

## Second Year <br> Fall

Select one of the following:

| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |


| Select one 200-level Core Course: |  | 4 |
| :---: | :---: | :---: |
| BIOL 201 | General Botany with Lab |  |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab |  |
| CHEM 201 | Organic Chemistry I | 3 |
| CHEM 211 | Organic Chemistry Laboratory I | 1 |
| Humanities Inquiry (p. 1378) |  | 3 |
| PSYC 105 | Introduction to Psychology (Recommended for Social Science Inquiry Requirement) | 3 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 17 |
| Spring |  |  |
| Select one 200-level Core Course: |  | 4 |
| BIOL 201 | General Botany with Lab |  |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab |  |
| CHEM 202 | Organic Chemistry II | 3 |
| CHEM 212 | Organic Chemistry Laboratory II | 1 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 14 |


| Third Year |  |  |
| :---: | :---: | :---: |
| Fall |  |  |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| CHEM 335 or CHEM 301 | Biochemistry I or Physical Chemistry 1 | 3 |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
|  | Hours | 15 |
| Spring |  |  |
| MATH 225 | Calculus I | 4 |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| BIOL 330 | Microbiology/Lab | 3 |
| BIOL 325 | Biometry with Lab | 3 |
| Free Elective |  | 2 |
|  | Hours | 15 |

## Fourth Year

Fall

| PHYS 211 | General Physics I with Lab | 4 |
| :--- | :--- | ---: |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| BIOL 300+ | Upper Level BIOL Elective | $\mathbf{3}$ |
| Free Elective |  | 3 |
|  | Hours | $\mathbf{1 6}$ |

## Spring

PSYC XXX See My Rock Audit for options 3
PHYS 213 General Physics III/ Lab ${ }^{3} \quad 4$
BIOL 300+ Upper Level BIOL Elective 3
BIOL 490 Independent Study ${ }^{4} 3$

| BIOL 492 | Biology Seminar | $\mathbf{1}$ |
| :--- | :--- | ---: |
|  | Hours | $\mathbf{1 4}$ |
|  | Total Hours** | $\mathbf{1 2 0}$ |

1 Course offered in multiple subjects; cannot take course in first major subject.
Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread.
4
3
or BIOL 300/400 level (except BIOL 300, BIOL 314, BIOL 315, BIOL 316, BIOL 319, or BIOL 345).

* Students are encouraged to take INDS 101 as a Free Elective.

Major Code: 6108
Concentration Code: PRFL
Revised Date: 07.15.2021
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Biology, Bachelor of Science (BS) Concentration in Professional / PrePhysician Assistant (SRU) (3+2) Biology Program Learning Outcomes

- Critical Thinking/Problem Solving: Respective program graduates should demonstrate synthetic, analytical, and interpretive skills.
- Knowledge/Content: Graduates should demonstrate that they are founded in the discipline at the molecular, cellular, organismal, population, community, and ecosystem levels and that they have a fundamental understanding of chemistry, physics, and mathematics.
- Practical Skills: Graduates will demonstrate proficiency in laboratory related skills.
- Communication Skills: Respective program graduates should demonstrate strong oral, digital, and written communication skills.
- Professional Attitude: Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures.
- Degree Program Writing Competency: Graduates will demonstrate proficiency in writing based on longitudinal data as opposed to point in time data.


## What are your options?

## Pre-Physician Assistant SRU 3+2: Earn a Master of Science degree in

 Physician Assistant Studies in five years rather than six. In the first three years, you complete your major courses and pre-requisites for the SRU PA program. At the end of your second year, you apply for admission into the SRU PA program. If accepted, your first year in the SRU PA program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.Pre-Physician Assistant (SRU Traditional): Complete the requirements
for your major and the pre-requisites for the SRU PA program and apply to the SRU PA program in your senior year.

## Related Links

Biology - Pre-Physician Assistant, BS Program Pag (https://www.sru.edu/ academics/majors-and-minors/biology-pre-physician-assistant/)e

Biology Department Page (https://www.sru.edu/academics/colleges-anddepartments/ches/departments/biology/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

1st Major: Biology

- Overall GPA: 2.00 or higher
- Major GPA (only includes Biology courses): 2.00 or higher


## 2nd Major: Pre-PA SRU 3+2 Biology

- Overall GPA: 3.25 or higher

| Summary* $\quad$ Title |  |
| :--- | ---: |
| Code | Hours |
| Rock Studies Requirements | 45 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | 41 |
| Major Requirements | 12 |
| Natural Science and Math College-Wide Requirements | 33 |
| Electives |  |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. However, because this |  |
| is a pre-professional program, credits taken during the $1^{\text {st }}$ year of the |  |
| graduate program are applied toward the undergraduate credit hours to |  |
| meet the 120 credits required for your undergraduate degree. |  |

## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 225 | Calculus I | 4 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 16 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credit | 78) | 3 |

Humanities Inquiry

| Select 3 Credits (p. 1378) | 3 |  |
| :--- | :--- | ---: |
| Social Science Inquiry |  |  |
| PSYC 105 | Introduction to Psychology | 3 |
| Natural Sciences Inquiry |  |  |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| Physical Sciences Inquiry |  |  |
| PHYS 211 | General Physics I with Lab | 4 |
| Subtotal | 17 |  |
| Thematic Thread |  |  |
| Select 12 Credits $($ p. 1378) |  |  |
| Total Hours | 45 |  |

1 Course offered in multiple subjects; cannot take course in first major subject
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300-level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra | $\mathbf{0 - 3}$ |
| Total Hours |  |  |

## Computer Competency

| Code | Title | Hours |
| :--- | :--- | ---: |
| Demonstrate "computer competency" by one of the following: | $0-3$ |  |
| Pass Computer Competency Exam OR |  |  |

PE 202 Technology for Wellness
Total Hours
0-3

## Major Requirements

- Students desiring a Biology Major must maintain at least a 2.000 average in Biology.
- Before progressing to a 200-level course, students must achieve a 2.000 average in Principles of Biology - BIOL 104.
- Students may register in 200-level courses in any order, but must maintain a Biology average of 2.000 or better and must complete the 200 core sequence before progressing to 300 and 400-level courses in the major.
- A student must repeat any 200-level course that brings the Biology average below a 2.000 .
- Students should complete all 200-level Biology requirements by the end of their sophomore year.
- If you choose to pursue Pre-Physician Assistant SRU $3+2$ Biology and are not accepted into the PA program, then additional coursework is required to complete a first major of Biology-Professional. Please refer to the Biology-Professional Curriculum Guide.
- If you have questions about Financial Aid, visit their website (https:// www.sru.edu/admissions/financial-aid/).
- To view the SRU policy on senior undergraduate students earning graduate credit, click here (https://catalog.sru.edu/academic-policies/senior-undergraduate-students-earning-graduate-credit/).

| Code | Title | Hours |
| :--- | :--- | ---: |
| Biology Core Requirements |  |  |
| BIOL 104 | Principles of Biology with Lab | 4 |
| BIOL 201 | General Botany with Lab | 4 |
| BIOL 212 | General Zoology with Lab | 4 |
| BIOL 250 | Genetics with Lab | 4 |
| Subtotal |  | 16 |


| Required Upper-Level Biology |  |  |
| :--- | :--- | :--- |
| BIOL 325 | Biometry with Lab | 3 |
| BIOL 330 | Microbiology/Lab | 3 |
| BIOL 492 | Biology Seminar | 1 |
| Subtotal |  | 7 |

## Upper Division Elective Courses

Select two of the following:

| BIOL 335 | Cell Biology/Lab |
| :--- | :--- |
| BIOL 340 | Vertebrate Anatomy with Lab |
| BIOL 370 | Molecular Biology with Lab |
| BIOL 410 | Animal Physiology with Lab |
| Subtotal | 6 |


| Required Courses from other Departments |  |  |
| :--- | :--- | ---: |
| CHEM 108 | General Chemistry II | 3 |
| CHEM 112 | General Chemistry II Lab | 1 |
| CHEM 201 | Organic Chemistry I | 3 |
| CHEM 202 | Organic Chemistry II | 3 |
| CHEM 211 | Organic Chemistry Laboratory I | 1 |
| CHEM 212 | Organic Chemistry Laboratory II | 1 |
| Subtotal |  | 12 |

Major Field Test
Field Test required of all Biology students before graduation
Total Hours

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

Natural Science and Math College-Wide Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| MATH 225 | Calculus I | 4 |
| PHYS 211 | General Physics I with Lab | 4 |


| Additional Physician Assistant Prerequisite Course |  |  |
| :--- | :--- | ---: |
| Code | Title | Hours |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| ERS 250 | Medical Terminology | 3 |
| or HCAM 250 | Medical Terminology for Healthcare |  |
|  | Administrators |  |

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Volunteering
2. Job Shadowing

## Physician Assistant Studies (Master of Science in Physician Assistant Studies) Prerequisite Admission Requirements - Pre- Physician Assistant 3+2

## For Application Requirements

Please refer to Slippery Rock University's Physician Assistant Studies (Master of Science in Physician Assistant Studies) website for requirements:http://www.sru.edu/pa (http://www.sru.edu/pa/)

## Liberal Studies and Rock Studies

| Code | Title | Hours |
| :---: | :---: | :---: |
| Prerequisite Courses - SRU Physician Assistant |  |  |
| BIOL 104 | Principles of Biology with Lab | 4 |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| BIOL 250 | Genetics with Lab | 4 |
| $\begin{aligned} & \text { BIOL } 210 \\ & \quad \text { or BIOL } 330 \end{aligned}$ | Medical Microbiology with Lab Microbiology/Lab | 3 |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
| CHEM 108 <br> \& CHEM 112 | General Chemistry II and General Chemistry II Lab | 4 |
| CHEM 201 | Organic Chemistry I | 3 |
| Inferential Statistics Course ${ }^{1}$ |  | 3 |
| PSYC 105 | Introduction to Psychology | 3 |
| ERS 250 or HCAM 250 | Medical Terminology <br> Medical Terminology for Healthcare <br> Administrators | 3 |

Total Hours
1 Any statistics course with inferential statistics embedded. See My Rock Audit for specific courses.

## Pre-Physician Assistant SRU 3+2 Requirements <br> If any of these requirements are not met, the $3+2$ designation will be removed from the student's record:

1. A 3.25 or higher overall GPA must be maintained by the student.
2. The student can only be enrolled in the Pre-Physician Assistant SRU $3+2$ program for a maximum of three (3) years, full-time continuous enrollment (fall/spring).

## Provision

Should a Pre-Physician Assistant SRU 3+2 student be unsuccessful in completing the $1^{\text {st }}$ two semesters (summer or fall) of the Physician Assistant Program and wants to complete the original undergraduate degree, it is solely up to the discretion of the undergraduate program Department Chair to determine which, if any, Physician Assistant courses will count toward the completion of his/her undergraduate degree. In addition, students must complete any unfulfilled requirements of their undergraduate major. Students may still apply to the Physician Assistant Studies Program with an earned Bachelor's degree.

BIOLOGY - BS (6108)
PRE-PA SRU $3+2$ (6SPB)
This program is effective as of Fall 2019.
Revised 10-2019
UCC 2/5/2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Recommended Three-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| ENGL 102 | Critical Writing | 3 |
| BIOL 104 | Principles of Biology with Lab | 4 |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| INDS 101 | FYRST Seminar* | 1 |
|  | Hours | 15 |
| Spring |  |  |
| ENGL 104 | Critical Reading | 3 |
| Select one 200-level Core Course: |  | 4 |
| BIOL 201 | General Botany with Lab |  |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab |  |
| CHEM 108 | General Chemistry II | 3 |
| CHEM 112 | General Chemistry II Lab | 1 |
| Creative and Aesthetic Inquiry |  | 3 |
| Humanities Inquiry |  | 3 |
|  | Hours | 17 |

## Second Year

Fall
Select one of the following: 3

| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :---: | :--- | :---: |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy | 3 |
| PSYC 105 | Introduction to Psychology | 3 |
| Thematic Thread (\#1) | 4 |  |
| Select one 200-level Core Course: |  |  |


| BIOL 201 | General Botany with Lab |  |
| ---: | :--- | ---: |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab | 3 |
| CHEM 201 | Organic Chemistry I | 1 |
| CHEM 211 | Organic Chemistry Laboratory I | $\mathbf{1 7}$ |
|  | Hours |  |
| Spring |  |  |

Thematic Thread (\#2) 3
Thematic Thread (\#3) 3

Select one 200-level Core Course: 4

| BIOL 201 | General Botany with Lab |  |
| :--- | :--- | ---: |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab |  |
| CHEM 202 | Organic Chemistry II | 3 |
| CHEM 212 | Organic Chemistry Laboratory II | $\mathbf{1}$ |
|  | Hours | $\mathbf{1 4}$ |

## Third Year

Fall

| Thematic Thread (\#4) | 3 |  |
| :--- | :--- | ---: |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| BIOL 492 | Biology Seminar | 1 |
| MATH 225 | Calculus I | $\mathbf{4}$ |
|  | Hours | $\mathbf{1 7}$ |

Spring

| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| :--- | :--- | :--- |
| BIOL 325 | Biometry with Lab | 3 |
| BIOL 330 | Microbiology/Lab | 3 |
| ERS 250 | Medical Terminology |  |
| or HCAM 250 | or Medical Terminology for Healthcare | 3 |
|  | Administrators |  |


| PHYS 211 | General Physics I with Lab | 4 |
| :--- | :--- | ---: |
|  | Hours | $\mathbf{1 6}$ |

## Fourth Year

Fall
PA Program Didactic

|  | Hours | $\mathbf{0}$ |
| :--- | ---: | ---: |
| Spring |  |  |
| PA Program Didactic | Hours | $\mathbf{0}$ |
|  | Total Hours** | $\mathbf{9 6}$ |

1 Course offered in multiple subjects; cannot take course in first major subject.

* Students are encouraged to take INDS 101 as a Free Elective.

Major Code: 6108
Concentration Code: 6SPB
Revised Date: 07.15.2021
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Biology, Bachelor of Science (BS) - Concentration in Professional / Pre-Physician Assistant (SRU) (Traditional)

## Biology Program Learning Outcomes

- Critical Thinking/Problem Solving: Respective program graduates should demonstrate synthetic, analytical, and interpretive skills.
- Knowledge/Content: Graduates should demonstrate that they are founded in the discipline at the molecular, cellular, organismal, population, community, and ecosystem levels and that they have a fundamental understanding of chemistry, physics, and mathematics.
- Practical Skills: Graduates will demonstrate proficiency in laboratory related skills.
- Communication Skills: Respective program graduates should demonstrate strong oral, digital, and written communication skills.
- Professional Attitude: Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures.
- Degree Program Writing Competency: Graduates will demonstrate proficiency in writing based on longitudinal data as opposed to point in time data.


## What are your options?

Pre-Physician Assistant SRU 3+2: Earn a Master of Science degree in Physician Assistant Studies in five years rather than six. In the first three years, you complete your major courses and pre-requisites for the SRU PA program. At the end of your second year, you apply for admission into the SRU PA program. If accepted, your first year in the SRU PA program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

Pre-Physician Assistant (SRU Traditional): Complete the requirements for your major and the pre-requisites for the SRU PA program and apply to the SRU PA program in your senior year.

## Related Links

Biology - Pre-Physician Assistant, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/biology-pre-physicianassistant/)

Biology Department Page (https://www.sru.edu/academics/colleges-anddepartments/ches/departments/biology/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher
Core GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 45 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | $59-60$ |
| Natural Science and Math College-Wide Requirements | 12 |
| Electives | 16 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 225 | Calculus I | 4 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 16 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Sciences Inquiry |  |  |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| Physical Sciences Inquiry |  |  |
| PHYS 211 | General Physics I with Lab | 4 |
| Subtotal |  | 17 |
| Thematic Thread |  |  |
| Select 12 Credits (p. 1378) ${ }^{2}$ |  | 12 |
| Total Hours |  | 45 |

1 Course offered in multiple subjects; cannot take course in first major subject
2
From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |

## Computer Competency

| Code | Title | Hours |
| :---: | :---: | :---: |
| Demonstrate "computer competency" by one of the following: |  | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 credits must be taken at the 300 level or above
- Students desiring a Biology Major must maintain at least a 2.000 average in Biology.
- Before progressing to a 200-level course, students must achieve a 2.000 average in Principles of Biology - BIOL 104.
- Students may register in 200-level courses in any order, but must maintain a Biology average of 2.000 or better and must complete the 200 core sequence before progressing to 300 and 400-level courses in the major.
- A student must repeat any 200-level course that brings the Biology average below a 2.000 .
- Students should complete all 200-level Biology requirements by the end of their sophomore year.
- If you have questions about Financial Aid, visit their website (https:// www.sru.edu/admissions/financial-aid/).
- To view the SRU policy on senior undergraduate students earning graduate credit, click here (https://catalog.sru.edu/academic-policies/senior-undergraduate-students-earning-graduate-credit/).

| Code | Title | Hours |
| :--- | :--- | :---: |
| Biology Core Requirements |  |  |
| BIOL 104 | Principles of Biology with Lab |  |
| BIOL 201 | General Botany with Lab $^{1,2}$ | 4 |
| BIOL 212 | General Zoology with Lab $^{1,2}$ | 4 |
| BIOL 250 | Genetics with Lab $^{1,2}$ | 4 |

Subtotal 16
Required Upper-Level Biology
BIOL $492 \quad$ Biology Seminar $^{1} \quad 1$
Subtotal 1

Upper-Level Biology Electives
Select five courses of the following: 15

| BIOL 325 | Biometry with Lab ${ }^{1}$ |
| :--- | :--- |
| BIOL 330 | Microbiology/Lab ${ }^{1}$ |
| BIOL 335 | Cell Biology/Lab $^{1}$ |
| BIOL 340 | Vertebrate Anatomy with Lab $^{1}$ |
| BIOL 370 | Molecular Biology with Lab $^{1}$ |
| BIOL 401 | Ecology with Lab $^{1}$ |
| BIOL 410 | Animal Physiology with Lab ${ }^{1}$ |
| BIOL 451 | Plant Physiology/Lab ${ }^{1}$ |
| Subtotal |  |

## Additional Upper-Level Biology Electives

Select 6 credits which can come from courses not chosen above, 6 or any 300/400 level course listed below. Additional electives may be selected from the Marine Science offerings listed below. PLE courses are only offered during the summer months through our affiliation with Pymatuning Laboratory of Ecology.

Upper-Level Biology Electives (p. 356)
Subtotal 6

Related Sciences - Chemistry

| CHEM 108 | General Chemistry II $^{3}$ | 3 |
| :--- | :--- | ---: |
| CHEM 112 | General Chemistry II Lab |  |
| CHEM 201 | Organic Chemistry I |  |
| CHEM 202 | Organic Chemistry II |  |
| CHEM 211 | Organic Chemistry Laboratory I $^{3}$ | 3 |
| CHEM 212 | Organic Chemistry Laboratory II $^{3}$ | 3 |
| Subtotal |  | 1 |

Related Sciences - Chemistry Advanced Elective
Select one of the following:
CHEM $301 \quad$ Physical Chemistry $1^{3}$
CHEM 335 Biochemistry ${ }^{3}$
Related Sciences - Physics
Select one of the following:
PHYS 213 General Physics III/ Lab ${ }^{3}$
Any 300/400 level BIOL elective ${ }^{4}$
Independent Study Option
Select one of the following options: 3

Independent Study Option
CHEM 490 Independent Study
Non-Independent Study Option
Select 3 credits in BIOL or MARS course from Additional Upper-
Level Biology Electives below.
Upper-Level Biology Electives (p. 356)

## Major Field Test

Field Test required of all Biology students before graduation

| Total Hours | 59-60 |
| :--- | :--- |

1 Course counts for $50 \%$ of Major requirements and Major GPA
2 Core GPA

3 Course counts for $50 \%$ of Major requirements but not for Major GPA
4 With the exception of BIOL 300, BIOL 314, BIOL 315, BIOL 316, BIOL 319, BIOL 345

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

| Natural Science and Math College-Wide Requirements |  |  |
| :--- | :--- | ---: |
| Code | Title | Hours |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| MATH 225 | Calculus I | 4 |
| PHYS 211 | General Physics I with Lab | 4 |

## Additional Physician Assistant Prerequisite Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| ERS 250 | Medical Terminology | 3 |
| or HCAM 250 | Medical Terminology for Healthcare |  |
|  | Administrators |  |

## Additional Upper-Level Biology Electives

| Code | Title | Hours |
| :---: | :---: | :---: |
| BIOL 301 | Forest Ecology ${ }^{1}$ | 3 |
| BIOL 302 | Ecology of Amphibians \& Reptiles/Lab ${ }^{1}$ | 3 |
| BIOL 303 | Behavioral Ecology/Lab ${ }^{1}$ | 3 |
| BIOL 305 | Wetlands and Aquatic Plants/Lab ${ }^{1}$ | 3 |
| BIOL 306 | Freshwater Biomonitoring/Lab ${ }^{1}$ | 3 |
| BIOL 307 | Vertebrate Ecology/Lab ${ }^{1}$ | 3 |
| BIOL 308 | Aquatic Ecosystem Management / Lab ${ }^{1}$ | 3 |
| BIOL 310 | Plant Systematics with Lab ${ }^{1}$ | 3 |
| BIOL 311 | Entomology/Lab ${ }^{1}$ | 3 |
| BIOL 313 | Herpetology/Lab ${ }^{1}$ | 3 |
| BIOL 314 | Medical Parasitology with Lab ${ }^{1}$ | 1 |
| BIOL 315 | Medical Mycology/Lab ${ }^{1}$ | 1 |
| BIOL 316 | Medical Immunology with Lab ${ }^{1}$ | 1 |
| BIOL 317 | Ecology and Fungi ${ }^{1}$ | 3 |
| BIOL 319 | Medical Virology with a Lab | 1 |
| BIOL 320 | Ornithology/Lab ${ }^{1}$ | 3 |
| BIOL 321 | Wildlife Management/Lab ${ }^{1}$ | 3 |
| BIOL 322 | Conservation Biology/Lab ${ }^{1}$ | 3 |
| BIOL 323 | Stream Ecology/Lab ${ }^{1}$ | 3 |
| BIOL 326 | Field Methods in Biogeography/Lab ${ }^{1}$ | 3 |
| BIOL 327 | Limnology/Lab ${ }^{1}$ | 3 |
| BIOL 331 | Mammology/Lab ${ }^{1}$ | 3 |
| BIOL 343 | Embryology with Lab ${ }^{1}$ | 3 |
| BIOL 345 | Introduction to Biological Electron Microscopy ${ }^{1}$ | 2 |
| BIOL 350 | Evolution ${ }^{1}$ | 3 |
| BIOL 356 | Field Ecology / Lab ${ }^{1}$ | 3 |
| BIOL 357 | Environmental Microbiology with Lab ${ }^{1}$ | 4 |
| BIOL 360 | Field Botany ${ }^{1}$ | 3 |
| BIOL 361 | Flora of Western Pennsylvania ${ }^{1}$ | 3 |


| BIOL 371 | Vertebrate Field Zoology ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| BIOL 373 | Ichthyology/Lab ${ }^{1}$ | 3 |
| BIOL 375 | Ecology of Fish / Lab ${ }^{1}$ | 3 |
| BIOL 402 | Biogeography/Lab ${ }^{1}$ | 3 |
| BIOL 405 | Animal Physiological Ecology with Lab ${ }^{1}$ | 4 |
| BIOL 412 | Population Biology ${ }^{1}$ | 3 |
| BIOL 430 | Pathogenic Microbiology with Lab ${ }^{1}$ | 3 |
| BIOL 450 | Biology Internship ${ }^{1}$ | 3 |
| BIOL 465 | Plant Anatomy with Lab ${ }^{1}$ | 3 |
| BIOL 470 | Histology with Lab ${ }^{1}$ | 3 |
| BIOL 498 | Selected Topics ${ }^{1}$ | 3 |
| MARS 221 | Marine Invertebrates ${ }^{1}$ | 3 |
| MARS 241 | Marine Biology ${ }^{1}$ | 3 |
| MARS 250 | Wetland Ecology ${ }^{1}$ | 3 |
| MARS 260 | Marine Ecology ${ }^{1}$ | 3 |
| MARS 270 | Coastal Vegetation ${ }^{1}$ | 3 |
| MARS 298 | Selected Topics ${ }^{1}$ | 3 |
| MARS 300 | Behavior of Marine Organisms ${ }^{1}$ | 3 |
| MARS 310 | The Mammals of Coastal Ecosystems ${ }^{1}$ | 3 |
| MARS 320 | Marine Microbiology ${ }^{1}$ | 3 |
| MARS 330 | Tropical Invertebrates ${ }^{1}$ | 3 |
| MARS 342 | Marine Botany ${ }^{1}$ | 3 |
| MARS 343 | Marine Ichthyology ${ }^{1}$ | 3 |
| MARS 344 | Anatomy of Marine Chordates ${ }^{1}$ | 3 |
| MARS 345 | Ornithology ${ }^{1}$ | 3 |
| MARS 350 | Physiology of Marine Invertebrates ${ }^{1}$ | 3 |
| MARS 398 | Selected Topics ${ }^{1}$ | 3 |
| MARS 420 | Marine Micropaleontology ${ }^{1}$ | 3 |
| MARS 431 | Ecology of Marine Plankton ${ }^{1}$ | 3 |
| MARS 441 | Biology of Molluscs ${ }^{1}$ | 3 |
| MARS 490 | Independent Study ${ }^{1}$ | 3 |
| MARS 491 | Coral Reef Ecology ${ }^{1}$ | 3 |
| MARS 492 | Marine Mammals ${ }^{1}$ | 3 |
| MARS 498 | Selected Topics ${ }^{1}$ | 3 |
| MARS 500 | Problems in Marine Science ${ }^{1}$ | 3 |
| 1 Course counts for 50\% of Major requirements and Major GPA |  |  |
| Co-Curric | d Experiential Learning |  |

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Volunteering
2. Job Shadowing

## Physician Assistant Studies (Master of Science in Physician Assistant Studies) Prerequisite Admission Requirements

## For Application Requirements

Please refer to Slippery Rock University's Physician Assistant Studies
(Master of Science in Physician Assistant Studies) website for requirements: http://www.sru.edu/pa (http://www.sru.edu/pa/)

| Liberal Studies and Rock Studies |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| Prerequisite Courses - SRU Physician Assistant |  |  |
| BIOL 104 | Principles of Biology with Lab | 4 |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| BIOL 250 | Genetics with Lab | 4 |
| $\begin{aligned} & \text { BIOL } 210 \\ & \text { or BIOL } 330 \end{aligned}$ | Medical Microbiology with Lab Microbiology/Lab | 3 |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
| CHEM 108 <br> \& CHEM 112 | General Chemistry II and General Chemistry II Lab | 4 |
| CHEM 201 | Organic Chemistry I | 3 |
| Inferential Statistics Course ${ }^{1}$ |  | 3 |
| PSYC 105 | Introduction to Psychology | 3 |
| $\begin{aligned} & \text { ERS } 250 \\ & \text { or HCAM } 250 \end{aligned}$ | Medical Terminology <br> Medical Terminology for Healthcare <br> Administrators | 3 |
| Total Hours |  | 37 |

1 Any statistics course with inferential statistics embedded. See My Rock Audit for specific courses.

BIOLOGY - PROFESSIONAL - BS (6108)
PRE-PA Traditional
Effective Fall 2019
Revised 12.15.2020
UCC 2/5/2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| ENGL 102 | Critical Writing | 3 |
| BIOL 104 | Principles of Biology with Lab | 4 |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| INDS 101 | FYRST Seminar * | 1 |
|  | Hours | 15 |
| Spring |  |  |
| ENGL 104 | Critical Reading | 3 |


| Select one 200-level Core Course: |  | 4 |
| :--- | :--- | ---: |
| BIOL 201 | General Botany with Lab |  |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab | 3 |
| CHEM 108 | General Chemistry II | 1 |
| CHEM 112 | General Chemistry II Lab | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) | $\mathbf{1 4}$ |  |

## Second Year

Fall
Select one of the following: 3

| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |

Select one 200-level Core Course: 4

| BIOL 201 | General Botany with Lab |  |
| :--- | :--- | :--- |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab |  |
| CHEM 201 | Organic Chemistry I | 3 |
| CHEM 211 | Organic Chemistry Laboratory I | 1 |
| Humanities Inquiry | (p. 1378) | 3 |
| PSYC 105 | Introduction to Psychology (Recommended | 3 |
|  | for Social Science Inquiry Requirement) |  |

Declare a Thematic Thread ${ }^{2}$
Hours 17

## Spring

Thematic Thread (\#1) 3
Select one 200-level Core Course: 4

| BIOL 201 | General Botany with Lab |  |
| ---: | :--- | ---: |
| BIOL 212 | General Zoology with Lab |  |
| BIOL 250 | Genetics with Lab | 3 |
| CHEM 202 | Organic Chemistry II | 1 |
| CHEM 212 | Organic Chemistry Laboratory II | 3 |
| Thematic Thread Requirement (p. 1378) | $\mathbf{1 4}$ |  |
|  | Hours |  |

## Third Year

Fall
Thematic Thread Requirement (p. 1378) 3
Thematic Thread Requirement (p. 1378) 3
CHEM 335 Biochemistry I 3
or CHEM 301 or Physical Chemistry 1
BIOL 300+ Upper Level BIOL Elective 3

| BIOL $300+$ | Upper Level BIOL Elective | 3 |
| :--- | :--- | ---: |
|  | Hours |  |


| Spring |  |
| :--- | :--- |
| MATH 225 | Calculus I |

BIOL 216 Anatomy and Physiology I with Lab 3
BIOL 325 Biometry with Lab 3
BIOL 330 Microbiology/Lab 3

| Free Elective | 2 |
| :--- | ---: |
|  | 15 |


| Fourth Year |  |  |
| :---: | :---: | :---: |
| Fall |  |  |
| PHYS 211 | General Physics I with Lab | 4 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| Free Elective |  | 3 |
|  | Hours | 16 |
| Spring |  |  |
| $\begin{aligned} & \text { ERS } 250 \\ & \quad \text { or HCAM } 250 \end{aligned}$ | Medical Terminology or Medical Terminology for Healthcare Administrators | 3 |
| PHYS 213 | General Physics III/ Lab ${ }^{3}$ | 4 |
| BIOL 300+ | Upper Level BIOL Elective | 3 |
| BIOL 490 | Independent Study ${ }^{4}$ | 3 |
| BIOL 492 | Biology Seminar | 1 |
|  | Hours | 14 |
|  | Total Hours** | 120 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread.
3 or BIOL 300/400 level (except BIOL 300, BIOL 314, BIOL 315, BIOL 316, BIOL 319, or BIOL 345.
4 or BIOL 300+: Upper Level BIOL Elective

* Students are encouraged to take INDS 101 as a Free Elective

Major Code: 6108
Concentration Code: PRFL
Revised Date: 07.15.2021
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Biology, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Biology, Minor Program Page (https://www.sru.edu/academics/majors-and-minors/biology/)

Biology Department Page (https://www.sru.edu/academics/colleges-anddepartments/ches/departments/biology/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirements
Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU -"C" average is required in core (BIOL 104, BIOL 201, BIOL 212, BIOL 250) to progress to the next level course
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| Choose one 100 level course with lab: |  | 4 |
| BIOL 101 <br> \& BIOL 100 | General Biology and Introductory Biology Laboratory |  |
| BIOL 104 | Principles of Biology with Lab ${ }^{1}$ |  |
| Take each of the following in any order: |  |  |
| BIOL 201 | General Botany with Lab | 4 |
| BIOL 212 | General Zoology with Lab | 4 |
| BIOL 250 | Genetics with Lab | 4 |
| Electives (300 level or above) |  |  |
| Select a minimum of six credits from 300 Level or Above Electives |  | 6 |
| 300 Level or | Electives (p. 358) |  |

## Total Hours

1 BIOL 104 is preferred for SRU students

## 300 Level or above Electives

| Code | Title | Hours |
| :--- | :--- | ---: |
| BIOL 301 | Forest Ecology | 3 |
| BIOL 302 | Ecology of Amphibians \& Reptiles/Lab | 3 |
| BIOL 303 | Behavioral Ecology/Lab | 3 |
| BIOL 305 | Wetlands and Aquatic Plants/Lab | 3 |
| BIOL 306 | Freshwater Biomonitoring/Lab | 3 |
| BIOL 307 | Vertebrate Ecology/Lab | 3 |
| BIOL 308 | Aquatic Ecosystem Management / Lab | 3 |
| BIOL 310 | Plant Systematics with Lab | 3 |
| BIOL 311 | Entomology/Lab | 3 |
| BIOL 313 | Herpetology/Lab | 3 |
| BIOL 314 | Medical Parasitology with Lab | 1 |
| BIOL 315 | Medical Mycology/Lab | 1 |
| BIOL 316 | Medical Immunology with Lab | 1 |
| BIOL 317 | Ecology and Fungi | 3 |
| BIOL 319 | Medical Virology with a Lab | 1 |
| BIOL 320 | Ornithology/Lab | 3 |
| BIOL 321 | Wildlife Management/Lab | 3 |
| BIOL 322 | Conservation Biology/Lab | 3 |
| BIOL 323 | Stream Ecology/Lab | 3 |
| BIOL 325 | Biometry with Lab | 3 |
| BIOL 326 | Field Methods in Biogeography/Lab | 3 |
| BIOL 327 | Limnology/Lab | 3 |
| BIOL 330 331 | Microbiology/Lab | 3 |
| BIOL 335 | Mammology/Lab | 3 |
| BIOL 340 | Cell Biology/Lab | 3 |
| BIOL 343 | Vertebrate Anatomy with Lab | 3 |
|  | Embryology with Lab | 3 |


| BIOL 345 | Introduction to Biological Electron Microscopy | 2 |
| :---: | :---: | :---: |
| BIOL 350 | Evolution | 3 |
| BIOL 356 | Field Ecology / Lab | 3 |
| BIOL 357 | Environmental Microbiology with Lab | 4 |
| BIOL 360 | Field Botany | 3 |
| BIOL 361 | Flora of Western Pennsylvania | 3 |
| BIOL 370 | Molecular Biology with Lab | 3 |
| BIOL 371 | Vertebrate Field Zoology | 3 |
| BIOL 373 | Ichthyology/Lab | 3 |
| BIOL 375 | Ecology of Fish / Lab | 3 |
| BIOL 400 | Disease Ecology | 3 |
| BIOL 401 | Ecology with Lab | 3 |
| BIOL 402 | Biogeography/Lab | 3 |
| BIOL 405 | Animal Physiological Ecology with Lab | 4 |
| BIOL 410 | Animal Physiology with Lab | 3 |
| BIOL 412 | Population Biology | 3 |
| BIOL 430 | Pathogenic Microbiology with Lab | 3 |
| BIOL 450 | Biology Internship | 3 |
| BIOL 451 | Plant Physiology/Lab | 3 |
| BIOL 465 | Plant Anatomy with Lab | 3 |
| BIOL 470 | Histology with Lab | 3 |
| BIOL 498 | Selected Topics | 3 |
| MARS 221 | Marine Invertebrates | 3 |
| MARS 241 | Marine Biology | 3 |
| MARS 250 | Wetland Ecology | 3 |
| MARS 260 | Marine Ecology | 3 |
| MARS 270 | Coastal Vegetation | 3 |
| MARS 298 | Selected Topics | 3 |
| MARS 300 | Behavior of Marine Organisms | 3 |
| MARS 310 | The Mammals of Coastal Ecosystems | 3 |
| MARS 320 | Marine Microbiology | 3 |
| MARS 330 | Tropical Invertebrates | 3 |
| MARS 342 | Marine Botany | 3 |
| MARS 343 | Marine Ichthyology | 3 |
| MARS 344 | Anatomy of Marine Chordates | 3 |
| MARS 345 | Ornithology | 3 |
| MARS 350 | Physiology of Marine Invertebrates | 3 |
| MARS 398 | Selected Topics | 3 |
| MARS 420 | Marine Micropaleontology | 3 |
| MARS 431 | Ecology of Marine Plankton | 3 |
| MARS 441 | Biology of Molluscs | 3 |
| MARS 490 | Independent Study | 3 |
| MARS 491 | Coral Reef Ecology | 3 |
| MARS 492 | Marine Mammals | 3 |
| MARS 498 | Selected Topics | 3 |
| MARS 500 | Problems in Marine Science | 3 |

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum
categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN BIOLOGY (08A)
Revised 8-2019
UCC 2.5.19

## Biology, Pre-Pharmacy (LECOM) (2+3)

The Lake Erie College of Osteopathic Medicine (LECOM) School of Pharmacy and Slippery Rock University (SRU) are committed to the training of future pharmacy practitioners. Slippery Rock University and LECOM School of Pharmacy offer an accelerated, five-year Doctor of Pharmacy program. Under this joint agreement students will successfully complete the two-year undergraduate program in prepharmacy at SRU and then matriculate into LECOM School of Pharmacy to complete the professional curriculum of the Doctor of Pharmacy degree (Pharm.D) in three years. The accelerated professional pharmacy curriculum at LECOM School of Pharmacy is offered in a 12-month program per academic year. Students participating in this program will not be awarded a Slippery Rock University degree.

For more information on admission requirements: https://lecom.edu/ admissions/entrance-requirements/early-acceptance-programs/

## Program Learning Outcomes

- Critical Thinking/Problem Solving: Respective program graduates should demonstrate synthetic, analytical, and interpretive skills.
- Knowledge/Content: Graduates should demonstrate that they are founded in the discipline at the molecular, cellular, organismal, population, community, and ecosystem levels and that they have a fundamental understanding of chemistry, physics, and mathematics.
- Practical Skills: Graduates will demonstrate proficiency in laboratory related skills.
- Communication Skills: Respective program graduates should demonstrate strong oral, digital, and written communication skills.
- Professional Attitude: Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures.
- Degree Program Writing Competency: Graduates will demonstrate proficiency in writing based on longitudinal data as opposed to point in time data.


## Related Links

Biology - LECOM Pre-Pharmacy, BS Program Page (https://www.sru.edu/ academics/majors-and-minors/biology-pre-pharmacy-23-(lecom)/)

Biology Department Page (https://www.sru.edu/academics/colleges-anddepartments/ches/departments/biology/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

| Overall GPA: 3.4 or higher |  |
| :--- | ---: |
| Science GPA: 3.4 or higher |  |
| Math GPA: 3.4 or higher |  |
| Summary |  |
| Code $\quad$ Title | Hours |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements/Concentration | 65 |
| Natural Science and Math College-Wide Requirements | 12 |
| Electives | 58 |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal A |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Biology Program Requirements

- Students desiring a Biology Major must maintain at least a 2.000 average in Biology.
- Before progressing to a 200-level course, students must achieve a 2.000 average in Principles of Biology - BIOL 104
- Students may register in 200-level courses in any order, but must maintain a Biology average of 2.000 or better and must complete the 200 core sequence before progressing to 300 and 400-level courses in the major.
- A student must repeat any 200-level course that brings the Biology average below a 2.000
- Students should complete all 200-level Biology requirements by the end of their sophomore year.
- If you have questions about Financial Aid, visit their website (https:// www.sru.edu/admissions/financial-aid/).
- To view the SRU policy on senior undergraduate students earning graduate credit, click here (https://catalog.sru.edu/academic-policies/senior-undergraduate-students-earning-graduate-credit/).

LECOM - Pre-Pharmacy Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  |  |
| BIOL 104 | Principles of Biology with Lab | 4 |
| BIOL 250 | Genetics with Lab | 4 |
| BIOL 325 | Biometry with Lab | 3 |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| CHEM 108 | General Chemistry II | 3 |
| CHEM 112 | General Chemistry II Lab | 1 |
| CHEM 201 | Organic Chemistry I | 3 |
| CHEM 211 | Organic Chemistry Laboratory I | 1 |
| CHEM 202 | Organic Chemistry II | 3 |
| CHEM 212 | Organic Chemistry Laboratory II | 1 |
| COMM 200 | Civil Discourse: Theory \& Practice | 3 |
| CPSC 110 | Computer Concepts | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 205 | Introduction to Professional Writing | 3 |
| MATH 225 | Calculus I | 4 |
| PHYS 211 | General Physics I with Lab | 4 |
| Subtotal |  | 47 |


| Economics Course | 3 |
| :--- | :--- |
| ECON elective |  |

Subtotal 3

| Psychology Course |  |
| :--- | :--- |
| PSYC elective | 3 |

Subtotal 3

Psychology or Sociology Course
Select one of the following: 3

PSYC elective
INDP $201 \quad$ Principles of Sociology
Subtotal 3

General Electives
Select nine credits 9
Subtotal 9

Total Hours 65
Natural Science and Math College-Wide Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Students must take the following four courses: |  |  |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| MATH 225 | Calculus I | 4 |
| PHYS 211 | General Physics I with Lab | 4 |
| Total Hours |  | $\mathbf{1 2}$ |

DEPARTMENT OF BIOLOGY (61LP)
PRE PHARMACY (LECOM) PROGRAM
This program is effective as of Fall 2003.

## Revised 8-2018

## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

## RECOMMENDED two-YEAR PLAN

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall |  |  |
| BIOL 104 | Principles of Biology with Lab |  |
| CHEM 107 | General Chemistry I |  |
| \& CHEM 111 | and General Chemistry I Lab | 4 |
| ENGL 102 | Critical Writing | 4 |
| INDS 101 | FYRST Seminar | 4 |
| MATH 225 | Calculus I | $\mathbf{4}$ |
|  | Hours | $\mathbf{1}$ |
| Spring | Genetics with Lab | $\mathbf{1 6}$ |
| BIOL 250 | General Chemistry II | 4 |
| CHEM 108 | and General Chemistry II Lab | 4 |
| \& CHEM 112 | Introduction to Professional Writing | 3 |
| ENGL 205 | Computer Concepts | 3 |
| CPSC 110 |  | 3 |
| Elective | Hours | $\mathbf{1 7}$ |

## Second Year

Fall
Select one of the following: 3

| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :---: | :---: | :---: |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| CHEM 201 <br> \& CHEM 211 | Organic Chemistry I and Organic Chemistry Laboratory I | 4 |
| PHYS 201 | Elements of Physics I with Lab | 4 |
| Electives |  | 6 |
|  | Hours | 17 |
| Spring |  |  |
| Economics Elective |  | 3 |
| CHEM 202 <br> \& CHEM 212 | Organic Chemistry II and Organic Chemistry Laboratory II | 4 |
| Psychology Elective |  | 3 |
| Behavioral Science Elective |  | 3 |
| BIOL 325 | Biometry with Lab | 3 |
|  | Hours | 16 |
|  | Total Hours** | 66 |

1 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.

Major Code: 61LP
Revised date: 07.14.2021
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Marine Science, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Marine Science, Minor Program Page (https://www.sru.edu/academics/ majors-and-minors/marine-science-minor/)

Biology Department Page (https://www.sru.edu/academics/majors-andminors/biology/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (an upper division course includes any 3 credit course that requires a prerequisite)
- A minor shall be no fewer than 18 credits.

| Code <br> Required Courses | Title | Hours |
| :--- | :--- | ---: |
| BIOL 101 <br> or BIOL 104 | General Biology <br> Principles of Biology with Lab | 3 |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 108 | General Chemistry II | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| CHEM 112 | General Chemistry II Lab | 1 |
| EGEO 131 | Oceanography | 3 |
| MARS 241 | Marine Biology | 3 |
| MARS 331 | Chemical Oceanography | 3 |
| MARS 362 | Marine Geology | 3 |
| Marine Science Elective | 3 |  |
| Choose one 300/400 level MARS course | $\mathbf{2 6}$ |  |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN MARINE SCIENCE (34D)
This program is effective as of Fall 2003.
Revised 8-2019

## Chemistry

| Chair | Secretary | Location | Department <br> Phone |
| :--- | :--- | :--- | :--- |
| Dr. Susan Zirpoli | Lisa Hammers | 272 Advanced <br> Technology and <br> Science Hall | $724-738-2031$ |
|  |  |  |  |

Department Web Site URL (http://www.sru.edu/academics/colleges/ ches/chemistry/Pages/)
Department Fact Sheet URL (https://www.sru.edu/documents/programs/ factsheets/undergraduate/chemistry-fs.pdf)

## The Rock Difference

- Prepare students for scientific career opportunities in industry and government.
- Prepare students for graduate study in biotechnology, chemistry, biology, physics, and environmental science
- Prepare students for entrance into schools of medicine, dentistry, veterinary medicine, optometry, nursing, physical therapy, engineering, medical technology, environmental science, pharmacy, and allied public health fields.
- Prepare students to enter the teaching profession in Elementary and Secondary Science Education.
"Slippery Rock was a life-altering experience for me. The chemistry courses I took as a freshman, and great professors, set my life's direction."


## Randy Russell

Chairman and President of Ranbar Technology, Inc.
and Ranbar Electrical Materials, Inc.
Vice Chairman of Preservation Technologies, LLP

## Faculty

Thaddeus Boron
Associate Professor
Chemistry
Ph.D., University of Michigan
M.S., University of Michigan

## B.S., University of Pittsburgh

## Andre Braz

Assistant Professor
Chemistry
Ph.D., Universidad de Alcala
M.S., University of Amsterdam
B.S., University of Lisbon

## Qi Chen

Associate Professor
Chemistry
Ph.D., Auburn University
B.S., East China University of Science \& Technology

## David Frohnapfel

Instructor
Chemistry
Ph.D., University of North Carolina at Chapel Hill
B.S., University of Pittsburgh

## Amanda Hemphill

Instructor
Chemistry
Ph.D., Purdue University
B.S., Slippery Rock University

## George Lengyel

Associate Professor
Chemistry
Ph.D., University of Pittsburgh
M.S., University of Pittsburgh
M.A., University of Pittsburgh
B.S., University of Pittsburgh

Min Lim
Associate Professor
Chemistry
Ph.D., University of Houston
B.S., Chungnam National University

## Ashley Loe

Assistant Professor
Chemistry
Ph.D., University of Kentucky
B.S., Muskingham University

## Michael Stapleton

Professor
Chemistry
Ph.D., University of Delaware
B.S., Wilkes College

## Donald Zapien

Professor
Chemistry
Ph.D., University of California at Santa Barbara
B.S., University of Santa Clara

## Susan Zirpoli

Assistant Professor
Chemistry
Ph.D., Pennsylvania State University
B.A., Franklin and Marshall College

## Programs

All first-year students who enter SRU in the Summer and Fall terms of 2019 and after will follow Rock Studies. Students who entered SRU before Spring 2019 will follow Liberal Studies. All new transfer students beginning Summer 2019 and after will follow Liberal Studies. We anticipate that transfer students will begin to enter under Rock Studies during the Summer/Fall term of 2021.

## Majors

- Chemistry, Bachelor of Arts (BA) (p. 368)
- Chemistry, Bachelor of Science (BS) (p. 371)
- Chemistry, Bachelor of Science (BS) - Concentration in Biochemistry (p. 374)
- Chemistry, Bachelor of Science (BS) - Concentration in Chemistry Education (p. 377)
- Chemistry, Bachelor of Science (BS) - Concentration in Computational Chemistry (p. 380)
- Chemistry, Bachelor of Science (BS) - Concentration in Environmental Chemistry (p. 383)
- Chemistry, Bachelor of Science (BS) - Concentration in Forensic Chemistry (p. 387)
- Chemistry, Bachelor of Science (BS) - Concentration in Health Sciences (p. 390)
- Chemistry, Bachelor of Science (BS) / Pre-Pharmacy (Duquesne) (3+4) (p. 393)
- Chemistry, Bachelor of Science (BS) / Pre-Pharmacy (LECOM) (3+3) (p. 396)
- Chemistry, Bachelor of Science (BS) / Pre-Physician Assistant (SRU) (3+2) (p. 399)
- Chemistry, Pre-Pharmacy (Duquesne) $(2+4)$ (p. 402)


## Minors

- Chemistry, Minor (p. 401)


## Courses

## CHEM 104-Introduction Chemistry I

This course is the first course in a two-semester sequence for nonscience majors which introduces the fundamental principles of Chemistry. Although this course serves as a prerequisite for the next course in the sequence (CHEM 106), it is also designed as a stand-alone course. This allows students to take either this course alone or the twosemester sequence and still obtain a basic understanding of chemical principles. The principles of chemistry are developed and illustrated through selective application. Note: This course is not a substitution for CHEM 107 and students cannot receive credit for CHEM 104 and CHEM 107. Also note that this course does not serve as a prerequisite for CHEM 108.

Credits: 3
Term(s) Typically Offered: Offered Every Term

## CHEM 106- Introductory Chemistry II

This is the second course in a two-semester sequence of an introductory chemistry course for non-science majors. The curse will build on the principles presented in CHEM 104 which is a prerequisite for this course and will focus on the areas of organic and biochemistry. As with CHEM 104, this course will concentrate on the basic principles of chemistry and illustrate them through selected applications.

Prerequisites: CHEM $104^{\text {C }}$ or CHEM $107^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Winter, Spring\&Summer

## CHEM 107-General Chemistry I

Topics include nomenclature, stoichiometry, kinetic-molecular theory, gas laws, electronic structure, periodicity, and chemical bonding. Stoichiometry is emphasized.

Prerequisites: (ACSD $110^{\mathrm{D}}$ or ESAP $110^{\mathrm{D}}$ ) or minimum score of 18 in 'Math ACT Exc 2 - EX110-PL MATH' or minimum score of 421 in 'Math SAT Exc 2-EX110-PL MATH' or MATH $199^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Summer Terms
CHEM 108-General Chemistry II
Topics include intermolecular forces, solutions, colloids, chemical kinetics, thermodynamics, equilibria (acid-base, solubility, and complex ion), electro-chemistry, and the transition elements.
Prerequisite: CHEM $107^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Spring \& Summer Terms
CHEM 110-Contemporary Chemistry Laboratory
Laboratory to accompany Chemistry 104 providing basic chemistry and environmentally related experiences. One two-hour laboratory per week.

Prerequisite: CHEM 104 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 1

Term(s) Typically Offered: Offerings Vary
CHEM 111-General Chemistry I Lab
A laboratory to accompany CHEM 107. Laboratory experiments are designed to develop basic laboratory skills and illustrate concepts.
Prerequisite: CHEM 107 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Fall \& Summer Terms
CHEM 112-General Chemistry II Lab
A laboratory to accompany CHEM 108. Laboratory experiments illustrate the concepts of General Chemistry II.

Prerequisites: CHEM $107^{\text {C }}$ and CHEM $111^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 1
Term(s) Typically Offered: Offered Spring \& Summer Terms

## CHEM 113-Clinical Chemistry Laboratory

Laboratory to accompany CHEM 103 providing basic chemistry and health-related experiences. One two-hour laboratory per week.

Prerequisite: CHEM 104 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offerings Vary
CHEM 139-University Seminar
University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## CHEM 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
CHEM 195 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
CHEM 198-Selected Topics
A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
CHEM 200-Fundamentals of Organic Chemistry
A one semester introductory course that covers the most commonly encountered properties of the major families of organic compounds. The course is designed for students pursuing a B.S. in environmental science. Not equivalent to CHEM 201.

Prerequisites: CHEM $108^{\text {C }}$ and CHEM $112^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Summer \& Winter Terms

## CHEM 201-Organic Chemistry I

Modern theories relating molecular structure to chemical reactivity are stressed. Elucidation of molecular structure by infrared, ultraviolet, nuclear magnetic resonance and mass spectroscopy is also covered.
Prerequisites: CHEM $108^{\text {C }}$ and CHEM $112^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Fall \& Summer Terms
CHEM 202- Organic Chemistry II
Modern theories relating molecular structure to chemical reactivity are stressed. Elucidation of molecular structure by infrared, ultraviolet, nuclear magnetic resonance and mass spectroscopy is also covered.
Prerequisite: CHEM $201^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Spring \& Summer Terms
CHEM 204 - Introduction to Forensic Science
Forensic science is the application of science to the examination of physical evidence obtained in the investigation of a crime. The Introduction to Forensic Science course uses high impact practices to provide an immersed research experience for students in the different steps of the scientific method, while learning about the multidisciplinary and interdisciplinary nature of Forensic Science.

Credits: 3
Thematic Thread(s): Comparative Perspectives of Justice \& Society, Demystifying Crime \& Justice, Transfer Thread Completion Course

## CHEM 211-Organic Chemistry Laboratory I

A laboratory course in which students employ the synthetic techniques and analytical procedures of organic chemistry.

Prerequisites: CHEM $112^{\text {C }}$ and CHEM $201^{*}$ C and CHEM $108^{\text {C }}$ (may be taken concurrently).
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 1
Term(s) Typically Offered: Offered Fall \& Summer Terms
CHEM 212- Organic Chemistry Laboratory II
A laboratory course in which students employ the synthetic techniques and analytical procedures of organic chemistry.

Prerequisites: CHEM $201^{\text {C }}$ and CHEM $211^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 1
Term(s) Typically Offered: Offered Spring \& Summer Terms
CHEM 240-Industrial Hygiene
Requirements to preserve worker health and safety will be surveyed.
Prerequisites: CHEM $108^{\mathrm{D}}$ and (CHEM $200^{\mathrm{D}}$ or CHEM 201 ${ }^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offerings Vary

## CHEM 243-Introduction to Research in Chemistry

This is a one semester seminar covering faculty research within the chemistry department, use of library resources, internship opportunities available to undergraduate students, and basic safety training. This course is intended primarily for first-semester sophomore chemistry majors but is open to students from other majors in CHES who might be interested in pursuing undergraduate research in chemistry.

Credits: 1
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with a semester level of Junior 1, Junior 2, Sophomore 1 or Sophomore 2.
Enrollment limited to students in the Coll of Health, Engineer \& Sci college.

## CHEM 270-Industrial Chemistry

A study of industries with emphasis on economic, technical, and possible ecological factors affecting process design. Includes on-site lectures and discussions of various industries in the area.

Prerequisites: CHEM $108^{\text {D }}$ and CHEM $112^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offerings Vary

## CHEM 290-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CHEM 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## CHEM 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
CHEM 301-Physical Chemistry 1
Thermodynamics and chemical kinetics. Cross listed as PHYS301.
Prerequisites: CHEM $108^{C}$ and CHEM $112^{C}$ and (PHYS $212^{C}$ or PHYS $213^{\circ}$ ) and MATH $230^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 302 - Physical Chemistry II

Quantum mechanics and spectroscopy.
Prerequisites: MATH $230^{\text {C }}$ and CHEM $108^{C}$ and CHEM $112^{C}$ and PHYS $211^{\text {C }}$ and (PHYS $212^{\text {C }}$ or PHYS $213^{\text {C }}$ )
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 321 - Physical Chemistry Laboratory I

Principles from Thermodynamic principles will be employed in the laboratory for determining and relating physical properties such as viscosity, surface tension, boiling and freezing points to the identity, and composition of chemical substances.

Prerequisites: CHEM 301 (may be taken concurrently) ${ }^{\text {D }}$ or PHYS 301 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 1
Term(s) Typically Offered: Offered Fall Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 322-Physical Chemistry Laboratory II

Applied principles from Physical Chemistry II lecture will be used for interpreting results from experiments involving kinetics, equilibria, and spectrophotometric data.

Prerequisite: CHEM 302 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 335-Biochemistry I

The study of structures and physical properties of biological molecules.
Prerequisites: BIOL $104^{\text {C }}$ and CHEM $202{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 336-Biochemistry Laboratory I

A laboratory course in which the student uses techniques employed in biochemical investigations.

Prerequisites: CHEM 335 (may be taken concurrently) ${ }^{\text {C }}$ and CHEM $212^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 1
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 337-Biochemistry II

Investigates the basic theme of intermediary metabolism. A background for this study is gained through study of the chemistry of cellular constituents.

Prerequisites: CHEM $335^{\text {C }}$ and CHEM $336^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 338 - Biochemistry Laboratory II

This is a one-credit course in biochemical techniques used in the investigation, isolation and purification of biomolecules. The student will get an exposure to and an appreciation for problem solving utilizing a research-oriented approach.

Prerequisites: CHEM $336^{\text {C }}$ and CHEM $337^{\star C}$ (may be taken concurrently).
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 340-Air Quality Assessment

A study of the quality of the air environment. Air quality assessment and potential problems will be examined both in lecture discussions and in laboratory or field situations. (Includes ambient air testing.) Three hours of lecture and three hours of laboratory per week.

Prerequisites: CHEM $200^{\text {C }}$ or CHEM $201^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 4
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 350-Analytical Chemistry

Topics include gravimetric and volumetric analysis of chemical systems. Special emphasis is given to titrimetric methods based on acid-base, complexation, and oxidation-reduction reactions.
Prerequisites: CHEM $108^{\text {C }}$ and CHEM $112^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 351 - Analytical Chemistry Lab

Students develop practical skills employed in the quantitative analysis of chemical systems.
Prerequisites: CHEM 350 (may be taken concurrently) ${ }^{\text {C }}$ and CHEM $108^{\text {C }}$ and CHEM $112^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## CHEM 370-Water Quality Assessment

Water quality assessment and water quality problems will be examined both in lecture discussions and in laboratory or field situations. Three hours of lecture and three hours of laboratory per week.
Prerequisites: CHEM $200^{\text {C }}$ or CHEM $201^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 4
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 390-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 395-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 415 - Forensic Analysis

The application of analytical chemistry including instrumental methods to the investigation and interpretation of crime scene evidence.
Prerequisites: CHEM $350^{\circ}$ and CHEM $351^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 416 - Forensic Analysis Lab

The application of instrumental methods of analysis to the interpretation of crime scene evidence.

Prerequisites: CHEM $350^{\circ}$ and CHEM $351^{\text {C }}$ and CHEM $415^{*}$ ( ( may be taken concurrently).
${ }^{\mathrm{C}}$ Requires minimum grade of C .

## Credits: 1

Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 425 - Instrumental Analysis

A lecture course to introduce the student to the theory, advantages, disadvantages, limitations, and power of contemporary chemical instrumentation, including computational methods.

Prerequisites: CHEM $350^{\text {C }}$ and MATH $225^{\text {C }}$ and PHYS $211^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 426 - Instrumental Analysis Laboratory

A three hour per week laboratory accompanying CHEM 425.
Instrumentation and computing technology will be applied to quantitative problems of chemistry.

Prerequisite: CHEM 425 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$
Credits: 1
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

CHEM 430- Industrial Pollution Control Engineering
Economic and technical problems will be discussed as related to the abatement of harmful discharges from industrial sources. Systems analysis will be employed in the examination of engineering solutions in the physical or chemical treatment of discharge. Three hours of lecture per week or a field trip.

Prerequisites: CHEM $108^{\text {D }}$ and CHEM $112^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

CHEM 442 - Inorganic Chemistry
A lecture course covering atomic structure, bonding, and properties of inorganic compounds. Coordination chemistry and other topics of current research interest are covered. Offered in alternate years.

Prerequisite: CHEM $202{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 450-Chemistry Internship

Supervised placement and research in selected public and private agencies. (Credits earned will be counted as free electives and will not be counted toward the chemistry major.)

Credits: 1-12
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 452 - Physical Inorganic Chemistry Laboratory

A laboratory course illustrating techniques of synthesis and characterization of inorganic compounds using a variety of spectroscopic and magnetic measurements, and using computational chemistry methods to investigate the electronic structure of compounds.

Prerequisites: CHEM $212^{\text {C }}$ and CHEM $442^{*}$ (may be taken concurrently).
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 460 - Materials Chemistry

A one semester introductory course that covers the synthesis, analysis, and properties of polymers and solid state materials. Applications to industrial and practical application will be discussed

Prerequisite: CHEM $202{ }^{\text {C }}$
${ }^{\text {C }}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 475 - Advanced Organic Synthesis

A one semester course that includes an advanced organic chemistry synthesis laboratory. The lecture part covers modern synthetically useful reactions and their applications. The intensive laboratory offers the students an introduction to organic synthesis research, including the use of modern reagents and instruments. Students will become acquainted with techniques of preparation, purification and spectroscopic identifications of organic compounds.

Prerequisites: CHEM $202^{\text {C }}$ and CHEM $212^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 4
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 490 - Independent Study

Independent Study courses offer a student the opportunity to carry out original, chemical research in a Chemistry Department, employeing al facilities available through the department. Students must properly write and submit an ACS-style report to their faculty advisor or department chair for evaluation.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 491-Chemistry Seminar

For junior chemistry majors. On-line searches of the chemical literature lead to oral presentations and written reports in a selected area of research.

Credits: 1
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## CHEM 495-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

CHEM 496 - Research
Offers a student the opportunity to carry out chemical research in the laboratory, employing all departmental facilities, and the experience of writing a thesis under the direction of a faculty mentor.

Credits: 1-3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## CHEM 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Chemistry, Bachelor of Arts (BA) Program Learning Outcomes <br> - Students will demonstrate knowledge of the main disciplines of

 chemistry, namely Organic, Analytical, Biological, Physical, and Inorganic chemistry.- Students will demonstrate development of technical skills for practical applications of chemistry.
- Students will present collected experimental data in written and oral reports.
- Students and faculty will participate in faculty-led research projects. Students are expected to be actively working in the laboratory under the supervision and guidance of a faculty mentor.


## Related Links

Chemistry, BA Program Page (https://www.sru.edu/academics/majors-and-minors/chemistry-ba/)

Chemistry Department Page (https://www.sru.edu/academics/colleges-and-departments/ches/departments/chemistry/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 45 |
| Modern Language Requirement | $0-9$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major/Concentration Requirements | 40 |
| Natural Science and Math College-Wide Requirements | 12 |
| Electives | 35 |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

## Rock Studies Requirements



## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

| Code | Title |
| :--- | ---: |
| Complete $0-9$ credits | Hours |

## Total Hours

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major/Concentration Requirements

- 20 major credits must be taken at SRU or PASSHE
- 20 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Chemistry Courses |  |  |
| CHEM 108 | General Chemistry II ${ }^{1}$ | 3 |
| CHEM 112 | General Chemistry II Lab ${ }^{1}$ | 1 |
| CHEM 201 | Organic Chemistry I ${ }^{1}$ | 3 |
| CHEM 211 | Organic Chemistry Laboratory I ${ }^{1}$ | 1 |
| CHEM 202 | Organic Chemistry II ${ }^{1}$ | 3 |
| CHEM 212 | Organic Chemistry Laboratory II ${ }^{1}$ | 1 |
| CHEM 301 | Physical Chemistry $1^{1}$ | 3 |
| CHEM 321 | Physical Chemistry Laboratory ${ }^{1}$ | 1 |
| CHEM 335 | Biochemistry ${ }^{1}$ | 3 |
| CHEM 336 | Biochemistry Laboratory I ${ }^{1}$ | 1 |
| CHEM 350 | Analytical Chemistry ${ }^{1}$ | 3 |
| CHEM 351 | Analytical Chemistry Lab ${ }^{1}$ | 1 |
| CHEM 442 | Inorganic Chemistry ${ }^{1}$ | 3 |
| CHEM 452 | Physical Inorganic Chemistry Laboratory ${ }^{1}$ | 1 |
| Subtotal |  | 28 |

## Chemistry Elective

Select four credits (must include one lecture and one lab):
CHEM 337 Biochemistry II ${ }^{1}$

CHEM 338 Biochemistry Laboratory II ${ }^{1}$
CHEM $340 \quad$ Air Quality Assessment ${ }^{1}$

| CHEM 370 | Water Quality Assessment ${ }^{1}$ |  |
| :---: | :---: | :---: |
| CHEM 425 | Instrumental Analysis ${ }^{1}$ |  |
| CHEM 426 | Instrumental Analysis Laboratory ${ }^{1}$ |  |
| CHEM 460 | Materials Chemistry ${ }^{1}$ |  |
| CHEM 475 | Advanced Organic Synthesis ${ }^{1}$ |  |
| CHEM 490 | Independent Study ${ }^{1}$ |  |
| Subtotal |  | 4 |
| Required Math and Science Courses |  |  |
| MATH 230 | Calculus II ${ }^{1}$ | 4 |
| PHYS 217 | University Physics 2 with Lab ${ }^{1}$ | 4 |
| Subtotal |  | 8 |
| Total Hours |  | 40 |

1 Course counts for $50 \%$ of Major requirements and Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

| Code | Title | Hours |
| :---: | :---: | :---: |
| CHEM 107 | General Chemistry ${ }^{1}$ | 3 |
| CHEM 111 | General Chemistry I Lab ${ }^{1}$ | 1 |
| PHYS 201 | Elements of Physics I with Lab ${ }^{1}$ | 4 |
| or PHYS 216 | University Physics 1 with Lab |  |
| MATH 125 | Precalculus ${ }^{1}$ | 4 |
| or MATH 225 | Calculus I |  |

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes (e.g., Organic Chemistry II Lab)
2. Student-faculty research
3. Student leadership development (Chemistry Club)
4. Career education and development
5. Internships
6. Student teaching (serve as Lab Assistants and tutors)
7. Volunteering

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

This program is effective as of Fall 2021
Revised 07.29.2021
UCC 04.13.2021
Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
| Select one of the following: |  | 3-4 |
| MATH 120 | Intermediate Algebra (if necessary) |  |
| MATH 125 | Precalculus (if necessary) |  |
| MATH 225 | Calculus I (if necessary) |  |
| MATH 230 | Calculus II |  |
| BIOL 104 | Principles of Biology with Lab | 4 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| INDS 101 | FYRST Seminar | 1 |
|  | Hours | 15-16 |
| Spring |  |  |
| CHEM 108 <br> \& CHEM 112 | General Chemistry II and General Chemistry II Lab | 4 |
| Select one of the following: |  | 4 |
| MATH 125 | Precalculus (if necessary) |  |
| MATH 225 | Calculus I (if necessary) |  |
| MATH 230 | Calculus II |  |
| ENGL 102 | Critical Writing | 3 |
| Inquiry/Thread/Elective Course |  | 3 |
|  | Hours | 14 |
| Second Year |  |  |
| Fall |  |  |
| CHEM 201 | Organic Chemistry I | 4 |
| \& CHEM 211 | and Organic Chemistry Laboratory I |  |
| CHEM 243 | Introduction to Research in Chemistry | 1 |
| Select one of the following: |  | 4 |
| MATH 225 | Calculus I (if necessary) |  |
| MATH 230 | Calculus II |  |
| PHYS 216 | University Physics 1 with Lab | 4 |
| ENGL 104 | Critical Reading | 3 |
|  | Hours | 16 |
| Spring |  |  |
| CHEM 202 | Organic Chemistry II | 4 |
| \& CHEM 212 | and Organic Chemistry Laboratory II |  |
| MATH 230 | Calculus II | 4 |
| PHYS 217 | University Physics 2 with Lab | 4 |
| Civil Discourse Requirement - select one |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Inquiry/Thread/Elective Course |  | 3 |
|  | Hours | 18 |

## Third Year

Fall

| CHEM 335 | Biochemistry I |  |
| :--- | :--- | ---: |
| \& CHEM 336 | and Biochemistry Laboratory I | 4 |
| CHEM 350 | Analytical Chemistry |  |
| \& CHEM 351 | and Analytical Chemistry Lab | 4 |
| Inquiry/Thread/Elective Course | 3 |  |
| Inquiry/Thread/Elective Course | $\mathbf{3}$ |  |
|  | Hours | $\mathbf{1 4}$ |
| Spring |  |  |

Select one of the following In Depth Chemistry Electives (1 4 lecture and 1 lab ):

| CHEM 337 | Biochemistry II |
| :--- | :--- |
| \& CHEM 338 | and Biochemistry Laboratory II |
| CHEM 340 | Air Quality Assessment |
| CHEM 370 | Water Quality Assessment |
| CHEM 415 | Forensic Analysis |
| \& CHEM 416 | and Forensic Analysis Lab |
| CHEM 460 | Materials Chemistry |
| CHEM 475 | Advanced Organic Synthesis |
| CHEM 490 | Independent Study |
| Inquiry/Thread/Elective Course | 3 |
| Inquiry/Thread/Elective Course | 3 |
| Inquiry/Thread/Elective Course | 3 |
| Inquiry/Thread/Elective Course | 3 |
|  | Hours |

## Fourth Year

Fall

| CHEM 301 | Physical Chemistry 1 | 4 |
| :--- | :--- | :---: |
| \& CHEM 321 | and Physical Chemistry Laboratory I |  |
| CHEM 442 | Inorganic Chemistry | 3 |

Inquiry/Thread/Elective Course 3

| Inquiry/Thread/Elective Course | 3 |
| ---: | ---: |
| Hours | 13 |

## Spring

CHEM $452 \quad$ Physical Inorganic Chemistry Laboratory 1
Inquiry/Thread/Elective Course 3
Inquiry/Thread/Elective Course 3
Inquiry/Thread/Elective Course 3
Inquiry/Thread/Elective Course 3

| Hours | 13 |
| :--- | ---: | ---: |
| Total Hours** | $119-120$ |

1 Course offered in multiple subjects; cannot take in first major subject

* Students are encouraged to take INDS 101 as a Free Elective.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 612
Revised date: 08.02.2021

## Chemistry, Bachelor of Science (BS)

The Slippery Rock University Chemistry Degree is certified by the American Chemistry Society or ACS. In order to earn ACS certification, students must complete 2 credits of Independent Study and 1 credit of Research in addition to the BS requirements. Students can also choose an option concentration in order to broaden their background in chemistry or to gain additional experience if they wish to pursue other interests.

Concentrations are available in the following areas:

- Biochemistry
- Computational Chemistry
- Education
- Environmental Chemistry
- Forensic Chemistry
- Health Sciences


## Program Learning Outcomes

- Students will demonstrate knowledge of the main disciplines of chemistry, namely Organic, Analytical, Biological, Physical, and Inorganic chemistry.
- Students will demonstrate development of technical skills for practical applications of chemistry.
- Students will present collected experimental data in written and oral reports.
- Students and faculty will participate in faculty-led research projects. Students are expected to be actively working in the laboratory under the supervision and guidance of a faculty mentor.


## Related Links

Chemistry, BS Program Page (https://www.sru.edu/academics/majors-and-minors/chemistry-bs/)

Chemistry Department Page (https://www.sru.edu/academics/colleges-and-departments/ches/departments/chemistry/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 45 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major/Concentration Requirements | 56 |
| Natural Science and Mathematics College Wide Requirement | 12 |
| ACS Certification - Optional | $0-3$ |
| Electives | 19 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.
Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 225 | Calculus ${ }^{2,3}$ | 4 |
| Select one of the following: |  |  |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 16 |

Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378) 3

Humanities Inquiry
Select 3 Credits (p. 1378) 3
Social Science Inquiry
Select 3 Credits (p. 1378) 3
Natural Sciences Inquiry
CHEM 107 General Chemistry I 4
\& CHEM 111 and General Chemistry I Lab ${ }^{2,3}$
Physical Sciences Inquiry
PHYS $216 \quad 4$

Subtotal 17
Thematic Thread
Select 12 Credits (p. 1378) ${ }^{4} \quad 12$
Total Hours 45

1 Course offered in multiple subjects; cannot take in first major subject
2 Course counts for $50 \%$ of Major requirements and Major GPA
3 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.
4 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code $\quad$ Title | Hours |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |
| Meet required minimum SAT or ACT math score OR |  |
| ESAP $110 \quad$ Beginning Algebra | $0-3$ |
| Total Hours |  |
| Computer Competency |  |
| Code $\quad$ Title | Hours |
| Demonstrate "computer competency" by one of the following: | $0-3$ |
| Pass Computer Competency Exam OR |  |


| Select one of the following at SRU or another post-secondary |
| :--- |
| institution: |


| CPSC 100 | Introduction to Computing for Liberal Arts |
| :--- | :--- |
| CPSC 110 | Computer Concepts |
| CPSC 130 | Introduction to Computing and <br> Programming |
| PE 202 | Technology for Wellness |

## Total Hours

## Major/Concentration Requirements

- 28 major credits must be taken at SRU or PASSHE
- 28 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Introductory Chemistry Courses |  |  |
| CHEM 108 | General Chemistry II 1,2 | 3 |
| CHEM 112 | General Chemistry II Lab ${ }^{1}$ | 1 |
| Subtotal |  | 4 |
| Required Foundation Chemistry Courses |  |  |
| CHEM 201 | Organic Chemistry I ${ }^{1,2}$ | 3 |
| CHEM 211 | Organic Chemistry Laboratory ${ }^{1}$ | 1 |
| CHEM 243 | Introduction to Research in Chemistry ${ }^{1}$ | 1 |
| CHEM 301 | Physical Chemistry $1^{1}$ | 3 |
| CHEM 321 | Physical Chemistry Laboratory ${ }^{1}$ | 1 |
| CHEM 335 | Biochemistry I ${ }^{1}$ | 3 |
| CHEM 336 | Biochemistry Laboratory I ${ }^{1}$ | 1 |
| CHEM 350 | Analytical Chemistry ${ }^{1}$ | 3 |
| CHEM 351 | Analytical Chemistry Lab ${ }^{1}$ | 1 |
| CHEM 442 | Inorganic Chemistry ${ }^{1}$ | 3 |
| CHEM 452 | Physical Inorganic Chemistry Laboratory ${ }^{1}$ | 1 |
| CHEM 491 | Chemistry Seminar ${ }^{1}$ | 1 |
| Subtotal |  | 22 |

Required In-Depth Chemistry Courses

| CHEM 202 | Organic Chemistry II ${ }^{\text {1,2 }}$ | 3 |
| :---: | :---: | :---: |
| CHEM 212 | Organic Chemistry Laboratory II ${ }^{1}$ | 1 |
| CHEM 302 | Physical Chemistry II ${ }^{1}$ | 3 |
| CHEM 425 | Instrumental Analysis ${ }^{1}$ | 3 |
| CHEM 426 | Instrumental Analysis Laboratory ${ }^{1}$ | 1 |
| CHEM 460 | Materials Chemistry ${ }^{1}$ | 3 |
| Subtotal |  | 14 |

Additional Required In-Depth Chemistry Courses
Select one lecture and one laboratory course:

| CHEM 337 | Biochemistry II $^{1}$ |
| ---: | :--- |
| CHEM 338 | Biochemistry Laboratory II $^{1}$ |
| CHEM 340 | Air Quality Assessment $^{1}$ |
| CHEM 370 | Water Quality Assessment $^{1}$ |
| CHEM 415 | Forensic Analysis $^{1}$ |
| CHEM 416 | Forensic Analysis Lab $^{1}$ |
| CHEM 475 | Advanced Organic Synthesis $^{1}$ |
| Subtotal |  |


| Cognate Courses |  |  |
| :--- | :--- | :--- |
| BIOL 104 | Principles of Biology with Lab ${ }^{1}$ | 4 |
| MATH 230 | Calculus II 1,3 | 4 |


| PHYS 217 | University Physics 2 with Lab ${ }^{1}$ | 4 |
| :--- | ---: | ---: |
| Subtotal | 12 |  |
| Total Hours | $\mathbf{5 6}$ |  |

1 Course counts for 50\% of Major requirements and Major GPA
2 A 'C' or better must be earned in course to register for Chemistry courses 300 or above.
3 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Natural Science and Math College-Wide Requirement

 CodeCHEM 107 General Chemistry I ${ }^{1,2} 3$
CHEM 111 General Chemistry I Lab ${ }^{1} 1$
MATH 225 Calculus $I^{1,3} 4$
PHYS $216 \quad$ University Physics 1 with Lab 4

Total Hours 12

1
Course counts for $50 \%$ of Major requirements and Major GPA
2 A ' C ' or better must be earned in course to register for Chemistry courses 300 or above.
3 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.

## ACS Certification - Optional

| Code | Title | Hours |
| :--- | :--- | ---: |
| CHEM 490 | Independent Study ${ }^{1}$ | 2 |
| CHEM 496 | Research $^{1}$ | 1 |
| Total Hours |  | 3 |

1 Course counts for $50 \%$ of Major requirements and Major GPA

## Co-curricular and Experiential Learning

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1. High-Impact Practice (HIP) designated classes (e.g., Organic Chemistry II Lab)
2. Student-faculty research
3. Student leadership development (Chemistry Club)
4. Career education and development
5. Internships
6. Student teaching (serve as Lab Assistants and tutors)
7. Volunteering

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to
ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
CHEMISTRY - BS (6118)
This program is effective as of Fall 2021
Revised 07.29.21
UCC 04.13.2021

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
| Select one of the following: |  | 3-4 |
| MATH 120 | Intermediate Algebra (if necessary) |  |
| MATH 125 | Precalculus (if necessary) |  |
| MATH 225 | Calculus I (if necessary) |  |
| MATH 230 | Calculus II |  |
| BIOL 104 | Principles of Biology with Lab | 4 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| INDS 101 | FYRST Seminar | 1 |
|  | Hours | 15-16 |
| Spring |  |  |
| CHEM 108 \& CHEM 112 | General Chemistry II and General Chemistry II Lab | 4 |
| Select one of the following: |  | 4 |
| MATH 125 | Precalculus (if necessary) |  |
| MATH 225 | Calculus I (if necessary) |  |
| MATH 230 | Calculus II |  |
| ENGL 102 | Critical Writing | 3 |
| Inquiry/Thread/Elective Course |  | 3 |
|  | Hours | 14 |

## Second Year

Fall

| CHEM 201 | Organic Chemistry I | 4 |
| :--- | :--- | :--- |
| \& CHEM 211 | and Organic Chemistry Laboratory I |  |
| CHEM 243 | Introduction to Research in Chemistry | 1 |

Select one of the following: 4

| MATH 225 | Calculus I (if necessary) |  |
| :---: | :--- | ---: |
| MATH 230 | Calculus II | 4 |
| PHYS 216 | University Physics 1 with Lab | 3 |
| ENGL 104 | Critical Reading | $\mathbf{1 6}$ |


| Spring |  | 4 |
| :--- | :--- | :--- |
| CHEM 202 | Organic Chemistry II | 4 |
| \& CHEM 212 | and Organic Chemistry Laboratory II | 4 |
| MATH 230 | Calculus II (if necessary) | 4 |
| PHYS 217 | University Physics 2 with Lab | 3 |
| Civil Discourse Requirement - select one |  |  |

COMM $200 \quad$ Civil Discourse: Theory \& Practice
PHIL 110 Ethics and Civil Discourse

| POLS 235 Civil Discourse and Democracy | 3 |
| :---: | ---: |
| nquiry/Thread/Elective Course | 3 |


| Inquiry/Thread/Elective Course | 3 |
| :---: | ---: |
| Hours | $\mathbf{1 8}$ |

Third Year
Fall

| CHEM 335 | Biochemistry I | 4 |
| :--- | :--- | :---: |
| \& CHEM 336 | and Biochemistry Laboratory I |  |
| CHEM 350 | Analytical Chemistry | 4 |
| \& CHEM 351 | and Analytical Chemistry Lab |  |

Inquiry/Thread/Elective Course 3

| Inquiry/Thread/Elective Course | 3 |
| :---: | ---: |
| Hours | $\mathbf{1 4}$ |

## Spring

Select one of the following: 3

| CHEM 302 | Physical Chemistry II (even years) |  |
| ---: | :--- | ---: |
| CHEM 460 | Materials Chemistry (odd years) | 4 |
| CHEM 425 | Instrumental Analysis | 4 |
| \& CHEM 426 | and Instrumental Analysis Laboratory | 1 |

Select one of the following In Depth Chemistry Elective (1 lecture 4 and 1 lab):

| CHEM 337 | Biochemistry II |
| :--- | :--- |
| \& CHEM 338 | and Biochemistry Laboratory II |
| CHEM 340 | Air Quality Assessment (even years) |
| CHEM 370 | Water Quality Assessment (odd years) |
| CHEM 415 | Forensic Analysis |
| \& CHEM 416 | and Forensic Analysis Lab |
| CHEM 475 | Advanced Organic Synthesis |


| Inquiry/Thread/Elective Course | 3 |
| :---: | ---: |
| Hours | 15 |

## Fourth Year

Fall

| CHEM 301 | Physical Chemistry 1 | 4 |
| :--- | :--- | :---: |
| \& CHEM 321 | and Physical Chemistry Laboratory I |  |
| CHEM 442 | Inorganic Chemistry | 3 |

Inquiry/Thread/Elective Course 3
Inquiry/Thread/Elective Course 3

| Inquiry/Thread/Elective Course | 3 |
| :---: | ---: |
| Hours | $\mathbf{1 6}$ |

## Spring

Select one of the following: 3

| CHEM 302 | Physical Chemistry II (even years) |  |
| ---: | :--- | :--- |
| CHEM 460 | Materials Chemistry (odd years) |  |
| CHEM 452 | Physical Inorganic Chemistry Laboratory | 1 |

Inquiry/Thread/Elective Course 3

Inquiry/Thread/Elective Course 3
Inquiry/Thread/Elective Course 3

| Hours | 13 |
| :--- | :--- | ---: |
| Total Hours** | $121-122$ |

1 Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

* Students are encouraged to take INDS 101 as a Free Elective.

Optional ACS Certification requires 2 credits of CHEM 490: Independent Study and 1 credit of CHEM 496: Research.

Major Code: 6118
Revised date: 08.02.2021
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Chemistry, Bachelor of Science (BS) Concentration in Biochemistry

The Slippery Rock University Chemistry Degree is certified by the American Chemistry Society or ACS. In order to earn ACS certification, students must complete 2 credits of Independent Study and 1 credit of Research in addition to the BS requirements. Students can also choose an option concentration in order to broaden their background in chemistry or to gain additional experience if they wish to pursue other interests.

Concentrations are available in the following areas:

- Biochemistry
- Computational Chemistry
- Education
- Environmental Chemistry
- Forensic Chemistry
- Health Sciences


## Program Learning Outcomes

- Students will demonstrate knowledge of the main disciplines of chemistry, namely Organic, Analytical, Biological, Physical, and Inorganic chemistry.
- Students will demonstrate development of technical skills for practical applications of chemistry.
- Students will present collected experimental data in written and oral reports.
- Students and faculty will participate in faculty-led research projects. Students are expected to be actively working in the laboratory under the supervision and guidance of a faculty mentor.


## Related Links

Chemistry - Biochemistry, BS Program Page (https://www.sru.edu/ academics/majors-and-minors/chemistry-biochemistry/)

Chemistry Department Page (https://www.sru.edu/academics/colleges-and-departments/ches/departments/chemistry/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide <br> GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

Code Title Hours
Rock Studies Requirements 45
Other Basic Requirements 0-3
Computer Competency 0-3

Major/Concentration Requirements 56
Natural Science and Math College-Wide Requirements 12
Biochemistry Concentration 14
ACS Certification - Optional 0-3
Electives 3

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar |  |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 225 | Calculus ${ }^{2,3}$ | 4 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |

Subtotal 16
Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378) 3
Humanities Inquiry
Select 3 Credits (p. 1378) 3
Social Science Inquiry
Select 3 Credits (p. 1378) 3

Natural Sciences Inquiry
CHEM 107 General Chemistry I 4
\& CHEM 111 and General Chemistry I Lab 2,3
Physical Sciences Inquiry
PHYS 216 University Physics 1 with Lab ${ }^{2,3} 4$
Subtotal 17

Thematic Thread

| Select 12 Credits (p. 1378) ${ }^{4}$ | 12 |
| :--- | :--- |

Total Hours 45
1
2
3
Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.

4 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one | following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Ar |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |

PE 202 Technology for Wellness
Total Hours
0-3

## Major/Concentration Requirements

- 28 major credits must be taken at SRU or PASSHE
- 28 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Introductory Chemistry Courses |  |  |
| CHEM 108 | General Chemistry II $^{1}$ | 3 |
| CHEM 112 | General Chemistry II Lab $^{1}$ | 1 |
| Subtotal |  | 4 |


| Required Foundation Chemistry Courses |  |  |
| :---: | :---: | :---: |
| CHEM 201 | Organic Chemistry ${ }^{1}$ | 3 |
| CHEM 211 | Organic Chemistry Laboratory $\mathrm{I}^{1}$ | 1 |
| CHEM 243 | Introduction to Research in Chemistry | 1 |
| CHEM 301 | Physical Chemistry $1^{1}$ | 3 |
| CHEM 321 | Physical Chemistry Laboratory ${ }^{1}$ | 1 |
| CHEM 335 | Biochemistry I ${ }^{1}$ | 3 |
| CHEM 336 | Biochemistry Laboratory $\mathrm{I}^{1}$ | 1 |
| CHEM 350 | Analytical Chemistry ${ }^{1}$ | 3 |
| CHEM 351 | Analytical Chemistry Lab ${ }^{1}$ | 1 |
| CHEM 442 | Inorganic Chemistry ${ }^{1}$ | 3 |
| CHEM 452 | Physical Inorganic Chemistry Laboratory ${ }^{1}$ | 1 |
| CHEM 491 | Chemistry Seminar ${ }^{1}$ | 1 |
| Subt |  |  |


| Required In-Depth Chemistry Courses |  |  |
| :--- | :--- | :---: |
| CHEM 202 | Organic Chemistry II $^{1}$ | 3 |
| CHEM 212 | Organic Chemistry Laboratory II $^{1}$ | 1 |
| CHEM 302 | Physical Chemistry II $^{1}$ | 3 |


| CHEM 425 | Instrumental Analysis ${ }^{1}$ | 3 |
| :--- | :--- | ---: |
| CHEM 426 | Instrumental Analysis Laboratory ${ }^{1}$ | 1 |
| CHEM 460 | Materials Chemistry $^{1}$ | 3 |
| Subtotal |  | 14 |

Additional Required In-Depth Chemistry Courses
Select one lecture and one laboratory course: 4

| CHEM 337 | Biochemistry II $^{1}$ |
| :--- | :--- |
| CHEM 338 | Biochemistry Laboratory II $^{1}$ |
| CHEM 340 | Air Quality Assessment $^{1}$ |
| CHEM 370 | Water Quality Assessment $^{1}$ |
| CHEM 415 | Forensic Analysis $^{1}$ |
| CHEM 416 | Forensic Analysis Lab $^{1}$ |
| CHEM 475 | Advanced Organic Synthesis $^{1}$ |

Subtotal 4

| Cognate Courses |  |  |
| :--- | :--- | ---: |
| BIOL 104 | Principles of Biology with Lab ${ }^{1}$ | 4 |
| MATH 230 | Calculus II $^{1}$ | 4 |
| PHYS 217 | University Physics 2 with Lab $^{1}$ | 4 |
| Subtotal |  | 12 |
| Total Hours |  | 56 |

1 Course counts for 50\% of Major requirements and Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

| Code | Title | Hours |
| :---: | :---: | :---: |
| CHEM 107 | General Chemistry ${ }^{1}$ | 3 |
| CHEM 111 | General Chemistry I Lab ${ }^{1}$ | 1 |
| MATH 225 | Calculus I ${ }^{1,2}$ | 4 |
| PHYS 216 | University Physics 1 with Lab ${ }^{1,2}$ | 4 |
| Course counts for 50\% of Major requirements and Major GPA |  |  |
| Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total. |  |  |

## Biochemistry Concentration

| Code | Title | Hours |
| :---: | :---: | :---: |
| CHEM 337 | Biochemistry II ${ }^{1}$ | 3 |
| CHEM 338 | Biochemistry Laboratory II ${ }^{1}$ | 1 |
| BIOL 250 | Genetics with Lab ${ }^{1}$ | 4 |
| BIOL 335 | Cell Biology/Lab ${ }^{1}$ | 3 |
| BIOL 370 | Molecular Biology with Lab ${ }^{1}$ | 3 |
| Total Hours |  | 14 |
| 1 Course counts for 50\% of Major requirements and Major GPA |  |  |
| ACS Certification - Optional |  |  |
| Code | Title | Hours |
| CHEM 490 | Independent Study ${ }^{1}$ | 2 |
| CHEM 496 | Research ${ }^{1}$ | 1 |
| Total Hours |  | 3 |

1 Course counts for $50 \%$ of Major requirements and Major GPA

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes (e.g., Organic Chemistry II Lab)
2. Student-faculty research
3. Student leadership development (Chemistry Club)
4. Career education and development
5. Internships
6. Student teaching (serve as Lab Assistants and tutors)
7. Volunteering

CHEMISTRY - BS (6118)
Concentration in Biochemistry (BCHM)
This program is effective as of Fall 2021
Revised 07.30.21
UCC 04.13.21

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
| Select one of the following: |  | 3-4 |
| MATH 120 | Intermediate Algebra (if necessary) |  |
| MATH 125 | Precalculus (if necessary) |  |
| MATH 225 | Calculus I (if necessary) |  |
| MATH 230 | Calculus II |  |
| BIOL 104 | Principles of Biology with Lab | 4 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| INDS 101 | FYRST Seminar | 1 |
|  | Hours | 15-16 |


| Spring |  |
| :--- | :--- |
| CHEM 108 General Chemistry II <br> \& CHEM 112 and General Chemistry II Lab |  |
| Select one of the following: 4 <br> MATH 125 Precalculus (if necessary) <br> MATH 225 Calculus I (if necessary) |  |


| MATH 230 | Calculus II |  |
| :---: | :---: | :---: |
| ENGL 102 | Critical Writing | 3 |
| BIOL 250 | Genetics with Lab | 4 |
|  | Hours | 15 |
| Second Year |  |  |
| Fall |  |  |
| CHEM 201 | Organic Chemistry I | 4 |
| \& CHEM 211 | and Organic Chemistry Laboratory I |  |
| CHEM 243 | Introduction to Research in Chemistry | 1 |
| Select one of the following: |  | 4 |
| MATH 225 | Calculus I |  |
| MATH 230 | Calculus II (if necessary) |  |
| PHYS 216 | University Physics 1 with Lab | 4 |
| ENGL 104 | Critical Reading | 3 |
|  | Hours | 16 |


| Spring |  | 4 |
| :--- | :--- | :--- |
| CHEM 202 | Organic Chemistry II | 4 |
| \& CHEM 212 | and Organic Chemistry Laboratory II | 4 |
| MATH 230 | Calculus II | 4 |
| PHYS 217 | University Physics 2 with Lab | 3 |


| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |


| Inquiry/Thread/Elective Course | 3 |
| :---: | ---: |
| Hours | 18 |

## Third Year

Fall

| CHEM 335 | Biochemistry I | 4 |
| :--- | :--- | ---: |
| \& CHEM 336 | and Biochemistry Laboratory I |  |
| CHEM 350 | Analytical Chemistry | 4 |
| \& CHEM 351 | and Analytical Chemistry Lab |  |
| BIOL 370 | Molecular Biology with Lab | 3 |
| Inquiry/Thread/Elective Course | 3 |  |
|  | Hours | $\mathbf{1 4}$ |

## Spring

Select one of the following: 3

| CHEM 302 | Physical Chemistry II (even years) |  |
| :--- | :--- | ---: |
| CHEM 460 | Materials Chemistry (odd years) | 4 |
| CHEM 337 | Biochemistry II |  |
| \& CHEM 338 | and Biochemistry Laboratory II | 4 |
| CHEM 425 | Instrumental Analysis |  |
| \& CHEM 426 | and Instrumental Analysis Laboratory |  |
| CHEM 491 | Chemistry Seminar | 1 |
| BIOL 335 | Cell Biology/Lab | 3 |
|  | Hours | $\mathbf{1 5}$ |
| Fourth Year |  |  |

Fall
CHEM 301 Physical Chemistry $1 \quad 4$
$\begin{array}{lll}\text { \& CHEM } 321 & \text { and Physical Chemistry Laboratory I } \\ \text { CHEM } 442 & \text { Inorganic Chemistry } & 3\end{array}$
Inquiry/Thread/Elective Course 3
Inquiry/Thread/Elective Course
3

| Inquiry/Thread/Elective Course | 3 |  |
| :--- | ---: | ---: |
|  | Hours | $\mathbf{1 6}$ |
| Spring |  |  |
| Select one of the following: | 3 |  |
| CHEM 302 | Physical Chemistry II (even years) |  |
| CHEM 460 | Materials Chemistry (odd years) |  |
| CHEM 452 | Physical Inorganic Chemistry Laboratory | 1 |
| Inquiry/Thread/Elective Course | 3 |  |
| Inquiry/Thread/Elective Course | 3 |  |
| Inquiry/Thread/Elective Course | 3 |  |
|  | Hours | $\mathbf{1 3}$ |
| Total Hours** | $\mathbf{1 2 2 - 1 2 3}$ |  |

1 Course offered in multiple subjects; cannot take course in first major subject

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

Optional ACS Certification requires 2 credits of CHEM 490: Independent Study and 1 credit of CHEM 496: Research.

Major Code: 6118
Concentration: BCHM
Revised date: 08.02.2021
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Chemistry, Bachelor of Science (BS) - Concentration in Chemistry Education

The Slippery Rock University Chemistry Degree is certified by the American Chemistry Society or ACS. In order to earn ACS certification, students must complete 2 credits of Independent Study and 1 credit of Research in addition to the BS requirements. Students can also choose an option concentration in order to broaden their background in chemistry or to gain additional experience if they wish to pursue other interests.

Concentrations are available in the following areas:

- Biochemistry
- Computational Chemistry
- Education
- Environmental Chemistry
- Forensic Chemistry
- Health Sciences


## Program Learning Outcomes

- Students will demonstrate knowledge of the main disciplines of chemistry, namely Organic, Analytical, Biological, Physical, and Inorganic chemistry.
- Students will demonstrate development of technical skills for practical applications of chemistry.
- Students will present collected experimental data in written and oral reports.
- Students and faculty will participate in faculty-led research projects. Students are expected to be actively working in the laboratory under the supervision and guidance of a faculty mentor.


## Related Links

Chemistry - Chemistry Education, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/chemistry-educationx33578/)

Chemistry Department Page (https://www.sru.edu/academics/colleges-and-departments/ches/departments/chemistry/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

Code Title Hours
Rock Studies Requirements ..... 45
Other Basic Requirements ..... 0-3
Computer Competency ..... 0-3
Major/Concentration Requirements ..... 56
Natural Science and Math College-Wide Requirements ..... 12
Chemistry Education Concentration ..... 13
ACS Certification - Optional ..... 0-3
Electives ..... 5

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 225 | Calculus ${ }^{\text {2,3 }}$ | 4 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory |  |
| PHIL 110 | Ethics and Civil Disc |  |
| POLS 235 | Civil Discourse and D |  |
| Subtotal |  | 16 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |


| Social Science Inquiry |  |
| :---: | :---: |
| Select 3 Credits (p.1378) | 3 |
| Natural Sciences Inquiry |  |
| CHEM 107 General Chemistry I <br> \& CHEM 111 and General Chemistry I Lab ${ }^{2,3}$ | 4 |
| Physical Sciences Inquiry |  |
| PHYS 216 University Physics 1 with Lab ${ }^{2,3}$ | 4 |
| Subtotal | 17 |
| Thematic Thread |  |
| Select 12 Credits (p.1378) ${ }^{4}$ | 12 |
| Total Hours | 45 |

1 Course offered in multiple subjects; cannot take in first major subject
2 Course counts for $50 \%$ of Major requirements and Major GPA
3 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.
4 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one | following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |

## Total Hours

## Major/Concentration Requirements

- 28 major credits must be taken at SRU or PASSHE
- 28 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Introductory Chemistry Courses |  |  |
| CHEM 108 | General Chemistry II $^{1}$ | 3 |
| CHEM 112 | General Chemistry II Lab $^{1}$ | 1 |
| Subtotal |  | 4 |

## Required Foundation Chemistry Courses

| CHEM 201 | Organic Chemistry I $^{1}$ | 3 |
| :--- | :--- | :--- |
| CHEM 211 | Organic Chemistry Laboratory I |  |


| CHEM 243 | Introduction to Research in Chemistry | 1 |
| :---: | :---: | :---: |
| CHEM 301 | Physical Chemistry $1^{1}$ | 3 |
| CHEM 321 | Physical Chemistry Laboratory ${ }^{1}$ | 1 |
| CHEM 335 | Biochemistry I ${ }^{1}$ | 3 |
| CHEM 336 | Biochemistry Laboratory $\mathrm{I}^{1}$ | 1 |
| CHEM 350 | Analytical Chemistry ${ }^{1}$ | 3 |
| CHEM 351 | Analytical Chemistry Lab ${ }^{1}$ | 1 |
| CHEM 442 | Inorganic Chemistry ${ }^{1}$ | 3 |
| CHEM 452 | Physical Inorganic Chemistry Laboratory ${ }^{1}$ | 1 |
| CHEM 491 | Chemistry Seminar ${ }^{1}$ | 1 |
| Subtotal |  | 22 |


| Required In-Depth Chemistry Courses |  |  |
| :--- | :--- | ---: |
| CHEM 202 | Organic Chemistry II ${ }^{1}$ |  |
| CHEM 212 | Organic Chemistry Laboratory II $^{1}$ | 3 |
| CHEM 302 | Physical Chemistry II $^{1}$ | 1 |
| CHEM 425 | Instrumental Analysis $^{1}$ | 3 |
| CHEM 426 | Instrumental Analysis Laboratory $^{1}$ | 3 |
| CHEM 460 | Materials Chemistry $^{1}$ | 1 |
| Subtotal |  | 3 |

Additional Required In-Depth Chemistry Courses
Select one lecture and one laboratory course: 4

| CHEM 337 | Biochemistry II ${ }^{1}$ |  |
| :---: | :---: | :---: |
| CHEM 338 | Biochemistry Laboratory II ${ }^{1}$ |  |
| CHEM 340 | Air Quality Assessment ${ }^{1}$ |  |
| CHEM 370 | Water Quality Assessment ${ }^{1}$ |  |
| CHEM 415 | Forensic Analysis ${ }^{1}$ |  |
| CHEM 416 | Forensic Analysis Lab ${ }^{1}$ |  |
| CHEM 475 | Advanced Organic Synthesis ${ }^{1}$ |  |
| Subtotal |  | 4 |
| Cognate Courses |  |  |
| BIOL 104 | Principles of Biology with Lab ${ }^{1}$ | 4 |
| MATH 230 | Calculus II ${ }^{1}$ | 4 |
| PHYS 217 | University Physics 2 with Lab ${ }^{1}$ | 4 |
| Subtotal |  | 12 |
| Total Hours |  | 56 |

1 Course counts for $50 \%$ of Major requirements and Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


Chemistry Education Concentration

| Code | Title | Hours |
| :--- | :--- | ---: |
| CPSC 146 | Programming Principles ${ }^{1,2}$ | 3 |
| EGEO 201 | Earth Materials and Processes/Lab | 4 |
| SEFE 338 | Standards-Based Instruction \& Assessment <br> in the Inclusionary Classroom ${ }^{1}$ | 3 |
| SEFE 342 | Educational Psychology for Diverse <br> Learners ${ }^{1}$ | 3 |

Total Hours 13
1 Course counts for $50 \%$ of Major requirements and Major GPA
2 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.

## ACS Certification - Optional

| Code | Title | Hours |
| :--- | :--- | ---: |
| CHEM 490 | Independent Study ${ }^{1}$ | 2 |
| CHEM 496 | Research $^{1}$ | 1 |
| Total Hours |  | 3 |

1 Course counts for $50 \%$ of Major requirements and Major GPA

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes (e.g., Organic Chemistry II Lab)
2. Student-faculty research
3. Student leadership development (Chemistry Club)
4. Career education and development
5. Internships
6. Student teaching (serve as Lab Assistants and tutors)
7. Volunteering

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.
PASSHE - Pennsylvania State System of Higher Education Institutions
CHEMISTRY-BS (6118)
Concentration in Chemistry Education (CHED)
This program is effective as of Fall 2021
Revised 07.29.21
UCC 04.13.21

Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| CHEM 107 | General Chemistry I | 4 |
| \& CHEM 111 | and General Chemistry I Lab |  |
| Select one of the following: |  | 3-4 |
| MATH 120 | Intermediate Algebra (if necessary) |  |
| MATH 125 | Precalculus (if necessary) |  |
| MATH 225 | Calculus I (if necessary) |  |
| MATH 230 | Calculus II |  |
| BIOL 104 | Principles of Biology with Lab | 4 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| INDS 101 | FYRST Seminar | 1 |
|  | Hours | 15-16 |
| Spring |  |  |
| CHEM 108 | General Chemistry II | 4 |
| \& CHEM 112 | and General Chemistry II Lab |  |
| Select one of the following: |  | 4 |
| MATH 125 | Precalculus (if necessary) |  |
| MATH 225 | Calculus I (if necessary) |  |
| MATH 230 | Calculus II |  |
| ENGL 102 | Critical Writing | 3 |
| Inquiry/Thread/Elective Course |  | 3 |
|  | Hours | 14 |

## Second Year

Fall
CHEM 201 Organic Chemistry I 4

| \& CHEM 211 | and Organic Chemistry Laboratory I |
| :--- | :--- |
| CHEM 243 | Introduction to Research in Chemistry |

Select one of the following: 4

| MATH 225 | Calculus I (if necessary) |  |
| :--- | :--- | ---: |
| MATH 230 | Calculus II | 4 |
| PHYS 213 | General Physics III/ Lab | 3 |
| ENGL 104 | Critical Reading | $\mathbf{1 6}$ |
|  | Hours | 4 |
| Spring |  | 4 |
| CHEM 202 | Organic Chemistry II |  |
| \& CHEM 212 | and Organic Chemistry Laboratory II | 4 |
| MATH 230 | Calculus II (if necessary) | 4 |
| PHYS 217 | University Physics 2 with Lab | 4 |
| EGEO 101 | Physical Geology |  |
| \& EGEO 111 | and Physical Geology Lab |  |
|  | Hours | $\mathbf{1 6}$ |

## Third Year

Fall

| CHEM 335 | Biochemistry I | 4 |
| :--- | :--- | ---: |
| \& CHEM 336 | and Biochemistry Laboratory I |  |
| CHEM 350 | Analytical Chemistry <br> \& CHEM 351 | and Analytical Chemistry Lab |

COMM $200 \quad$ Civil Discourse: Theory \& Practice

PHIL 110 Ethics and Civil Discourse

| POLS 235 | Civil Discourse and Democracy |  |
| :---: | :---: | :---: |
| CPSC 146 | Programming Principles | 3 |
|  | Hours | 14 |
| Spring |  |  |
| Select one of the following: |  | 3 |
| CHEM 302 | Physical Chemistry II (even years) |  |
| CHEM 460 | Materials Chemistry (odd years) |  |
| Select one of the following In Depth Chemistry Electives (1 lecture and 1 lab ): |  | 4 |
| CHEM 337 <br> \& CHEM 338 | Biochemistry II and Biochemistry Laboratory II |  |
| CHEM 340 | Air Quality Assessment (even years) |  |
| CHEM 370 | Water Quality Assessment (odd years) |  |
| CHEM 415 <br> \& CHEM 416 | Forensic Analysis and Forensic Analysis Lab |  |
| CHEM 475 | Advanced Organic Synthesis |  |
| CHEM 425 <br> \& CHEM 426 | Instrumental Analysis and Instrumental Analysis Laboratory | 4 |
| CHEM 491 | Chemistry Seminar | 1 |
| Inquiry/Thread/Elective Course |  | 3 |
|  | Hours | 15 |

## Fourth Year

Fall

| CHEM 301 | Physical Chemistry 1 |  |
| :--- | :--- | ---: |
| \& CHEM 321 | and Physical Chemistry Laboratory I | 4 |
| CHEM 442 | Inorganic Chemistry |  |
| SEFE 342 | Educational Psychology for Diverse <br> Learners | 3 |
| Inquiry/Thread/Elective Course | 3 |  |
| Inquiry/Thread/Elective Course | 3 |  |
| Hours | $\mathbf{3}$ |  |

## Spring

Select one of the following: 3

| CHEM 302 | Physical Chemistry II (even years) |  |
| ---: | :--- | :--- |
| CHEM 460 | Materials Chemistry (odd years) |  |
| CHEM 452 | Physical Inorganic Chemistry Laboratory | 1 |
| SEFE 338 | Standards-Based Instruction \& Assessment <br> In | 3 |


| Inquiry/Thread/Elective Course | 3 |
| ---: | ---: |
| Inquiry/Thread/Elective Course | 3 |
| Inquiry/Thread/Elective Course | 3 |
| Hours | $\mathbf{1 6}$ |
| Total Hours** | $\mathbf{1 2 2 - 1 2 3}$ |

1 Course offered in multiple subjects; cannot take course in first major subject

* Students are encouraged to take INDS 101 as a Free Elective.

Optional ACS Certification requires 2 credits of CHEM 490: Independent Study and 1 credit of CHEM 496: Research.

## Major Code: 6118

Concentration Code: CHED
Revised date: 08.02.2021
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Chemistry, Bachelor of Science (BS) - Concentration in Computational Chemistry

The Slippery Rock University Chemistry Degree is certified by the American Chemistry Society or ACS. In order to earn ACS certification, students must complete 2 credits of Independent Study and 1 credit of Research in addition to the BS requirements. Students can also choose an option concentration in order to broaden their background in chemistry or to gain additional experience if they wish to pursue other interests.

Concentrations are available in the following areas:

- Biochemistry
- Computational Chemistry
- Education
- Environmental Chemistry
- Forensic Chemistry
- Health Sciences


## Program Learning Outcomes

- Students will demonstrate knowledge of the main disciplines of chemistry, namely Organic, Analytical, Biological, Physical, and Inorganic chemistry.
- Students will demonstrate development of technical skills for practical applications of chemistry.
- Students will present collected experimental data in written and oral reports.
- Students and faculty will participate in faculty-led research projects. Students are expected to be actively working in the laboratory under the supervision and guidance of a faculty mentor.


## Related Links

Chemistry - Computational Chemistry, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/chemistry-computationalchemistry/)

Chemistry Department Page (https://www.sru.edu/academics/colleges-and-departments/ches/departments/chemistry/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher


1 Course offered in multiple subjects; cannot take in first major subject
2 Course counts for $50 \%$ of Major requirements and Major GPA
3 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.
4 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.


| CHEM 338 | Biochemistry Laboratory II $^{1}$ |  |
| :--- | :--- | ---: |
| CHEM 340 | Air Quality Assessment $^{1}$ |  |
| CHEM 370 | Water Quality Assessment $^{1}$ |  |
| CHEM 415 | Forensic Analysis $^{1}$ |  |
| CHEM 416 | Forensic Analysis Lab $^{1}$ |  |
| CHEM 475 | Advanced Organic Synthesis $^{1}$ | 4 |
| Subtotal |  | 4 |
| Cognate Courses |  | 4 |
| BIOL 104 | Principles of Biology with Lab $^{1}$ | 4 |
| MATH 230 | Calculus II $^{1}$ | 4 |
| PHYS 217 | University Physics 2 with Lab $^{1}$ | 4 |
| Subtotal |  | $\mathbf{4}$ |
| Total Hours |  | 56 |

1 Course counts for $50 \%$ of Major requirements and Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Natural Science and Math College Wide Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| CHEM 107 | General Chemistry $\mathrm{I}^{1,2}$ | 3 |
| CHEM 111 | General Chemistry I Lab ${ }^{1,2}$ | 1 |
| MATH 225 | Calculus I ${ }^{1,2}$ | 4 |
| PHYS 216 | University Physics 1 with Lab ${ }^{\text {1,2 }}$ | 4 |
| Total Hours |  | 12 |

1 Course counts for $50 \%$ of Major requirements and Major GPA
2 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.

## Computational Chemistry Concentration

| Code Title | Hours |
| :--- | :--- | :--- |
| Computer Science Courses |  |


| CPSC 146 | Programming Principles ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| CPSC 246 | Advanced Programming Principles ${ }^{1}$ | 3 |
| CPSC 374 | Algorithms and Data Structures ${ }^{1}$ | 3 |
| CPSC 480 | Topics in Computer Science: Machine Learning ${ }^{1}$ | 3 |
| Subtotal |  | 12 |


| Required Math and Science Courses |  |  |
| :--- | :--- | ---: |
| PHYS 385 | Computational Physics ${ }^{1}$ | 3 |
| STAT 152 | Elementary Statistics I $^{1}$ | 3 |
| MATH 240 | Linear Algebra and Differential Equations $^{1}$ | 3 |
| Subtotal |  | 9 |
| Total Hours |  | $\mathbf{2 1}$ |

1 Course counts for $50 \%$ of Major requirements and Major GPA

| ACS Certification - Optional |  |  |
| :--- | :--- | ---: |
| Code | Title | Hours |
| CHEM 490 | Independent Study ${ }^{1}$ | 2 |
| CHEM 496 | Research $^{1}$ | 1 |
| Total Hours |  | 3 |

1 Course counts for $50 \%$ of Major requirements and Major GPA

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes (e.g., Organic Chemistry II Lab)
2. Student-faculty research
3. Student leadership development (Chemistry Club)
4. Career education and development
5. Internships
6. Student teaching (serve as Lab Assistants and tutors)
7. Volunteering

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
CHEMISTRY - BS (6118)
Concentration in Computational Chemistry (CCHM)
This program is effective as of Fall 2021
Revised 07.28.2021
UCC 03.14.21

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| CHEM 107 | General Chemistry I | 4 |
| \& CHEM 111 | and General Chemistry I Lab |  |
| Select one of the following: |  | 3-4 |
| MATH 120 | Intermediate Algebra (if necessary) |  |
| MATH 125 | Precalculus (if necessary) |  |
| MATH 225 | Calculus I (if necessary) |  |
| MATH 230 | Calculus II |  |
| BIOL 104 | Principles of Biology with Lab | 4 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| INDS 101 | FYRST Seminar | 1 |
|  | Hours | 15-16 |
| Spring |  |  |
| CHEM 108 | General Chemistry II | 4 |
| \& CHEM 112 | and General Chemistry II Lab |  |
| Select one of the following: |  | 4 |
| MATH 125 | Precalculus (if necessary) |  |
| MATH 225 | Calculus I (if necessary) |  |


| MATH 230 | Calculus II |  |
| :---: | :---: | :---: |
| ENGL 102 | Critical Writing | 3 |
| STAT 152 | Elementary Statistics I | 3 |
|  | Hours | 14 |
| Second Year |  |  |
| Fall |  |  |
| CHEM 201 | Organic Chemistry I | 4 |
| \& CHEM 211 | and Organic Chemistry Laboratory I |  |
| CHEM 243 | Introduction to Research in Chemistry | 1 |
| Select one of the following: |  | 4 |
| MATH 225 | Calculus I (if necessary) |  |
| MATH 230 | Calculus II |  |
| PHYS 216 | University Physics 1 with Lab | 4 |
| CPSC 146 | Programming Principles | 3 |
|  | Hours | 16 |
| Spring |  |  |
| CHEM 202 | Organic Chemistry II | 4 |
| \& CHEM 212 | and Organic Chemistry Laboratory II |  |
| MATH 230 | Calculus II | 4 |
| PHYS 217 | University Physics 2 with Lab | 4 |
| ENGL 104 | Critical Reading | 3 |
| CPSC 246 | Advanced Programming Principles | 3 |
|  | Hours | 18 |
| Third Year |  |  |
| Fall |  |  |
| CHEM 335 | Biochemistry I | 4 |
| \& CHEM 336 | and Biochemistry Laboratory I |  |
| CHEM 350 | Analytical Chemistry | 4 |
| \& CHEM 351 | and Analytical Chemistry Lab |  |
| BIOL 370 | Molecular Biology with Lab | 3 |
| CPSC 374 | Algorithms and Data Structures | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
|  | Hours | 17 |
| Spring |  |  |
| Select one of the following: |  | 3 |
| CHEM 302 | Physical Chemistry II (even years) |  |
| CHEM 460 | Materials Chemistry (odd years) |  |
| Select one of the following: |  | 4 |
| In Depth Chemistry Elective (1 lecture and 1 lab ) |  |  |
| CHEM 337 <br> \& CHEM 338 | Biochemistry II and Biochemistry Laboratory II |  |
| CHEM 415 <br> \& CHEM 416 | Forensic Analysis and Forensic Analysis Lab |  |
| CHEM 475 | Advanced Organic Synthesis |  |
| CHEM 425 <br> \& CHEM 426 | Instrumental Analysis and Instrumental Analysis Laboratory | 4 |
| CHEM 491 | Chemistry Seminar | 1 |
| CPSC 480 | Topics in Computer Science: Machine Learning | 3 |
|  | Hours | 15 |



The Slippery Rock University Chemistry Degree is certified by the American Chemistry Society or ACS. In order to earn ACS certification, students must complete 2 credits of Independent Study and 1 credit of Research in addition to the BS requirements. Students can also choose an option concentration in order to broaden their background in chemistry or to gain additional experience if they wish to pursue other interests.

Concentrations are available in the following areas:

- Biochemistry
- Computational Chemistry
- Education
- Environmental Chemistry
- Forensic Chemistry
- Health Sciences


## Program Learning Outcomes

- Students will demonstrate knowledge of the main disciplines of chemistry, namely Organic, Analytical, Biological, Physical, and Inorganic chemistry.
- Students will demonstrate development of technical skills for practical applications of chemistry.
- Students will present collected experimental data in written and oral reports.
- Students and faculty will participate in faculty-led research projects. Students are expected to be actively working in the laboratory under the supervision and guidance of a faculty mentor.


## Related Links

Chemistry - Environmental Chemistry, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/chemistry-environmentalchemistry/)

Chemistry Department Page (https://www.sru.edu/academics/colleges-and-departments/ches/departments/chemistry/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 45 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 56 |
| Natural Science and Math College Wide Requirement | 12 |
| Environmental Chemistry Concentration | $14-15$ |
| ACS Certification - Optional | $0-3$ |
| Electives | 5 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

| Rock Studies Requirements |  |  |
| :--- | :--- | ---: |
| Code | Title | Hours |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 225 | Calculus I 2,3 | 4 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :--- | :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy | 16 |
| Subtotal |  |  |
| Integrated Inquiry |  |  |



| Subtotal |  | 4 |
| :---: | :---: | :---: |
| Required Foundation Chemistry Courses |  |  |
| CHEM 201 | Organic Chemistry ${ }^{1}$ | 3 |
| CHEM 211 | Organic Chemistry Laboratory $\mathrm{I}^{1}$ | 1 |
| CHEM 243 | Introduction to Research in Chemistry | 1 |
| CHEM 301 | Physical Chemistry $1^{1}$ | 3 |
| CHEM 321 | Physical Chemistry Laboratory ${ }^{1}$ | 1 |
| CHEM 335 | Biochemistry ${ }^{1}$ | 3 |
| CHEM 336 | Biochemistry Laboratory ${ }^{1}$ | 1 |
| CHEM 350 | Analytical Chemistry ${ }^{1}$ | 3 |
| CHEM 351 | Analytical Chemistry Lab ${ }^{1}$ | 1 |
| CHEM 442 | Inorganic Chemistry ${ }^{1}$ | 3 |
| CHEM 452 | Physical Inorganic Chemistry Laboratory ${ }^{1}$ | 1 |
| CHEM 491 | Chemistry Seminar ${ }^{1}$ | 1 |
| Subtotal |  | 22 |

Required In-Depth Chemistry Courses

| CHEM 202 | Organic Chemistry II ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| CHEM 212 | Organic Chemistry Laboratory II ${ }^{1}$ | 1 |
| CHEM 302 | Physical Chemistry II ${ }^{1}$ | 3 |
| CHEM 425 | Instrumental Analysis ${ }^{1}$ | 3 |
| CHEM 426 | Instrumental Analysis Laboratory ${ }^{1}$ | 1 |
| CHEM 460 | Materials Chemistry ${ }^{1}$ | 3 |
| Subtotal |  | 14 |

Additional Required In-Depth Chemistry Courses
Select one lecture and one laboratory course:

| CHEM 337 | Biochemistry II $^{1}$ |
| :--- | :--- |
| CHEM 338 | Biochemistry Laboratory II $^{1}$ |
| CHEM 340 | Air Quality Assessment ${ }^{1}$ |
| CHEM 370 | Water Quality Assessment $^{1}$ |
| CHEM 415 | Forensic Analysis $^{1}$ |
| CHEM 416 | Forensic Analysis Lab $^{1}$ |
| CHEM 475 | Advanced Organic Synthesis $^{1}$ |

Subtotal

## Cognate Courses

| BIOL 104 | Principles of Biology with Lab ${ }^{1}$ | 4 |
| :--- | :--- | ---: |
| PHYS 217 | University Physics 2 with Lab $^{1}$ | 4 |
| MATH 230 | Calculus II $^{1}$ | 4 |
| Subtotal |  | 12 |
| Total Hours |  | $\mathbf{5 6}$ |

1 Course counts for $50 \%$ of Major requirements and Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

| Code | Title | Hours |
| :---: | :---: | :---: |
| CHEM 107 | General Chemistry $\mathrm{I}^{1,2}$ | 3 |
| CHEM 111 | General Chemistry I Lab ${ }^{1,2}$ | 1 |
| MATH 225 | Calculus I ${ }^{1,2}$ | 4 |
| PHYS 216 | University Physics 1 with Lab ${ }^{1,2}$ | 4 |
| Total Hours |  | 12 |

1 Course counts for $50 \%$ of Major requirements and Major GPA
2 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.

## Environmental Chemistry Concentration

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  | 3 |
| BIOL 401 | Ecology with Lab ${ }^{1}$ | 4 |
| EGEO 451 | Geochemistry/Lab ${ }^{1}$ | 7 |
| Subtotal |  | 4 |
| Required Chemistry Courses | 4 |  |
| Select one of the following: |  |  |


| CHEM 340 | Air Quality Assessment ${ }^{1}$ |
| :--- | :--- |
| CHEM 370 | Water Quality Assessment $^{1}$ |

Subtotal

## Additional Required Course

Select one of the following: 3-4

| BIOL 305 | Wetlands and Aquatic Plants/Lab ${ }^{1}$ |  |
| :--- | :--- | ---: |
| BIOL 306 | Freshwater Biomonitoring/Lab ${ }^{1}$ |  |
| CHEM 340 | Air Quality Assessment ${ }^{1}$ |  |
| CHEM 370 | Water Quality Assessment $^{1}$ |  |
| EGEO 201 | Earth Materials and Processes/Lab ${ }^{1}$ |  |
| Subtotal |  | 3-4 |
| Total Hours |  | $\mathbf{1 4 - 1 5}$ |

1 Course counts for $50 \%$ of Major requirements and Major GPA

## ACS Certification - Optional

| Code | Title | Hours |
| :--- | :--- | ---: |
| CHEM 490 | Independent Study ${ }^{1}$ | 2 |
| CHEM 496 | Research $^{1}$ | 1 |
| Total Hours |  | $\mathbf{3}$ |

1 Course counts for $50 \%$ of Major requirements and Major GPA

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes (e.g., Organic Chemistry II Lab)
2. Student-faculty research
3. Student leadership development (Chemistry Club)
4. Career education and development
5. Internships
6. Student teaching (serve as Lab Assistants and tutors)
7. Volunteering

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report
and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
CHEMISTRY - BS (6118)
Concentration in Environmental Chemistry (ENVI)
This program is effective as of Fall 2021
Revised 07.29.21
UCC 04.13.21

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
| Select one of the following: |  | 3-4 |
| MATH 120 | Intermediate Algebra (if necessary) |  |
| MATH 125 | Precalculus (if necessary) |  |
| MATH 225 | Calculus I (if necessary) |  |
| MATH 230 | Calculus II |  |
| BIOL 104 | Principles of Biology with Lab | 4 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| INDS 101 | FYRST Seminar | 1 |
|  | Hours | 15-16 |
| Spring |  |  |
| CHEM 108 | General Chemistry II | 4 |
| \& CHEM 112 | and General Chemistry II Lab |  |
| Select one of the following: |  | 4 |
| MATH 125 | Precalculus (if necessary) |  |
| MATH 225 | Calculus I (if necessary) |  |
| MATH 230 | Calculus II |  |
| ENGL 102 | Critical Writing | 3 |
| Inquiry/Thread/Elective Course |  | 3 |
|  | Hours | 14 |
| Second Year |  |  |
| Fall |  |  |
| CHEM 201 | Organic Chemistry I | 4 |
| \& CHEM 211 | and Organic Chemistry Laboratory I |  |
| CHEM 243 | Introduction to Research in Chemistry | 1 |
| Select one of the following: |  | 4 |
| MATH 225 | Calculus I (if necessary) |  |
| MATH 230 | Calculus II |  |
| PHYS 216 | University Physics 1 with Lab | 4 |
| ENGL 104 | Critical Reading | 3 |
|  | Hours | 16 |
| Spring |  |  |
| CHEM 202 | Organic Chemistry II | 4 |
| \& CHEM 212 | and Organic Chemistry Laboratory II |  |
| MATH 230 | Calculus II (if necessary) | 4 |
| PHYS 217 | University Physics 2 with Lab | 4 |


| Inquiry/Thread/Elective Course |  | 3 |
| :---: | :---: | :---: |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| CHEM 335 <br> \& CHEM 336 | Biochemistry I and Biochemistry Laboratory I | 4 |
| CHEM 350 <br> \& CHEM 351 | Analytical Chemistry and Analytical Chemistry Lab | 4 |
| Civil Discourse Requirement - select one |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| BIOL 401 | Ecology with Lab | 3 |
|  | Hours | 14 |

Spring

| Select one of the following: | 3 |  |
| :--- | :--- | :--- |
| CHEM 302 | Physical Chemistry II (even years) |  |
| CHEM 460 | Materials Chemistry (odd years) | 4 |
| Select one of the following: |  |  |


|  |  |  |
| :--- | :--- | :--- |
| In Depth Chemistry Elective (1 lecture and 1 lab) |  |  |
| CHEM 337 | Biochemistry II |  |
| \& CHEM 338 | and Biochemistry Laboratory II |  |
| CHEM 415 | Forensic Analysis |  |
| \& CHEM 416 | and Forensic Analysis Lab |  |
| CHEM 475 | Advanced Organic Synthesis |  |
| CHEM 425 | Instrumental Analysis | 4 |
| \& CHEM 426 | and Instrumental Analysis Laboratory |  |
| CHEM 491 | Chemistry Seminar | 1 |

Select one of the following: 4

| CHEM 340 | Air Quality Assessment (even years) |  |
| :--- | :--- | ---: |
| CHEM 370 | Water Quality Assessment (odd years) |  |
|  | Hours | $\mathbf{1 6}$ |
| Fourth Year |  |  |
| Fall |  | 4 |
| CHEM 301 | Physical Chemistry 1 |  |
| \& CHEM 321 | and Physical Chemistry Laboratory I |  |
| CHEM 442 | Inorganic Chemistry | 3 |
| Select 3-4 credits from the following | $3-4$ |  |


| BIOL 305 | Wetlands and Aquatic Plants/Lab |
| :--- | :--- |
| BIOL 306 | Freshwater Biomonitoring/Lab |
| CHEM 340 | Air Quality Assessment |
| CHEM 370 | Water Quality Assessment |
| EGEO 201 | Earth Materials and Processes/Lab |

Inquiry/Thread/Elective Course 3

| Inquiry/Thread/Elective Course | 3 |
| :---: | ---: |
| Hours | $16-17$ |

## Spring

Select one of the following: 3

| CHEM 302 | Physical Chemistry II (even years) |  |
| :--- | :--- | :--- |
| CHEM 460 | Materials Chemistry (odd years) |  |
| CHEM 452 | Physical Inorganic Chemistry Laboratory | 1 |
| EGEO 451 | Geochemistry/Lab | 4 |
| Inquiry/Thread/Elective Course | 3 |  |


| Inquiry/Thread/Elective Course | 3 |
| :---: | ---: |
| Inquiry/Thread/Elective Course | 3 |
| Hours | $\mathbf{1 7}$ |
| Total Hours** | $\mathbf{1 2 3 - 1 2 5}$ |

* Students are encouraged to take INDS 101 as a Free Elective.

1 Course offered in multiple subjects; cannot take course in first major subject

Optional ACS Certification requires 2 credits of CHEM 490: Independent Study and 1 credit of CHEM 496: Research.

Major Code: 6118
Concentration Code: ENVI
Revised date: 08.02.2021
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Chemistry, Bachelor of Science (BS) Concentration in Forensic Chemistry

The Slippery Rock University Chemistry Degree is certified by the American Chemistry Society or ACS. In order to earn ACS certification, students must complete 2 credits of Independent Study and 1 credit of Research in addition to the BS requirements. Students can also choose an option concentration in order to broaden their background in chemistry or to gain additional experience if they wish to pursue other interests.

Concentrations are available in the following areas:

- Biochemistry
- Computational Chemistry
- Education
- Environmental Chemistry
- Forensic Chemistry
- Health Sciences


## Program Learning Outcomes

- Students will demonstrate knowledge of the main disciplines of chemistry, namely Organic, Analytical, Biological, Physical, and Inorganic chemistry.
- Students will demonstrate development of technical skills for practical applications of chemistry.
- Students will present collected experimental data in written and oral reports.
- Students and faculty will participate in faculty-led research projects. Students are expected to be actively working in the laboratory under the supervision and guidance of a faculty mentor.


## Related Links

Chemistry - Forensic Chemistry, BS Program Page (https://www.sru.edu/ academics/majors-and-minors/chemistry-forensic-chemistry/)

Chemistry Department Page (https://www.sru.edu/academics/colleges-and-departments/ches/departments/chemistry/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher Overall GPA: 2.0 or higher

## Summary*

| Title | Hours |
| :--- | ---: |
| Code | 45 |
| Rock Studies Requirements | $0-3$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | 56 |
| Major Requirements | 12 |
| Natural Science and Math College Wide Requirement | 18 |
| Forensic Chemistry Concentration | $0-3$ |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 225 | Calculus I | 4 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 16 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Sciences Inquiry |  |  |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab ${ }^{2,3}$ | 4 |
| Physical Sciences Inquiry |  |  |
| PHYS 211 | General Physics I with Lab ${ }^{2,3}$ | 4 |
| PHYS 216 | University Physics 1 with Lab ${ }^{2,3}$ | 4 |
| Subtotal |  | 21 |
| Thematic Thread |  |  |
| Select 12 Credits (p. 1378) ${ }^{4}$ |  | 12 |
| Total Hours |  | 49 |

1 Course offered in multiple subjects; cannot take in first major subject
${ }^{2}$ Course counts for $50 \%$ of Major requirements and Major GPA
3 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.
4 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one | following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | er competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Ar |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |

Total Hours

## Major/Concentration Requirements

- 28 major credits must be taken at SRU or PASSHE
- 28 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Introductory Chemistry Courses |  |  |
| CHEM 108 | General Chemistry II $^{1}$ | 3 |
| CHEM 112 | General Chemistry II Lab $^{1}$ | 1 |
| Subtotal |  | 4 |


| Required Foundation Chemistry Courses |  |  |
| :---: | :---: | :---: |
| CHEM 201 | Organic Chemistry ${ }^{1}$ | 3 |
| CHEM 211 | Organic Chemistry Laboratory $1^{1}$ | 1 |
| CHEM 243 | Introduction to Research in Chemistry | 1 |
| CHEM 301 | Physical Chemistry $1{ }^{1}$ | 3 |
| CHEM 321 | Physical Chemistry Laboratory ${ }^{1}$ | 1 |
| CHEM 335 | Biochemistry ${ }^{1}$ | 3 |
| CHEM 336 | Biochemistry Laboratory $\mathrm{I}^{1}$ | 1 |
| CHEM 350 | Analytical Chemistry ${ }^{1}$ | 3 |
| CHEM 351 | Analytical Chemistry Lab ${ }^{1}$ | 1 |
| CHEM 442 | Inorganic Chemistry ${ }^{1}$ | 3 |
| CHEM 452 | Physical Inorganic Chemistry Laboratory ${ }^{1}$ | 1 |
| CHEM 491 | Chemistry Seminar ${ }^{1}$ | 1 |
| Subtotal |  | 22 |

[^11]| CHEM 202 | Organic Chemistry II ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| CHEM 212 | Organic Chemistry Laboratory II ${ }^{1}$ | 1 |
| CHEM 302 | Physical Chemistry II ${ }^{1}$ | 3 |
| CHEM 425 | Instrumental Analysis ${ }^{1}$ | 3 |
| CHEM 426 | Instrumental Analysis Laboratory ${ }^{1}$ | 1 |
| CHEM 460 | Materials Chemistry ${ }^{1}$ | 3 |
| Subtotal |  | 14 |

Additional Required In-Depth Chemistry Courses
Select one lecture and one laboratory course:

| CHEM 337 | Biochemistry II ${ }^{1}$ |  |
| :---: | :---: | :---: |
| CHEM 338 | Biochemistry Laboratory II ${ }^{1}$ |  |
| CHEM 340 | Air Quality Assessment ${ }^{1}$ |  |
| CHEM 370 | Water Quality Assessment ${ }^{1}$ |  |
| CHEM 415 | Forensic Analysis ${ }^{1}$ |  |
| CHEM 416 | Forensic Analysis Lab ${ }^{1}$ |  |
| CHEM 475 | Advanced Organic Synthesis ${ }^{1}$ |  |
| Subtotal |  | 4 |
| Cognate Courses |  |  |
| BIOL 104 | Principles of Biology with Lab ${ }^{1}$ | 4 |
| PHYS 217 | University Physics 2 with Lab ${ }^{1}$ | 4 |
| MATH 230 | Calculus II ${ }^{1}$ | 4 |
| Subtotal |  | 12 |
| Total Hours |  | 56 |

1 Course counts for $50 \%$ of Major requirements and Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Natural Science and Math College-Wide Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| CHEM 107 | General Chemistry I |  |
| CHEM 111 | General Chemistry I Lab $^{1,2}$ | 3 |
| MATH 225 | Calculus I $^{1,2}$ | $\mathbf{1}$ |
| PHYS 216 | University Physics 1 with Lab $^{1,2}$ | 4 |
| Total Hours |  | $\mathbf{4}$ |

1 Course counts for $50 \%$ of Major requirements and Major GPA
2 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.

Forensic Chemistry Concentration

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| CHEM 204 | Introduction to Forensic Science ${ }^{1}$ | 3 |
| CHEM 415 | Forensic Analysis ${ }^{1}$ | 3 |
| CHEM 416 | Forensic Analysis Lab ${ }^{1}$ | 1 |
| BIOL 250 | Genetics with Lab ${ }^{1}$ | 4 |
| BIOL 370 | Molecular Biology with Lab ${ }^{1}$ | 3 |
| CRIM 110 | Introduction to Criminology \& Criminal Justice Systems ${ }^{1}$ | 3 |
| Subtotal |  | 17 |
| Electives |  |  |


| Department of Chemistry strongly recommends that the following <br> course be taken: <br> CRIM 343$\quad$ Criminal Investigations | 3 |
| :--- | ---: |
| Subtotal | 3 |
| Total Hours | $\mathbf{2 0}$ |

1 Course counts for 50\% of Major requirements and Major GPA

## ACS Certification - Optional

| Code | Title | Hours |
| :--- | :--- | ---: |
| CHEM 490 | Independent Study ${ }^{1}$ | 2 |
| CHEM 496 | Research $^{1}$ | 1 |
| Total Hours |  | 3 |

1 Course counts for $50 \%$ of Major requirements and Major GPA

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes (e.g., Organic Chemistry II Lab)
2. Student-faculty research
3. Student leadership development (Chemistry Club)
4. Career education and development
5. Internships
6. Student teaching (serve as Lab Assistants and tutors)
7. Volunteering

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
CHEMISTRY - BS (6118)
Concentration in Forensic Chemistry (FORE)
This program is effective as of Fall 2021
Revised 12.14.2021
UCC 04.13.21

## Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall |  | 4 |
| CHEM 107 | General Chemistry I |  |
| \& CHEM 111 | and General Chemistry I Lab | 4 |
| Select one of the following: | $3-4$ |  |
| MATH 120 |  | Intermediate Algebra (if necessary) |


| MATH 125 | Precalculus (if necessary) |  |
| :--- | :--- | ---: |
| MATH 225 | Calculus I (if necessary) |  |
| MATH 230 | Calculus II | 4 |
| BIOL 104 | Principles of Biology with Lab | 3 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 1 |
| INDS 101 | FYRST Seminar | $\mathbf{1 5 - 1 6}$ |

## Spring

| CHEM 108 | General Chemistry II |  |
| :--- | :--- | :--- |
| \& CHEM 112 | and General Chemistry II Lab | 4 |
| Select one of the following: | 4 |  |


| MATH 125 | Precalculus (if necessary) |  |
| ---: | :--- | ---: |
| MATH 225 | Calculus I (if necessary) |  |
| MATH 230 | Calculus II | 3 |
| ENGL 102 | Critical Writing | 4 |
| BIOL 250 | Genetics with Lab | $\mathbf{1 5}$ |

## Second Year

Fall

| CHEM 201 | Organic Chemistry I <br> \& CHEM 211 | 4 |
| :--- | :--- | :--- |
| CHEM 243 Organic Chemistry Laboratory I |  |  |$\quad$ Introduction to Research in Chemistry $\quad 18$


| MATH 225 | Calculus I (if necessary) |  |
| :---: | :--- | ---: |
| MATH 230 | Calculus II | 4 |
| PHYS 216 | University Physics 1 with Lab | 3 |
| ENGL 104 | Critical Reading | $\mathbf{1 6}$ |

## Spring

| CHEM 202 | Organic Chemistry II <br> \& CHEM 212 | 4 |
| :--- | :--- | :--- |
| MATH 230 Organic Chemistry Laboratory II |  |  |$\quad$| 4 |
| :--- |
| PHYS 217 |$\quad$ Calculus II $\quad 4$


| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :---: | :--- | ---: |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy | $\mathbf{3}$ |
| Inquiry/Thread/Elective Course | $\mathbf{1 8}$ |  |

Third Year
Fall

| CHEM 335 | Biochemistry I | 4 |
| :--- | :--- | :--- |
| \& CHEM 336 | and Biochemistry Laboratory I |  |
| CHEM 350 | Analytical Chemistry | 4 |

\& CHEM 351 and Analytical Chemistry Lab
BIOL $370 \quad 3$

Introduction to Criminology \& Criminal 3
Justice Systems

## Hours

14
4 Spring
Select one of the following:
CHEM $302 \quad$ Physical Chemistry II (even years)
CHEM 460 Materials Chemistry (odd years)

| CHEM 415 <br> \& CHEM 416 | Forensic Analysis and Forensic Analysis Lab | 4 |
| :---: | :---: | :---: |
| CHEM 425 <br> \& CHEM 426 | Instrumental Analysis and Instrumental Analysis Laboratory | 4 |
| CHEM 491 | Chemistry Seminar | 1 |
| Inquiry/Thread/Elective Course |  | 3 |


| Fourth Year |  |  |  |  |
| :--- | :--- | ---: | :---: | :---: |
| Fall |  |  |  |  |
| CHEM 301 | Physical Chemistry 1 |  |  |  |
| \& CHEM 321 | and Physical Chemistry Laboratory I |  |  |  |
| CHEM 442 | Inorganic Chemistry | 3 |  |  |
| Inquiry/Thread/Elective Course | 3 |  |  |  |
| Inquiry/Thread/Elective Course | 3 |  |  |  |
| Inquiry/Thread/Elective Course | 3 |  |  |  |
| Hours |  |  |  | $\mathbf{1 6}$ |

## Spring

| Select one of the following: | 3 |  |
| :--- | :--- | ---: |
| CHEM 302 | Physical Chemistry II (even years) |  |
| CHEM 460 | Materials Chemistry (odd years) |  |
| CHEM 452 | Physical Inorganic Chemistry Laboratory | 1 |
| Inquiry/Thread/Elective Course | 3 |  |
| Inquiry/Thread/Elective Course | 3 |  |
| Inquiry/Thread/Elective Course | 3 |  |
|  | Hours | $\mathbf{1 3}$ |
| Total Hours** | $\mathbf{1 2 2 - 1 2 3}$ |  |

1 Course offered in multiple subjects; cannot take course in first major subject

* Students are encouraged to take INDS 101 as a Free Elective.

Optional ACS Certification requires 2 credits of CHEM 490: Independent Study and 1 credit of CHEM 496: Research.

Major Code: 6118
Concentration Code: FORE
Revised date: 08.02.2021
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Chemistry, Bachelor of Science (BS) Concentration in Health Sciences

The Slippery Rock University Chemistry Degree is certified by the American Chemistry Society or ACS. In order to earn ACS certification, students must complete 2 credits of Independent Study and 1 credit of Research in addition to the BS requirements. Students can also choose an option concentration in order to broaden their background in chemistry or to gain additional experience if they wish to pursue other interests.

Concentrations are available in the following areas:

- Biochemistry
- Computational Chemistry
- Education
- Environmental Chemistry
- Forensic Chemistry
- Health Sciences


## Program Learning Outcomes

- Students will demonstrate knowledge of the main disciplines of chemistry, namely Organic, Analytical, Biological, Physical, and Inorganic chemistry.
- Students will demonstrate development of technical skills for practical applications of chemistry.
- Students will present collected experimental data in written and oral reports.
- Students and faculty will participate in faculty-led research projects. Students are expected to be actively working in the laboratory under the supervision and guidance of a faculty mentor.


## Related Links

Chemistry - Health Sciences, BS Program Page (https://www.sru.edu/ academics/majors-and-minors/chemistry-health-sciences/)

Chemistry Department Page (https://www.sru.edu/academics/colleges-and-departments/ches/departments/chemistry/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

Code Title Hours

Rock Studies Requirements 45
Other Basic Requirements 0-3
Computer Competency 0-3
Major/Concentration Requirements 56
Natural Science and Math College-Wide Requirements 12
ACS Certification -Optional 0-3
Electives 14

* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar |  |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 225 | Calculus I ${ }^{2}$ | 4 |
| Select one of the following: |  | 3 |


| COMM 200 | Civil Discourse: Theory \& Practic |  |
| :---: | :---: | :---: |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 16 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p.1378) |  | 3 |
| Social Science Inquiry |  |  |
| PSYC 105 | Introduction to Psychology | 3 |
| Natural Sciences Inquiry |  |  |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab ${ }^{2}$ | 4 |
| Physical Sciences Inquiry |  |  |
| PHYS 216 | University Physics 1 with Lab ${ }^{2}$ | 4 |
| Subtotal |  | 17 |
| Thematic Thread |  |  |
| Select 12 Credits (p.1378) ${ }^{3}$ |  | 12 |
| Total Hours |  | 45 |

1 Course offered in multiple subjects; cannot take course in first major subject
2 Course counts for $50 \%$ of Major requirements and Major GPA
3 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major/Concentration Requirements

- 28 major credits must be taken at SRU or PASSHE
- 28 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Introductory Chemistry Courses |  |  |
| CHEM 108 | General Chemistry II ${ }^{1}$ | 3 |
| CHEM 112 | General Chemistry II Lab ${ }^{1}$ | 1 |
| Subtotal |  | 4 |
| Required Foundation Chemistry Courses |  |  |
| CHEM 201 | Organic Chemistry $\mathrm{I}^{1}$ | 3 |
| CHEM 211 | Organic Chemistry Laboratory $\mathrm{I}^{1}$ | 1 |
| CHEM 243 | Introduction to Research in Chemistry ${ }^{1}$ | 1 |
| CHEM 301 | Physical Chemistry $1{ }^{1}$ | 3 |
| CHEM 321 | Physical Chemistry Laboratory ${ }^{1}$ | 1 |
| CHEM 335 | Biochemistry $\mathrm{I}^{1}$ | 3 |
| CHEM 336 | Biochemistry Laboratory ${ }^{1}$ | 1 |
| CHEM 350 | Analytical Chemistry ${ }^{1}$ | 3 |
| CHEM 351 | Analytical Chemistry Lab ${ }^{1}$ | 1 |
| CHEM 442 | Inorganic Chemistry ${ }^{1}$ | 3 |
| CHEM 452 | Physical Inorganic Chemistry Laboratory ${ }^{1}$ | 1 |
| CHEM 491 | Chemistry Seminar ${ }^{1}$ | 1 |
| Subtotal |  | 22 |
| Required In-Depth Chemistry Courses |  |  |
| CHEM 202 | Organic Chemistry II ${ }^{1}$ | 3 |
| CHEM 212 | Organic Chemistry Laboratory II ${ }^{1}$ | 1 |
| CHEM 302 | Physical Chemistry II ${ }^{1}$ | 3 |
| CHEM 425 | Instrumental Analysis ${ }^{1}$ | 3 |
| CHEM 426 | Instrumental Analysis Laboratory ${ }^{1}$ | 1 |
| CHEM 460 | Materials Chemistry ${ }^{1}$ | 3 |
| Subtotal |  | 14 |

Additional Required In-Depth Chemistry Courses
Select four credits (must include one lecture and one lab): 4

| CHEM 337 | Biochemistry II $^{1}$ |
| :--- | :--- |
| CHEM 338 | Biochemistry Laboratory II $^{1}$ |
| CHEM 340 | Air Quality Assessment $^{1}$ |
| CHEM 370 | Water Quality Assessment $^{1}$ |
| CHEM 415 | Forensic Analysis $^{1}$ |
| CHEM 416 | Forensic Analysis Lab $^{1}$ |
| CHEM 475 | Advanced Organic Synthesis $^{1}$ |

Subtotal 4

| Cognate Courses |  |  |
| :--- | :--- | ---: |
| BIOL 104 | Principles of Biology with Lab ${ }^{1}$ | 4 |
| PHYS 217 | University Physics 2 with Lab $^{1}$ | 4 |
| MATH 230 | Calculus II $^{1}$ | 4 |
| Subtotal |  | 12 |
| Total Hours |  | $\mathbf{5 6}$ |

1 Course counts for 50\% of Major requirements and Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

Natural Science and Math College-Wide Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| CHEM 107 | General Chemistry I ${ }^{1}$ | 3 |
| CHEM 111 | General Chemistry I Lab $^{1}$ | 1 |


| MATH 225 | Calculus I $^{1}$ | 4 |
| :--- | :--- | ---: |
| PHYS 216 | University Physics 1 with Lab $^{1}$ | 4 |
| Total Hours |  | $\mathbf{1 2}$ |

1 Course counts for $50 \%$ of Major requirements and Major GPA

## Health Sciences Concentration

| Code | Title | Hours |
| :---: | :---: | :---: |
| BIOL 216 | Anatomy and Physiology I with Lab ${ }^{1}$ | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab ${ }^{1}$ | 3 |
| BIOL 250 | Genetics with Lab ${ }^{1}$ | 4 |
| BIOL 330 | Microbiology/Lab ${ }^{1}$ | 3 |
| PSYC 105 | Introduction to Psychology ${ }^{1}$ | 3 |
| STAT 152 | Elementary Statistics ${ }^{1}{ }^{1}$ | 3 |
| Total Hours |  | 19 |

1 Course counts for $50 \%$ of Major requirements and Major GPA

## ACS Certification - Optional

| Code | Title | Hours |
| :--- | :--- | ---: |
| CHEM 490 | Independent Study ${ }^{1}$ | 2 |
| CHEM 496 | Research $^{1}$ | 1 |
| Total Hours |  | 3 |

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes (e.g., Organic Chemistry II Lab)
2. Student-faculty research
3. Student leadership development (Chemistry Club)
4. Career education and development
5. Internships
6. Student teaching (serve as Lab Assistants and tutors)
7. Volunteering

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
CHEMISTRY - BS (6118)
Concentration in Health Sciences (CHHS)
This program is effective as of Fall 2021
Revised 07.29.21

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| CHEM 107 | General Chemistry I | 4 |
| \& CHEM 111 | and General Chemistry I Lab |  |
| Select one of the following: |  | 3-4 |
| MATH 120 | Intermediate Algebra (if necessary) |  |
| MATH 125 | Precalculus (if necessary) |  |
| MATH 225 | Calculus I (if necessary) |  |
| MATH 230 | Calculus II |  |
| BIOL 104 | Principles of Biology with Lab | 4 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| INDS 101 | FYRST Seminar | 1 |
|  | Hours | 15-16 |

## Spring

CHEM 108 General Chemistry II 4

| \& CHEM 112 and General Chemistry II Lab |  |
| :--- | :--- |
| Select one of the following: | 4 |


| MATH 125 | Precalculus (if necessary) | 4 |
| :--- | :--- | ---: |
| MATH 225 | Calculus I (if necessary) |  |
| MATH 230 | Calculus II | 3 |
| ENGL 102 | Critical Writing | 4 |
| BIOL 250 | Genetics with Lab | $\mathbf{1 5}$ |

## Second Year

Fall

| CHEM 201 | Organic Chemistry I | 4 |
| :--- | :--- | :--- |
| \& CHEM 211 | and Organic Chemistry Laboratory I |  |
| CHEM 243 | Introduction to Research in Chemistry | 1 |

Select one of the following: 4

| MATH 225 | Calculus I (if necessary) |  |
| :---: | :--- | ---: |
| MATH 230 | Calculus II | 4 |
| PHYS 216 | University Physics 1 with Lab | $\mathbf{3}$ |
| ENGL 104 | Critical Reading | $\mathbf{1 6}$ |

Spring

| CHEM 202 | Organic Chemistry II |  |
| :--- | :--- | ---: |
| \& CHEM 212 | and Organic Chemistry Laboratory II | 4 |
| MATH 230 | Calculus II | 4 |
| PHYS 217 | University Physics 2 with Lab | 4 |
| STAT 152 | Elementary Statistics I | 3 |
| Inquiry/Thread/Elective Course | $\mathbf{3}$ |  |
|  | Hours | $\mathbf{1 8}$ |

Third Year
Fall
CHEM 335
\& CHEM 336
CHEM 350
\& CHEM 351
COMM 200

Biochemistry I
4 and Biochemistry Laboratory I
Analytical Chemistry 4 and Analytical Chemistry Lab Civil Discourse: Theory \& Practice

| PSYC 105 | Introduction to Psychology | 3 |
| :---: | :---: | :---: |
|  | Hours | 14 |
| Spring |  |  |
| Select one of the following: |  | 3 |
| CHEM 302 | Physical Chemistry II (even years) |  |
| CHEM 460 | Materials Chemistry (odd years) |  |
| Select one of the following In-Depth Chemistry Electives (lecture and lab): |  | 4 |
| CHEM 337 <br> \& CHEM 338 | Biochemistry II and Biochemistry Laboratory II |  |
| CHEM 415 <br> \& CHEM 416 | Forensic Analysis and Forensic Analysis Lab |  |
| CHEM 475 | Advanced Organic Synthesis |  |
| CHEM 425 <br> \& CHEM 426 | Instrumental Analysis and Instrumental Analysis Laboratory | 4 |
| CHEM 491 | Chemistry Seminar | 1 |
| BIOL 330 | Microbiology/Lab | 3 |
|  | Hours | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| CHEM 301 <br> \& CHEM 321 | Physical Chemistry 1 and Physical Chemistry Laboratory I | 4 |
| CHEM 442 | Inorganic Chemistry | 3 |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| Inquiry/Thread/Elective Course |  | 3 |
| Inquiry/Thread/Elective Course |  | 3 |
|  | Hours | 16 |
| Spring |  |  |
| Select one of the following: |  | 3 |
| CHEM 302 | Physical Chemistry II (even years) |  |
| CHEM 460 | Materials Chemistry (odd years) |  |
| CHEM 452 | Physical Inorganic Chemistry Laboratory | 1 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| Inquiry/Thread/Elective Course |  | 3 |
| Inquiry/Thread/Elective Course |  | 3 |
|  | Hours | 13 |
|  | Total Hours** | 123 |

* Students are encouraged to take INDS 101 as a Free Elective.

Optional ACS Certification requires 2 credits of CHEM 490 and 1 credit of CHEM 496.

Major Code: 6118
Concentration Code: CHHS
Revised date: 08.02.2021
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Chemistry, Bachelor of Science (BS) / Pre-Pharmacy (Duquesne) (3+4) <br> Pre-Acceptance Requirements

To be considered for the pre-acceptance program at Slippery Rock University, students must:

- Have a minimum high school QPA of 3.0.
- Score a minimum of 1130 on their SAT or 23 on their ACT.
- Demonstrate evidence of leadership potential, community service, and involvement in co-curricular activities.
- Provide one letter of recommendation from either a high school teacher or guidance counselor.

To maintain satisfactory progress in the Duquesne pre-pharmacy program, students must:

- Complete the curricular requirements described in their SRU curriculum guide.
- Earn a letter grade of " $C$ " or better in all courses.
- Maintain a minimum QPA of 2.50 .

For the $2+4$ program: Students should prepare to take the PCAT but October of their sophomore year at Slippery Rock University.

For the 3+4 program: Students should prepare to take the PCAT but October of their junior year at Slippery Rock University.

Before January 15th of their sophomore year (for the $2+4$ option) and their junior year (for the $3+4$ option), prospective students must apply to Duquesne University. In addition to the grade and QPA requirements listed above, formal acceptance in the PharmD program requires that students:

- Attain a PCAT score of 375 or better.
- Participate in an interview process with the Duquesne University School of Pharmacy faculty.
- Submit a letter of recommendation from the SRU Pre-Pharmacy Selection Committee.
- Provide evidence of leadership potential and commitment to the pharmacy profession.

Preference will be granted to candidates who:

- Attain a PCAT score of 400 or better.
- Maintain a QPA of 3.00 or higher for all science and math courses.
- Maintain a cumulative QPA of 3.00 or higher.


## Related Links

Chemistry: Pre-Pharmacy (Duquesne) Program Page (https:// www.sru.edu/academics/majors-and-minors/chemistry-pre-pharmacy(duquesne)/)

Chemistry Department Page (https://www.sru.edu/academics/colleges-and-departments/ches/departments/chemistry/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide <br> GPA Requirement

```
Overall GPA: 3.00 or higher
Math/Science Course GPA: 3.00 or higher
```


## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 45 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major/Concentration Requirements | 12 |
| Natural Science and Math College-Wide Requirements | 15 |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. However, because this |  |
| is a pre-professional program, credits taken during the 1 |  |
| st |  |
| gear of the |  |
| graduate program are applied toward the undergraduate credit hours to |  |
| meet the 120 credits required for your undergraduate degree. |  |

Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| PHIL 110 | Ethics and Civil Discourse | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 225 | Calculus I | 4 |
| Subtotal |  | 16 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p.1378) |  | 3 |
| Humanities Inquiry |  |  |
| PHIL 140 | World Religions | 3 |
| Social Science Inquiry |  |  |
| PSYC 105 | Introduction to Psychology | 3 |
| Natural Science Inquiry |  |  |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
| Physical Science Inquiry |  |  |
| PHYS 216 | University Physics 1 with Lab | 4 |
| Subtotal |  | 17 |
| Thematic Thread |  |  |
| Select 12 Cre | 378) ${ }^{2}$ | 12 |
| Total Hours |  | 45 |

1 Course offered in multiple subjects; cannot take course in first major subject
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | $\mathbf{0 - 3}$ |

## Computer Competency

Code Title Hours

Demonstrate "computer competency" by one of the following: 0-3
Pass Computer Competency Exam OR
Select one of the following at SRU or another post-secondary institution:

| CPSC 100 | Introduction to Computing for Liberal Arts |
| :--- | :--- |
| CPSC 110 | Computer Concepts |
| CPSC 130 | Introduction to Computing and <br> Programming |
| PE 202 | Technology for Wellness |
| Total Hours |  |

## Major/Concentration Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Introductory Chemistry Courses |  |  |
| CHEM 108 | General Chemistry II | 3 |
| CHEM 112 | General Chemistry II Lab | 1 |
| Subtotal |  | 4 |

Required Foundation Chemistry Courses
CHEM $201 \quad$ Organic Chemistry I
CHEM 211 Organic Chemistry Laboratory I 1
CHEM 243 Introduction to Research in Chemistry 1
CHEM 335 Biochemistry I 3
CHEM 336 Biochemistry Laboratory I 1

CHEM 350 Analytical Chemistry 3
CHEM 351 Analytical Chemistry Lab 1
Select one of the following: 4

| CHEM 301 | Physical Chemistry 1 |  |
| :--- | :--- | :--- |
| \& CHEM 321 | and Physical Chemistry Laboratory I |  |
| CHEM 442 | Inorganic Chemistry |  |
| \& CHEM 452 | and Physical Inorganic Chemistry <br> Laboratory |  |
| Subtotal |  | 17 |


| Required In-Depth Chemistry Courses |  |  |
| :--- | :--- | ---: |
| CHEM 202 | Organic Chemistry II | 3 |
| CHEM 212 | Organic Chemistry Laboratory II | 1 |
| CHEM 337 | Biochemistry II | 3 |
| CHEM 338 | Biochemistry Laboratory II | 1 |
| Select one of the following: | $3-4$ |  |


| CHEM 302 | Physical Chemistry II |
| :--- | :--- |
| CHEM 460 | Materials Chemistry |


| CHEM 425 |
| :--- | :--- | ---: |
| \& CHEM 426 |\(\left.\quad \begin{array}{l}Instrumental Analysis <br>

and Instrumental Analysis Laboratory\end{array}\right)\)

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

| Natural | Science | and Math College-Wide Requirements |
| :--- | :--- | ---: |
| Code | Title | Hours |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| MATH 225 | Calculus I | 4 |
| PHYS 216 | University Physics 1 with Lab | 4 |

## Additional Pre-Pharmacy Prerequisite Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| BIOL 250 | Genetics with Lab | 4 |
| STAT 152 | Elementary Statistics I | 3 |

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Chemistry, BS (6118)
Pre-Pharmacy Duquesne 3+4 (61DQ)
This program is effective as of Fall 2021
Revised 07.28.2021
UCC 04.13.2021
Recommended Three-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall |  | 3 |
| CHEM 107 | General Chemistry I | 1 |
| CHEM 111 | General Chemistry I Lab | 4 |
| BIOL 104 | Principles of Biology with Lab | 1 |
| INDS 101 | FYRST Seminar | 4 |
| MATH 125 | Precalculus | 3 |
| SUBJ 139 | University Seminar | $\mathbf{1 6}$ |


| Spring |  |  |
| :---: | :---: | :---: |
| CHEM 108 | General Chemistry II | 3 |
| CHEM 112 | General Chemistry II Lab | 1 |
| BIOL 250 | Genetics with Lab | 4 |
| ENGL 102 | Critical Writing | 3 |
| MATH 225 | Calculus I | 4 |
|  | Hours | 15 |
| Second Year |  |  |
| Fall |  |  |
| CHEM 201 | Organic Chemistry I | 3 |
| CHEM 211 | Organic Chemistry Laboratory I | 1 |
| CHEM 243 | Introduction to Research in Chemistry | 1 |
| ENGL 104 | Critical Reading | 3 |
| MATH 230 | Calculus II | 4 |
| PHYS 211 | General Physics I with Lab | 4 |
|  | Hours | 16 |
| Spring |  |  |
| CHEM 202 | Organic Chemistry II | 3 |
| CHEM 212 | Organic Chemistry Laboratory II | 1 |
| PHIL 140 | World Religions | 3 |
| PHYS 217 | University Physics 2 with Lab | 4 |
| PSYC 105 | Introduction to Psychology | 3 |
| STAT 152 | Elementary Statistics I | 3 |
|  | Hours | 17 |
| Third Year |  |  |
| Fall |  |  |
| CHEM 350 | Analytical Chemistry | 3 |
| CHEM 351 | Analytical Chemistry Lab | 1 |
| CHEM 335 | Biochemistry I | 3 |
| CHEM 336 | Biochemistry Laboratory I | 1 |
| CHEM 442 | Inorganic Chemistry | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |


| Spring |  |  |
| :--- | :--- | ---: |
| CHEM 425 | Instrumental Analysis | 3 |
| CHEM 426 | Instrumental Analysis Laboratory | 1 |
| CHEM 452 | Physical Inorganic Chemistry Laboratory | 1 |
| CHEM 337 | Biochemistry II | 3 |
| CHEM 338 | Biochemistry Laboratory II | 1 |
| CHEM 491 | Chemistry Seminar | 1 |
| CHEM 302 <br> or CHEM 460 | Physical Chemistry II <br> or Materials Chemistry | 3 |
|  | Hours | $\mathbf{1 3}$ |
|  | Total Hours** | $\mathbf{9 1}$ |

* Prepare to take PCAT by October, Fall of Sophomore Year.

Major Code: 61DQ
UCC 02.02.2021
Revised: 08.02.2021
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please
consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Chemistry, Bachelor of Science (BS) / Pre-Pharmacy (LECOM) (3+3)

Slippery Rock University of Pennsy/vania (SLIPPERY ROCK) and Lake Erie College of Osteopathic Medicine (LECOM) School of Pharmacy offer a 3+3 Pre-Pharmacy program that culminates with a BS Chemistry degree from SRU and a Doctor of Pharmacy from LECOM if successfully completed. Under the joint agreement between SLIPPERY ROCK and LECOM School of Pharmacy, students must successfully complete the three-year undergraduate program in chemistry at SLIPPERY ROCK and then matriculate into LECOM School of Pharmacy to complete the professional curriculum of the Doctor of Pharmacy degree (Pharm.D.) in three years. After successfully completing the first full year at LECOM, students can earn a BS Chemistry Degree from SRU.

## Selection of Studies for the Program

For admission to Phase I of the Program, students must fulfill the following requirements:

- SAT Scores (or ACT scores) 1100 (total of 24); New SAT of 1240 or higher is preferred; ACT of 26 or better.
- High School Grade Point Average (GPA) 3.4 out of 4.0
- Class rank Top 25\% of the class
- Letters of recommendation are not required by LECOM to enter into EAP
- Potential Evidence of scholarly activities and desire to become a pharmacist

LECOM School of Pharmacy will not accept advanced placement credit of science and mathematics courses into Phase I of the program.

## Admission to Phase II of the Program

The LECOM School of Pharmacy will accept Slippery Rock students into the professional pharmacy curriculum who meet the criteria listed below:

- Complete the pre-pharmacy curriculum in Phase I of the $3+3$ Accelerated Program in Pharmacy as described below (or as amended).
- Earn a minimum GPA of 3.4 in Phase I of the Program. No grade lower than a "C."
- Earn a GPA of 3.2 or higher for science courses.
- Must maintain full-time student status while at Slippery Rock and complete the Program in the specified time frame.

Submit two letters of recommendation. One of these letters MUST be from the Health Professions Committee at SLIPPERY ROCK. The letter will address the personal growth of the student during Phase I of the
Program, as well as the student's maturity, responsibility, and desire to become a pharmacist.

- Demonstrate leadership potential and commitment to the pharmacy profession.
- Submit a completed application for admission to the LECOM School of Pharmacy.

All questions from students accepted into the $3+3$ Accelerated Pharmacy Program should be directed to the LECOM School of Pharmacy Admissions Office.

## Conferral of Degrees

The Doctor of Pharmacy (Pharm.D.) degree will be conferred upon successful completion of Phase I and Phase II of the Program, both didactic and clinical, and recommendation by both the administration and faculty of the LECOM School of Pharmacy. Conferral of the Pharm.D. degree will be at the end of the three year professional program in pharmacy at the LECOM School of Pharmacy. The Bachelor of Science (B.S.) degree will be conferred on " $3+3$ " students after completion of all SLIPPERY ROCK requirements which includes completion (with a C or better) of all courses in the first semester of year one at LECOM.

## Program Learning Outcomes

- Students will demonstrate knowledge of the main disciplines of chemistry, namely Organic, Analytical, Biological, Physical, and Inorganic chemistry.
- Students will demonstrate development of technical skills for practical applications of chemistry.
- Students will present collected experimental data in written and oral reports.
- Students and faculty will participate in faculty-led research projects. Students are expected to be actively working in the laboratory under the supervision and guidance of a faculty mentor.


## Related Links

Chemistry - Pre-Pharmacy, BS Program Page (https://www.sru.edu/ academics/majors-and-minors/chemistry-biochemistry-pre-pharmacy-33(lecom)/)

Chemistry Department Page (https://www.sru.edu/academics/colleges-and-departments/ches/departments/chemistry/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 45 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major/Concentration Requirements | 47 |
| Natural Science and Math College-Wide Requirements | 12 |
| Electives | 23 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 225 | Calculus 1 ${ }^{2}$ | 4 |
| Select one of the following: | 3 |  |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 16 |

Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378)
Humanities Inquiry

Select 3 Credits (p. 1378) 3
Social Science Inquiry
Select 3 Credits (p. 1378) 3

| Natural Sciences Inquiry |  |
| :--- | :--- | :--- |
| CHEM $107 \quad$ General Chemistry I | 4 |

\& CHEM $111 \quad$ and General Chemistry I Lab ${ }^{2}$ 4
Physical Sciences Inquiry
PHYS $216 \quad$ University Physics 1 with Lab ${ }^{2}$ 4
Subtotal 17

Thematic Thread
Select 12 Credits (p. 1378) ${ }^{3} \quad 12$

## Total Hours

1 Course offered in multiple subjects; cannot take course in first major subject
2 Course counts for $50 \%$ of Major requirements and Major GPA
3 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

$\left.\begin{array}{ll}\text { CPSC } 130 & \begin{array}{l}\text { Introduction to Computing and } \\ \text { Programming }\end{array} \\ \hline \text { PE } 202 & \text { Technology for Wellness }\end{array}\right] \mathbf{0 - 3}$

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| CHEM 108 | General Chemistry II ${ }^{1}$ | 3 |
| CHEM 112 | General Chemistry II Lab ${ }^{1}$ | 1 |
| CHEM 201 | Organic Chemistry ${ }^{1}$ | 3 |
| CHEM 211 | Organic Chemistry Laboratory $1^{1}$ | 1 |
| CHEM 202 | Organic Chemistry II ${ }^{1}$ | 3 |
| CHEM 212 | Organic Chemistry Laboratory II ${ }^{1}$ | 1 |
| CHEM 301 | Physical Chemistry $1{ }^{1}$ | 3 |
| CHEM 321 | Physical Chemistry Laboratory ${ }^{1}$ | 1 |
| CHEM 335 | Biochemistry ${ }^{1}$ | 3 |
| CHEM 336 | Biochemistry Laboratory $\mathrm{I}^{1}$ | 1 |
| CHEM 337 | Biochemistry II | 3 |
| CHEM 338 | Biochemistry Laboratory II | 1 |
| Subtotal |  | 24 |
| Chemistry Electives |  |  |
| Select one of the follo | wing: | 4 |


| CHEM 350 | Analytical Chemistry |
| :--- | :--- |
| \& CHEM 351 | and Analytical Chemistry Lab ${ }^{1}$ |
| CHEM 425 | Instrumental Analysis |
| \& CHEM 426 | ${\text { and Instrumental Analysis Laboratory }{ }^{1}}^{1}$ |Required Math and Science Courses


| PHYS 217 | University Physics 2 with Lab ${ }^{1}$ | 4 |
| :---: | :---: | :---: |
| STAT 152 | Elementary Statistics $1^{1}$ | 3 |
| MATH 230 | Calculus II ${ }^{1}$ | 4 |
| BIOL 104 | Principles of Biology with Lab ${ }^{1}$ | 4 |
| BIOL 250 | Genetics with Lab ${ }^{1}$ | 4 |
| Subtotal |  | 19 |
| Total Hours |  | 47 |

1 Course counts for 50\% of Major requirements and Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

| Natural Science and Math College-Wide Requirements |  |  |
| :--- | :--- | ---: |
| Code | Title | Hours |
| CHEM 107 | General Chemistry I $^{1}$ | 3 |
| CHEM 111 | General Chemistry I Lab $^{1}$ | 1 |


| MATH 225 | Calculus I $^{1}$ | 4 |
| :--- | :--- | :--- |
| PHYS 216 | University Physics 1 with Lab $^{1}$ | 4 |

1 Course counts for $50 \%$ of Major requirements and Major GPA

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes (e.g., Organic Chemistry II Lab)
2. Student-faculty research
3. Student leadership development (Chemistry Club)
4. Career education and development
5. Internships
6. Student teaching (serve as Lab Assistants and tutors)
7. Volunteering

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
CHEMISTRY - BS (6118)
Biochemistry w/3+3 Pre-Pharmacy (61P4)
This program is effective as of Fall 2021
Revised 07.29.21
UCC 04.13.21

## Recommended Three-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
| Select one of the following: |  | 3-4 |
| MATH 120 | Intermediate Algebra (if necessary) |  |
| MATH 125 | Precalculus (if necessary) |  |
| MATH 225 | Calculus I (if necessary) |  |
| MATH 230 | Calculus II |  |
| BIOL 104 | Principles of Biology with Lab | 4 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| INDS 101 | FYRST Seminar | 1 |
|  | Hours | 15-16 |
| Spring |  |  |
| CHEM 108 | General Chemistry II | 4 |
| \& CHEM 112 | and General Chemistry II Lab |  |
| Select one of the following: |  | 4 |


| MATH 125 | Precalculus (if necessary) |  |
| :--- | ---: | ---: |
| MATH 225 | Calculus I (if necessary) |  |
| MATH 230 | Calculus II | 3 |
| ENGL 102 | Critical Writing | 4 |
| BIOL 250 | Genetics with Lab | 3 |
| Inquiry/Thread/Elective Course | $\mathbf{1 8}$ |  |
|  | Hours |  |

## Second Year

Fall

| CHEM 201 | Organic Chemistry I |
| :--- | :--- |
| \& CHEM 211 | and Organic Chemistry Laboratory I |

Select one of the following: ..... 4

| MATH 225 | Calculus I (if necessary) |  |
| :---: | :---: | :---: |
| MATH 230 | Calculus II |  |
| PHYS 216 | University Physics 1 with Lab | 4 |
| ENGL 104 | Critical Reading | 3 |
| Inquiry/Thread/Elective Course |  | 3 |
|  | Hours | 18 |
| Spring |  |  |
| CHEM 202 <br> \& CHEM 212 | Organic Chemistry II and Organic Chemistry Laboratory II | 4 |
| MATH 230 | Calculus II | 4 |
| PHYS 217 | University Physics 2 with Lab | 4 |
| Select one of the following: |  | 3 |


| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :---: | :--- | ---: |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| STAT 152 | Elementary Statistics I | 3 |
|  | Hours | $\mathbf{1 8}$ |

## Third Year

Fall
CHEM $301 \quad$ Physical Chemistry $1 \quad 4$

| \& CHEM 321 | and Physical Chemistry Laboratory I |
| :--- | :--- |
| CHEM 335 | Biochemistry I |


| \& CHEM 336 | and Biochemistry Laboratory I |
| :--- | :--- |
| CHEM 350 | Analytical Chemistry |

\& CHEM 351 and Analytical Chemistry Lab
Inquiry/Thread/Elective Course 3

| Inquiry/Thread/Elective Course | 3 |
| ---: | ---: |
| Hours | $\mathbf{1 8}$ |

## Spring

CHEM 337 Biochemistry II 4
\& CHEM 338 and Biochemistry Laboratory II
Inquiry/Thread/Elective Course
Inquiry/Thread/Elective Course 3
Inquiry/Thread/Elective Course 3
Inquiry/Thread/Elective Course 3
Hours 16

1 Course offered in multiple subjects; cannot take course in first major subject

* Students are encouraged to take INDS 101 as a Free Elective.


## Major Code: 6118

Concentration Code: 61P4
Revised date: 08.02.2021
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Chemistry, Bachelor of Science (BS) / Pre-Physician Assistant (SRU) (3+2) Chemistry Program Learning Outcomes

- Students will demonstrate knowledge of the main disciplines of chemistry, namely Organic, Analytical, Biological, Physical, and Inorganic chemistry.
- Students will demonstrate development of technical skills for practical applications of chemistry.
- Students will present collected experimental data in written and oral reports.
- Students and faculty will participate in faculty-led research projects. Students are expected to be actively working in the laboratory under the supervision and guidance of a faculty mentor.


## What are your options?

Pre-Physician Assistant SRU 3+2: Earn a Master of Science degree in Physician Assistant Studies in five years rather than six. In the first three years, you complete your major courses and pre-requisites for the SRU PA program. At the end of your second year, you apply for admission into the SRU PA program. If accepted, your first year in the SRU PA program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

Pre-Physician Assistant (SRU Traditional): Complete the requirements for your major and the pre-requisites for the SRU PA program and apply to the SRU PA program in your senior year.

## Related Links

Chemistry - Pre-Physician Assistant, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/chemistry-pre-physicianassistant/)

Chemistry Department Page (https://www.sru.edu/academics/colleges-and-departments/ches/departments/chemistry/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

1st Major: Chemistry

- Overall GPA: 2.00 or higher
- Major GPA (includes Major Requirements and College Wide Requirements): 2.00 or higher

2nd Major. Pre-PA SRU 3+2 Chemistry

- Overall GPA: 3.00 or higher (before Fall 2018)
- Overall GPA: 3.25 or higher (Fall 2018 and after)


## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 45 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major/Concentration Requirements | 50 |
| Natural Science and Math College-Wide Requirements | 12 |
| Electives | 23 |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. However, because this |  |
| is a pre-professional program, credits taken during the 1 |  |
| st | year of the |
| graduate program are applied toward the undergraduate credit hours to |  |
| meet the 120 credits required for your undergraduate degree. |  |

## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 225 | Calculus I | 4 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |

Subtotal 16

Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378)
Humanities Inquiry
Select 3 Credits (p. 1378) 3

## Social Science Inquiry

Select 3 Credits (p. 1378) 3

Natural Sciences Inquiry
CHEM 107 General Chemistry I 4
\& CHEM 111 and General Chemistry I Lab ${ }^{2}$
Physical Sciences Inquiry
PHYS 216 University Physics 1 with Lab ${ }^{2} 4$
Subtotal 17

Thematic Thread

| Select 12 Credits $(\mathrm{p} .1378)^{3}$ | 12 |
| :--- | :--- |

Total Hours 45
1 Course offered in multiple subjects; cannot take course in first major subject

2 Course counts for 50\% of Major requirements and Major GPA
3 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Ar |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major/Concentration Requirements

- 25 major credits must be taken at SRU or PASSHE
- 25 major credits must be taken at the 300 level or above
- If you choose to pursue Pre-Physician Assistant SRU $3+2$ Chemistry and are not accepted into the PA program, then CHEM 302,CHEM 425,CHEM 426, andCHEM 460 are required to complete a first major in Chemistry. In this case,CHEM 425/CHEM 426cannot count towards the Additional Required-In-Depth Course Requirement. Please refer to the Chemistry Curriculum Guide.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Introductory Chemistry Courses |  |  |
| CHEM 108 | General Chemistry II ${ }^{1}$ | 3 |
| CHEM 112 | General Chemistry II Lab ${ }^{1}$ | 1 |
| Subtotal |  | 4 |
| Required Foundation Chemistry Courses |  |  |
| CHEM 201 | Organic Chemistry ${ }^{1}$ | 3 |
| CHEM 211 | Organic Chemistry Laboratory $\mathrm{I}^{1}$ | 1 |
| CHEM 243 | Introduction to Research in Chemistry ${ }^{1}$ | 1 |
| CHEM 301 | Physical Chemistry $1{ }^{1}$ | 3 |
| CHEM 321 | Physical Chemistry Laboratory ${ }^{1}$ | 1 |
| CHEM 335 | Biochemistry I ${ }^{1}$ | 3 |
| CHEM 336 | Biochemistry Laboratory $\mathrm{I}^{1}$ | 1 |
| CHEM 350 | Analytical Chemistry ${ }^{1}$ | 3 |
| CHEM 351 | Analytical Chemistry Lab ${ }^{1}$ | 1 |
| CHEM 442 | Inorganic Chemistry ${ }^{1}$ | 3 |


| CHEM 452 | Physical Inorganic Chemistry Laboratory ${ }^{1}$ | 1 |
| :--- | :--- | ---: |
| CHEM 491 | Chemistry Seminar $^{1}$ | 1 |
| Subtotal |  | 22 |

Required In-Depth Chemistry Courses

| CHEM 202 | Organic Chemistry II $^{1}$ | 3 |
| :--- | :--- | :--- |
| CHEM 212 | Organic Chemistry Laboratory II $^{1}$ | 1 |
| CHEM 337 $^{1}$ | Biochemistry II $^{1}$ | 3 |
| CHEM 338 | Biochemistry Laboratory II $^{1}$ | 1 |
| Subtotal |  | 8 |

Additional Required In-Depth Chemistry Courses
Select four credits (must include one lecture and one lab): 4

| CHEM 340 | Air Quality Assessment $^{1}$ |
| :--- | :--- |
| CHEM 370 | Water Quality Assessment $^{1}$ |
| CHEM 415 | Forensic Analysis $^{1}$ |
| CHEM 416 | Forensic Analysis Lab $^{1}$ |
| CHEM 425 | Instrumental Analysis |
| CHEM 426 | Instrumental Analysis Laboratory ${ }^{1}$ |
| CHEM 475 | Advanced Organic Synthesis ${ }^{1}$ |
| Subtotal |  |

Cognate Courses

| BIOL 104 | Principles of Biology with Lab ${ }^{1}$ | 4 |
| :--- | :--- | ---: |
| PHYS 217 | University Physics 2 with Lab ${ }^{1}$ | 4 |
| MATH 230 | Calculus II $^{1}$ | 4 |
| Subtotal |  | $\mathbf{1 2}$ |
| Total Hours |  | $\mathbf{5 0}$ |

1 Course counts for 50\% of Major requirements and Major GPA

| Natural Science and Math College-Wide Requirements |  |  |
| :--- | :--- | ---: |
| Code | Title | Hours |
| CHEM 107 | General Chemistry I $^{1}$ | 3 |
| CHEM 111 | General Chemistry I Lab $^{1}$ | 1 |
| MATH 225 | Calculus I $^{1}$ | 4 |
| PHYS 216 | ${\text { University Physics } 1 \text { with Lab }^{1}}^{l}$ |  |

1 Course counts for $50 \%$ of Major requirements and Major GPA

## Additional Physician Assistant Prerequisite Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| BIOL 250 | Genetics with Lab | 4 |
| BIOL 330 | Microbiology/Lab | 3 |
| ERS 250 | Medical Terminology | 3 |
| or HCAM 250 | Medical Terminology for Healthcare |  |
| STAT 152 | Administrators |  |

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes (e.g., Organic Chemistry II Lab)
2. Student-faculty research
3. Student leadership development (Chemistry Club)
4. Career education and development
5. Internships
6. Student teaching (serve as Lab Assistants and tutors)
7. Volunteering

## Physician Assistant Studies (Master of Science in Physician Assistant Studies) Prerequisite Admission Requirements - Pre- Physician Assistant 3+2

## For Application Requirements

Please refer to Slippery Rock University's Physician Assistant Studies
(Master of Science in Physician Assistant Studies) website for requirements:http://www.sru.edu/pa (http://www.sru.edu/pa/)


1 Any statistics course with inferential statistics embedded. See My Rock Audit for specific courses.

## Pre-Physician Assistant SRU 3+2 Requirements

If any of these requirements are not met, the $3+2$ designation will be removed from the student's record:

1. A 3.25 or higher overall GPA must be maintained by the student.
2. The student can only be enrolled in the Pre-Physician Assistant SRU $3+2$ program for a maximum of three (3) years, full-time continuous enrollment (fall/spring).

## Provision

Should a Pre-Physician Assistant SRU 3+2 student be unsuccessful in completing the $1^{\text {st }}$ two semesters (summer or fall) of the Physician Assistant Program and wants to complete the original undergraduate degree, it is solely up to the discretion of the undergraduate program Department Chair to determine which, if any, Physician Assistant courses will count toward the completion of his/her undergraduate degree. In
addition, students must complete any unfulfilled requirements of their undergraduate major. Students may still apply to the Physician Assistant Studies Program with an earned Bachelor's degree.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
CHEMISTRY - BS (6118)
PRE-PA 3+2 (6SPC)
This program is effective as of Fall 2021
Revised 07.29.21
UCC 04.13.21

## Chemistry, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Chemistry, Minor Program Page (https://www.sru.edu/academics/ majors-and-minors/chemistry-bs/)

Chemistry Department Page (https://www.sru.edu/academics/colleges-and-departments/ches/departments/chemistry/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (coursed numbered 300 and above)
- A minor shall be no fewer than 18 credits.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Chemistry Courses |  |  |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| CHEM 108 | General Chemistry II | 3 |
| CHEM 112 | General Chemistry II Lab | 1 |
| CHEM 201 | Organic Chemistry I | 3 |
| CHEM 211 | Organic Chemistry Laboratory I | 1 |
| Electives |  |  |
| Choose from the following: | 4 |  |


| CHEM 212 | Organic Chemistry Laboratory II |
| :--- | :--- | :--- |
| CHEM 350 | Analytical Chemistry |
| CHEM 351 | Analytical Chemistry Lab |
| Choose from the following: |  |
| CHEM 301 | Physical Chemistry 1 |
| CHEM 321 | Physical Chemistry Laboratory I |
| CHEM 335 | Biochemistry I |
| CHEM 336 | Biochemistry Laboratory I |
| CHEM 340 | Air Quality Assessment |
| CHEM 370 | Water Quality Assessment |
| Choose from the following: |  |
| CHEM 302 | Physical Chemistry II |
| CHEM 337 | Biochemistry II |
| CHEM 338 | Biochemistry Laboratory II |
| CHEM 415 | Forensic Analysis |
| CHEM 416 | Forensic Analysis Lab |
| CHEM 425 | Instrumental Analysis |
| CHEM 426 | Instrumental Analysis Laboratory |
| CHEM 442 | Inorganic Chemistry |
| CHEM 452 | Physical Inorganic Chemistry Laboratory |
| CHEM 460 | Materials Chemistry |
| CHEM 475 | Advanced Organic Synthesis |
| CHEM 490 | Independent Study |

Total Hours

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN CHEMISTRY (12A)
This program is effective as of Fall 2007.
Revised 8-2019

## Chemistry, Pre-Pharmacy (Duquesne) (2+4)

## This program is coming soon, Beginning in Fall 2021. Pre-Acceptance Requirements

To be considered for the pre-acceptance program at Slippery Rock University, students must:

- Have a minimum high school QPA of 3.0.
- Score a minimum of 1130 on their SAT or 23 on their ACT.
- Demonstrate evidence of leadership potential, community service, and involvement in co-curricular activities.
- Provide one letter of recommendation from either a high school teacher or guidance counselor.

To maintain satisfactory progress in the Duquesne pre-pharmacy program, students must:

- Complete the curricular requirements described in their SRU curriculum guide.
- Earn a letter grade of " $C$ " or better in all courses.
- Maintain a minimum QPA of 2.50 .

For the $2+4$ program: Students should prepare to take the PCAT but October of their sophomore year at Slippery Rock University.

For the $3+4$ program: Students should prepare to take the PCAT but October of their junior year at Slippery Rock University.

Before January 15 th of their sophomore year (for the $2+4$ option) and their junior year (for the $3+4$ option), prospective students must apply to Duquesne University. In addition to the grade and QPA requirements listed above, formal acceptance in the PharmD program requires that students:

- Attain a PCAT score of 375 or better.
- Participate in an interview process with the Duquesne University School of Pharmacy faculty.
- Submit a letter of recommendation from the SRU Pre-Pharmacy Selection Committee.
- Provide evidence of leadership potential and commitment to the pharmacy profession.

Preference will be granted to candidates who:

- Attain a PCAT score of 400 or better.
- Maintain a QPA of 3.00 or higher for all science and math courses.
- Maintain a cumulative QPA of 3.00 or higher.


## Related Links

Chemistry: Pre-Pharmacy (Duquesne) Program Page (https:// www.sru.edu/academics/majors-and-minors/chemistry-pre-pharmacy(duquesne)/)

Chemistry Department Page (https://www.sru.edu/academics/colleges-and-departments/ches/departments/chemistry/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement

```
Overall GPA: 3.00 or higher
Math/Science Course GPA: 3.00 or higher
```


## Summary

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 33 |
| Other Basic Requirements | $0-3$ |


| Computer Competency | 0-3 |
| :---: | :---: |
| Major/Concentration Requirements | 25 |
| Natural Science and Math College-Wide Requirements | 12 |
| Rock Studies Requirements |  |
| Code Title | Hours |
| The Rock |  |
| SUBJ 139 University Seminar ${ }^{1}$ | 3 |
| PHIL 110 Ethics and Civil Discourse | 3 |
| ENGL 102 Critical Writing | 3 |
| ENGL 104 Critical Reading | 3 |
| MATH 225 Calculus I | 4 |
| Subtotal | 16 |
| Integrated Inquiry |  |
| Creative and Aesthetic Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Humanities Inquiry |  |
| PHIL 140 World Religions | 3 |
| Social Science Inquiry |  |
| PSYC 105 Introduction to Psychology | 3 |
| Natural Science Inquiry |  |
| CHEM 107 General Chemistry I <br> \& CHEM 111 and General Chemistry I Lab | 4 |
| Physical Science Inquiry |  |
| PHYS 216 University Physics 1 with Lab | 4 |
| Subtotal | 17 |
| Total Hours | 33 |

1 Course offered in multiple subjects; cannot take course in first major subject

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

Major/Concentration Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Introductory Chemistry Courses |  |  |
| CHEM 108 | General Chemistry II | 3 |
| CHEM 112 | General Chemistry II Lab | 1 |
| Subtotal |  | 4 |
| Required Foundation Chemistry Courses |  |  |
| CHEM 201 | Organic Chemistry I | 3 |
| CHEM 211 | Organic Chemistry Laboratory I | 1 |
| CHEM 243 | Introduction to Research in Chemistry | 1 |
| Subtotal |  | 5 |
| Required In-Depth Chemistry Courses | 3 |  |
| CHEM 202 | Organic Chemistry II | 1 |
| CHEM 212 | Organic Chemistry Laboratory II | 4 |
| Subtotal |  | 4 |
| Cognate Courses | Principles of Biology with Lab | 4 |
| BIOL 104 | Calculus II | 4 |
| MATH 230 | University Physics 2 with Lab | 4 |
| PHYS 217 |  | $\mathbf{4}$ |
| Subtotal |  | $\mathbf{2 5}$ |
| Total Hours |  |  |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

Natural Science and Math College-Wide Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| MATH 225 | Calculus I | 4 |
| PHYS 216 | University Physics 1 with Lab | 4 |

## Additional Pre-Pharmacy Prerequisite Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| BIOL 250 | Genetics with Lab | 4 |
| PHIL 110 | Ethics and Civil Discourse | 3 |
| PHIL 140 | World Religions | 3 |
| PSYC 105 | Introduction to Psychology | 3 |
| STAT 152 | Elementary Statistics I | 3 |

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Chemistry/Pre-Pharmacy Duquesne 2+4 (61DP)
This program is effective as of Fall 2021

Revised 12.14.2021
UCC 04.13.21


| Spring |  |  |
| :--- | :--- | ---: |
| CHEM 108 | General Chemistry II | 3 |
| CHEM 112 | General Chemistry II Lab | 1 |
| BIOL 250 | Genetics with Lab | 4 |
| ENGL 102 | Critical Writing | 3 |
| MATH 225 | Calculus I | $\mathbf{4}$ |
|  | Hours | $\mathbf{1 5}$ |


| Second Year |  |  |
| :--- | :--- | :---: |
| Fall |  |  |
| CHEM 201 | Organic Chemistry I | 3 |
| CHEM 211 | Organic Chemistry Laboratory I | 1 |
| CHEM 243 | Introduction to Research in Chemistry | $\mathbf{1}$ |
| ENGL 104 | Critical Reading | 3 |
| MATH 230 | Calculus II | 4 |
| PHYS 216 | University Physics 1 with Lab | 4 |
|  | Hours | $\mathbf{1 6}$ |


| Spring |  |  |
| :--- | :--- | ---: |
| CHEM 202 | Organic Chemistry II | 3 |
| CHEM 212 | Organic Chemistry Laboratory II | $\mathbf{1}$ |
| PHIL 140 | World Religions | 3 |
| PHYS 216 | University Physics 1 with Lab | 4 |
| PSYC 105 | Introduction to Psychology | 3 |
| STAT 152 | Elementary Statistics I | 3 |
|  | Hours | $\mathbf{1 7}$ |
|  | Total Hours** | $\mathbf{6 4}$ |

* Prepare to take PCAT by October, Fall of Sophomore Year.

Major Code: 61DP
UCC 02.02.2021
Revised: 08.02.2021
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Computer Science

| Chair | Assistant Chair | Secretary | Location | Department Phone |
| :---: | :---: | :---: | :---: | :---: |
| Dr. Sam | Dr. Raed | Vicki Sparano |  | 724-738-2040 |
| Thangiah | Seetan |  | Advanced |  |
|  |  |  | Technology |  |
|  |  |  | Hall |  |
| Department Web Site URL (https://www.sru.edu/academics/colleges-and-departments/ches/departments/computer-science/) |  |  |  |  |
| Computer Science Program Outcomes (https://www.sru.edu/documents/ academics/colleges/CHES/comp-sci-program-outcomes.pdf) |  |  |  |  |
| Computing Fact Sheet URL (https://www.sru.edu/documents/programs/ factsheets/undergraduate/compsci-fs.pdf) |  |  |  |  |
| Cybersecurity Fact Sheet URL (https://www.sru.edu/documents/ programs/factsheets/undergraduate/Cybersecurity-fs.pdf) |  |  |  |  |
| Facul |  |  |  |  |

## Naresh Adhikari

Assistant Professor
Computer Science
Ph.D., Mississippi State University
M.S., Mississippi State University
B.E., Pokhara University

## Sidney Faber

Instructor
Computer Science
John Franolich
Instructor
Computer Science

## Alice Gretch

Instructor
Computer Science
M.B.A., Robert Morris College
B.S., University of Pittsburgh

## Kwang Lee

Assistant Professor
Computer Science
Ph.D., Rensselaer Polytechnic Institute
M.S., Texas A\&M University
M.B.A., Ajou University
B.S., Ajou University

## Raed Seetan

Associate Professor
Computer Science
Ph.D., North Dakota State University
M.S., Jordan University of Science and Technology
B.S., Jordan University of Science and Technology

## Nitin Sukhija

Associate Professor
Computer Science
D.C.Sc., Mississippi State University
M.C.S., National University
M.B.A., San Diego State University
B.E., Maharshi Dayanand University

## Sam Thangiah

Professor
Computer Science
Ph.D., North Dakota State University
M.S., North Dakota State University
B.S., Slippery Rock University

## Abdullah Wahbeh

Assistant Professor
Computer Science
D.S., Dakota State University
M.S., Dakota State University
M.S., Yarmouk University
B.S., Yarmouk University

## Deborah Whitfield

Professor
Computer Science
Ph.D., University of Pittsburgh
M.S., University of Pittsburgh
B.S., Youngstown State University

## Hongbo Zhou

Associate Professor
Computer Science
Ph.D., Michigan State University
M.S., Xi'an Jiaotong University (China)
B.S., Xi'an Jiaotong University (China)

## Programs

All first-year students who enter SRU in the Summer and Fall terms of 2019 and after will follow Rock Studies. Students who entered SRU before Spring 2019 will follow Liberal Studies. All new transfer students beginning Summer 2019 and after will follow Liberal Studies. We anticipate that transfer students will begin to enter under Rock Studies during the Summer/Fall term of 2021.

## Majors

- Computing, Bachelor of Science (BS) - Concentration in Computer Science (p. 414)
- Computing, Bachelor of Science (BS) - Concentration in Computer Science with Concentration in Bioinformatics (p. 417)
- Computing, Bachelor of Science (BS) - Concentration in Computing Analytics (p. 419)
- Computing, Bachelor of Science (BS) - Concentration in Information Technology (p. 422)
- Cybersecurity, Bachelor of Science (BS) - Concentration in Secure Software Development (p. 426)
- Cybersecurity, Bachelor of Science (BS) - Concentration in Security Governance (p. 429)


## Minors

- Computing, Minor (p. 425)
- Cybersecurity, Minor (p. 431)


## Certificates

- Big Data Science, Certificate (p. 414)


## Courses CPSC Courses

CPSC 099 - Computer Competency Exam
This non-credit course is used to identify students who have met the university's computer competency requirement by earning a passing grade on the Computer Competency Placement Test.

## Credits: 0

## CPSC 100 - Introduction to Computing for Liberal Arts

A pass/no credit course to provide an introduction to the computer capabilities needed to succeed in an Information Society. This course is designed to support the SRU Computer Competency requirement. Topics will include computer hardware, software, networking, security and privacy, and societal issues.

## Credits: 1

Term(s) Typically Offered: Offered Every Term
CPSC 102 - Collaborative Information Technology and Society
We will explore how the use of collaborative information technology impacts human interaction in globally diverse contexts. The course provides an introduction to the historical development, current use and future directions of collaborative technology in human societies. We will address how to manage and protect personal computing devices and communication, along with the ethical, legal and social issues involved in the use of these collaborative technologies.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Transfer Thread Completion Course

## CPSC 110-Computer Concepts

A computer literacy course stressing the use of application software on personal computers. It covers a survey of computers and their impact on society and the use of word processing software. Other application software is also covered, such as spreadsheets and database software, but the particular applications examined may vary from section to section.

## Credits: 3

Term(s) Typically Offered: Offered Every Term

## CPSC 125-3D Modeling for Computing

This course introduces students to 3D modeling for applications in computing fields. It covers the basic and intermediate features in 3D modeling software tools, which are utilized in applications such as 30 visualization, 3D animation, virtual reality/augmented reality, and 3D game design. This course also introduces students to the printing of 3D objects.
Prerequisites: CPSC $100^{\mathrm{D}}$ or CPSC $110^{\mathrm{D}}$ or CPSC $130^{\mathrm{D}}$ or PE $202^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed

## CPSC 130 - Introduction to Computing and Programming

An introductory course devoted to programming and to a description of hardware and software concepts. Programming concepts covered include top-down program development using pseudocode, algebraic notation, standard control structures, and arrays in an appropriate programming language. Other topics include binary representation, storage, and general architecture and functioning of a computer system. Keywords: computer science

Prerequisites: (ACSD $110^{\mathrm{D}}$ or ESAP $110^{\mathrm{D}}$ ) or minimum score of 18 in 'Math ACT Exc 2 - EX110-PL MATH' or minimum score of 421 in 'Math SAT Exc 2 -EX110-PL MATH'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## CPSC 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## CPSC 140 - Introduction to Programming Principles

Techniques are stressed that enable systematic development of clear, correct programs. Other topics include data types, algebraic notation, standard control structures, functions; input/output, arrays, and program testing and debugging. This course will be taught in C++.

Prerequisites: ACSD $110^{D}$ or minimum score of 18 in 'Math ACT Exc 2 -EX110-PL MATH' or minimum score of 421 in 'Math SAT Exc 2 - EX110-PL MATH'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed

## CPSC 146 - Programming Principles

Techniques are stressed that enable systematic development of clear, correct programs. Other topics include data types, algebraic notation, standard control structures, functions; input/output, arrays, and program testing and debugging. Programs will be written in the department's current official programming language of instruction.

Prerequisites: (ACSD $110^{C}$ or ESAP $110^{C}$ ) or minimum score of 18 in 'Math ACT Exc 2 - EX110-PL MATH' or minimum score of 421 in 'Math SAT Exc 2 -EX110-PL MATH'
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## CPSC 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CPSC 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## Credits: 1-6

Term(s) Typically Offered: Offered as Needed

## CPSC 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CPSC 207 - Shell Commands and Scripting

This course introduces the student to the shell commands and shell programming in prevalent operating systems (OS). The architecture of the PC and how it relates to the OS is discussed conceptually and physically examined. The hardware and software required for data communication are discussed.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## CPSC 210 - Productivity Software

An in-depth, practical study of existing productivity software packages that focuses primarily on decision-support systems for microcomputers. Projects will involve the use of intermediate and advanced features of various software packages, as well as the use of several packages in finding computer-based solutions to information storage and retrieval problems.
Prerequisites: CPSC $100^{\mathrm{P}}$ or CPSC $110^{\mathrm{D}}$ or CPSC $099^{\mathrm{D}}$ or CPSC $130^{\mathrm{D}}$ or minimum score of 01 in 'Computer Competency Exam'
${ }^{P}$ Requires minimum grade of $P$.
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed

## CPSC 217 - Advanced Web Programming

This course continues the coverage of JavaScript features for creating web pages with DOM features. Advanced topics are discussed including CSS scripting, arrays, functions, the creation and utilization of objects, mouse and browser events, pop-up windows, and forms. This course prepares students to learn spin-off languages and introduces the use of 3rd party libraries and APIs.

Prerequisites: CPSC $130^{\mathrm{D}}$ and CPSC $146^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## CPSC 236 - Selected Computer Languages

A selected prevalent computer language(s) other than those taught regularly in other Computer Science courses will be studied and used for programming. Topics will include data structure, control structures, data control, modularization and other features of the language. Special applications, if any, of the language will be studied. The student is expected to have basic programming experience in at least one other language. For different languages, this course may be repeated for credit toward graduation, but not toward Computing major or minor.

Prerequisites: CPSC $130^{\mathrm{D}}$ or CPSC $146^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed

## CPSC 237 - Mobile App Development for Smart Devices

This course is a practical and comprehensive approach to designing, building, testing, and deploying mobile applications on mobile devices. Students build mobile applications that leverage device features and 3rd party application programming interfaces (APIs) to create stable and robust software Topics covered include application design, memory constraints, input methods, data handling, interfacing with device APIs and connectivity.

Prerequisite: CPSC $217^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms

## CPSC 246 - Advanced Programming Principles

This course places its emphasis on data and their role in software development. Such a study relies on a two-step approach to data abstraction. In the first step, data must be viewed as abstract objects. These objects are selected and specified so as to be useful in the solution of programming projects. In the second step, the abstract objects are translated into program data structures. An extensive examination of data structures provides the student many opportunities to explore the issues of implementing data abstractions. This course will be taught in C ++, and will include an introduction to Unix/Linux.

Prerequisites: CPSC $146^{\mathrm{D}}$ and (MGMT $219^{\mathrm{D}}$ or ECON $219^{\mathrm{D}}$ or BUSA $219^{\mathrm{D}}$ or MATH $125^{\text {D }}$ or MATH $152^{\text {D }}$ or STAT $152^{\text {D }}$ or MATH $225^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## CPSC 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CPSC 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## CPSC 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
CPSC 300 - Challenges of Computer Technology
An in-depth study of the critical issues related to the computerization of society. Ethical, legal, and moral issues raised by the evolution of computer technology will be discussed.

Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): The Future, Transfer Thread Completion Course Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 301 - Practical Computer Security

This course is a practical introduction to the threats present to the online, electronic community, and how to protect yourself and your organization from them. We will explore the connectivity structure of the Internet, along with the security and criminal threats to members of the online community. The legal, ethical, and technical issues related to threats such as viruses, worms, and identity theft will be covered.

Prerequisites: CPSC $099^{\mathrm{D}}$ or CPSC $110^{\mathrm{D}}$ or CPSC $130^{\mathrm{D}}$ or CPSC $100^{\mathrm{P}}$
${ }^{D}$ Requires minimum grade of $D$.
Requires minimum grade of $P$
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 305 - Introduction to Expert Systems

An overview of the purpose, structure, and applications of expert systems. Topics covered will include expert systems technology, knowledge engineering, applications of expert systems, expert systems development, and the future of expert systems.

Prerequisites: CPSC $100^{\mathrm{P}}$ or CPSC $110^{\mathrm{D}}$ or CPSC $130^{\mathrm{D}}$ or CPSC $099^{\mathrm{D}}$
Requires minimum grade of $P$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 311 - Discrete Computational Structures

Introduces computational implementations of the mathematical structures most frequently used in computing including sets, equivalence relations, functions, graphs, trees and standard logic. Also introduces automata, formal languages, countability, decidability and computational complexity, Markov and stochastic processes. The course will stress traditional programming and mathematical approaches to these structures such as the use of recursion, elementary data structure, and proof techniques to instantiate, parse, traverse, demonstrate correctness, or use these computational objects.

Prerequisite: MATH $125^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 315 - Internet of Things (IoT)

This course introduces the students to digital electronics and programming based on popular single-board microcontroller and singleboard computer system platforms to interact with the environment. Sensors and actuators are utilized for communication and applications in the internet of things (IOT), smart homes, robotics, cyber-physical systems and sensor networks. Topics include the architecture of singleboard microcontroller and single-board computer system, basic electricity and electronics, loT building blocks, connections and configuration, and programming.

Prerequisites: CPSC $146^{\text {D }}$ and CPSC $207^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 317- Server Side Scripting

This course emphasizes programming using scripting languages for the purpose of creating the back-end of web applications. A variety of languages and utilities available on the web server are covered. The student is expected to have programming experience, knowledge of the Unix/Windows environments, and knowledge of database.

Prerequisites: CPSC $217^{\mathrm{D}}$ and CPSC $207^{\mathrm{D}}$ and CPSC $323^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

CPSC 323 - Fundamentals of Database Systems
A practical approach to analysis, design, and implementation of database systems. This course covers topics such as: conceptual, logical and physical data models; relational database and relational algebra; building and mapping entity relationship diagrams (ERDs); normalization; basic and advanced Structured Query Language (SQL) for data retrieval and manipulation; functions, triggers, and procedures; transactions and concurrency control; security, backup, and recovery procedures.
Prerequisites: CPSC $130^{\text {D }}$ or CPSC $146^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 327 - Administration and Security

Students will learn administration techniques for at least two popular computer operating systems, with special attention to system security. Techniques for managing networking, remote printing, storage allocation, account management, and backup will be discussed. Common techniques for breaching system security, and methods of defense against such attacks, will be emphasized.

Prerequisites: CPSC $207^{\text {D }}$ and (CPSC $246^{\text {D }}$ or CPSC $217^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 333 - Introduction to Computer Forensics

This is a fundamental course which covers computer forensics. This class covers methods and tools for gainng forensic information from computer systems and networks. It includes case studies of cyber crimes as well as the application and management of cyber forensics. The course introduces students to forensics tools using hands-on experience and the Internet.

Prerequisites: CPSC $099^{\mathrm{P}}$ or CPSC $100^{\mathrm{P}}$ or CPSC $110^{\mathrm{D}}$ or CPSC $130^{\mathrm{D}}$ or CPSC $210^{\mathrm{D}}$ or PE $202^{\mathrm{D}}$ or MIS $210^{\mathrm{D}}$
${ }^{P}$ Requires minimum grade of $P$.
${ }^{D}$ Requires minimum grade of $D$. Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 337 - Introduction to Web Graphics

This course will expose the student to the standards for Web and mobile graphics such as SVG, CSS and canvas. Topics include color models, coordinate systems, coordinate transformations and popular image formats. Differences between vector and pixel-based approaches and between declarative and scripted models of graphical content creation are also covered.

Prerequisites: CPSC $217^{\mathrm{D}}$ or (CPSC $130^{\mathrm{D}}$ and CPSC $246^{\mathrm{D}}$ )
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 342 - Introduction to Bioinformatics

It is a practical course that introduces a wide range of bioinformatics tools, algorithms and biological databases. A broad array of topics in Bioinformatics will be covered such as: overview of Bioinformatics, biological databases, sequence alignment, multiple sequence alignment, molecular phylogeny and evolution, gene expression analysis, protein structure and genome mapping.

Prerequisites: $\operatorname{BIOL} 250^{C}$ and (BIOL $104^{C}$ or (BIOL $101^{C}$ and BIOL $100^{C}$ ) )
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 358 - Simulation

Models of real-life phenomena are programmed with a current simulation language. These are run and adjusted for accurate prediction and explanation. Other simulation languages are surveyed, and needed statistical background is reviewed.

Prerequisites: CPSC $146^{\mathrm{D}}$ and (ECON $219^{\mathrm{D}}$ or MGMT $219^{\mathrm{D}}$ or MATH $152^{\mathrm{D}}$ or MATH $352^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 370-Computer Organization and Architecture

This course will study computer organization topics such as data representation, Boolean logic, memory hierarchy, and data path design. It will study computer architecture topics such as CPU control, pipelining and instruction set architecture. The course will also introduce the architecture and software models involved in parallel computing.
Students will learn the assembly level machine organization by means of a standard assembly language.

Prerequisites: CPSC $150^{\text {D }}$ or CPSC $246^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 374-Algorithms and Data Structures

This course establishes a foundation for the systematic study of algorithms and data structures. The integration of these two concepts into a single organizational structure emphasizes that algorithms and data structures are inseparably inter-twined. This course builds and elaborates on the concepts introduced in CPSC 246. This course will be taught in a language other than that used in CPSC 246.

Prerequisites: CPSC $246^{\text {D }}$ and CPSC $311^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 376 - Programming Language and Theory

Programming languages are studies from the theoretical viewpoint. The goal is deeper understanding of the design and translation of computer languages. Topics include compilation, automata and formal languages, computability by Turing machines and recursive functions, uncomputability, data types, data structures, binding scope, control mechanisms, conversions, storage management, reliability, portability, modularity, documentation, implementation methods and language extensibility.

Prerequisites: CPSC $150^{\text {D }}$ or CPSC $246^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 378 - Theory of Computation

Both the classical and the contemporary theories of computation will be discussed in this course. The topics covered include the theory of automata and formal languages, computability by Turing machines and recursive functions, uncomputability, and proof of correctness of code.

Prerequisites: CPSC $311^{\text {D }}$ or MATH $131^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Prerequisites: CPSC $150^{\text {D }}$ or CPSC $246^{\text {D }}$ or CPSC $217^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## CPSC 395-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 405 - Data Mining \& Analysis

This course provides a survey of data analysis and data mining techniques for finding patterns in data. It will emphasize using data models, data gathering and storage, selection and preparing of data, model building and testing and interpreting and validating results. If the student takes CPSC 405 for the undergraduate program, he/she can take CPSC 605 for additional credits.

Prerequisite: CPSC $323^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Students cannot enroll who have a program in Health Informatics.

## CPSC 406 - Data Visualization

This course provides a survey of techniques for visualizing patterns in data. The course will emphasize modern and traditional methods for data visualization, including interactive visualization for data sets too large to display statically. If the student takes CPSC 406 for the undergraduate program, he/she can take CPSC 606 for additional credits.

Prerequisites: (MATH $152^{\mathrm{D}}$ or STAT $152^{\mathrm{D}}$ ) and CPSC $146^{\mathrm{D}}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Term(s) Typically Offered: Offered Summer Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 415 - Advanced Bioinformatics

Advanced topics in Bioinformatics will be discussed in this course including: motif searching, biological networks analysis, next generation sequencing data analysis, programming for genomic data analysis, Data Mining techniques for biology problems such as Clustering of gene expression data, and Classification for protein function prediction.

Prerequisite: CPSC $342^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

## CPSC 417-Advanced Web Technologies

This course emphasizes up-to-date technologies that enable the development of interactive Web applications. New Web standards and their applications and development toolkits will be exemplified. Advanced concepts in scripting languages for the Unix and Windows environments will be discussed.

Prerequisite: CPSC $317^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 423 - Computer Networks

This is an introduction to computer networks and data communications. Course content includes: the layered model; transmission and multiplexing; data link protocols; packet, point-to-point, and satellite transmission; local area networks; security and privacy. Examples of some well-known networks will be studied.

Prerequisites: CPSC $150^{\mathrm{D}}$ or CPSC $246^{\mathrm{D}}$ or CPSC $217^{\mathrm{D}}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 427 - IT Capstone Project

This Information Technology majors' course uses graphical user interface design concepts to introduce interface design possibilities. This senior-level course requires students to produce an intricate interface that utilizes systems design, information management, systems administration and security, and programming concepts from lower-level courses. This course is intended as a capstone course that introduces human user interface theory and practice.

Prerequisite: CPSC $317^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 450 - Internship

Professional work experience performed as an intern at selected agencies supervised both by the agency and by the Computer Science Department.

Credits: 1-12
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 456 - Introduction to Computer Graphics

This course introduces the basics of interactive computer graphics including software and hardware requirements for computer graphics systems, graphics data structures, algorithms and programming languages, raster and random display devices, and graphics applications. Students will work with dedicated graphics computers in completing laboratory exercises and course projects.
Prerequisite: CPSC $374^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## CPSC 464 - Principles of Concurrent Programming and Operating

 SystemsAn introduction to operating systems with emphasis on fundamental principles. These include store management, processor management, file systems, and input/output. Laboratory exercises are assigned using a language that supports concurrency. Distributed and "real time illustrations are used, as well as standard operating system illustrations.

Prerequisites: CPSC $370^{\mathrm{D}}$ and CPSC $374^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 466 - Compiler Design and Implementation

This is an introduction to language translation. Topics include specification of languages and its relation to automata, lexical analysis, finite state machines, context free languages, LL and LR parsing methods, syntax directed translation, error recovery, code generation, and portability.

Prerequisites: CPSC $370^{\mathrm{D}}$ and CPSC $374^{\mathrm{D}}$ and CPSC $376^{\mathrm{D}}$ and CPSC $378^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 474 - Advanced Architecture \& Parallel Computing

This course will investigate the architecture and software models involved in parallel computing. We will explore both shared-memory and distributed-memory systems, along with the algorithms and languages involved in those systems.

Prerequisites: CPSC $370^{\mathrm{D}}$ and CPSC $374^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 476 - Artificial Intelligence

A survey of artificial intelligence topics including heuristic programming, search techniques, knowledge representation, expert systems, vision and speech in automators, pattern recognition, and robotics.

Prerequisite: CPSC $374^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 478 - Analysis of Algorithms

An advanced study of algorithms and data structures. Analysis of algorithms, space and time complexity, and the NP classes will be considered. Significant illustrative individual or group programming projects are required. Examples may be drawn from heuristic programming, encipherment, natural language processing, object code generation, combinatorial analysis, graphics, robotics, relational databases, or other algorithmic issues of current importance.

Prerequisite: CPSC $374^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 480 - Topics in Computer Science: Machine Learning

This course provides an overview of concepts, techniques, algorithms and applications in machine learning, including supervised learning (e.g.: classification and regression), unsupervised learning (e.g.: clustering and dimensionality reduction), and learning theory (e.g.: bias/variance; regularization and feature selection). Moreover, the course will include research projects that will require writing computer code, conduction experiments, and writing papers. If the student takes CPSC 480 for the undergraduate program, he/she can take CPSC 680 for additional credits.

Prerequisite: CPSC $374^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 485 - Big Data Analytics

This is a project driven course designed to provide techniques for acquiring, managing and analyzing massive unstructured data. Consideration will be given to both batch mode processing and real time analytics. Specific topics include the MapReduce parallel computing paradigm, distributed file systems, the Hadoop Ecosystem and its components such as Pig, Hive, HBase, Oozie, Yarn and Mahout, NoSQL databases, cloud computing, techniques for clustering and visualizing big data, Web analytics, machine learning in a big data setting and data setting and data security issues. Applications in business, engineering, health care and social networks will also be covered. If the student takes CPSC 485 for the undergraduate program, he/she can take CPSC 685 for additional credits.

Prerequisite: CPSC $405^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 488-Software Engineering

The course is the study of software engineering principles and design. The course will emphasize requirement analysis, design, testing, debugging and implementation of a semester long project. Students will work in groups for the project to be implemented. There will be multiple phases for the design and implementation of the project. The project will be implemented using a standard programming environment.

Prerequisite: CPSC $374^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 490 - Independent Study

Supervised study in a special interest area. Prerequisites: Two computer science courses selected from 370 or above, permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 495-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CYBR Courses

CYBR 101-Cybersecurity in the Era of Evolving Technology
This course covers the fundamental concepts and design principles behind cybersecurity. This course will provide the students with the awareness, knowledge, opportunity and resources to develop the cybersecurity skills required for full participation as informed, responsible, ethical and productive citizens. Through research-oriented discussions and projects, the course will focus on security design, principles, ethics and models that all students should know and be able to apply independently when using technology, computing systems, digital media and information technology, including the internet.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Demystifying Crime \& Justice, The Future, International Business, Transfer Thread Completion Course
CYBR 139-University Seminar
University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## CYBR 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## CYBR 195-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## CYBR 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CYBR 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CYBR 295-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## CYBR 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## CYBR 301 - Secure Programming

This class will present the basic topics in computer security and their relationship to secure programming. A broad array of topics in secure software development will be covered such as the following: Security models, threats, design principles and secure coding practices. The course will cover programming language features and semantics to evaluate and to facilitate implementation of programs that are free from vulnerabilities. Additionally, different types of systems including webbased systems and some internals of OS kernel software testing and exploitation will be explored. Moreover, the software design patterns to built-in security during the architectural phase of the lifecycle will also be covered in detail.

Prerequisite: CPSC $246^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with a semester level of Junior 1, Junior 2,
Post Baccalaureate, Senior 1 or Senior 2.
Enrollment limited to students in a Bachelor of Science degree.
CYBR 353-Software Assurance
This class will present a detailed description of software assurance practices, methods, and tools required throughout the software development life-cycle. The students will apply the development life-cycle processes and methodologies to explore common programming errors and to evaluate the common software testing tools.
Prerequisite: CPSC $246^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1 or Senior 2.
Enrollment limited to students in a Bachelor of Science degree.

## CYBR 390-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1,
Freshman 2 or Sophomore 1.

## CYBR 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CYBR 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CYBR 401-Software Security Analysis

This course presents the tools and methods for analyzing software security. This course will focus on software penetration testing and will stress the critical aspects of software security testing in all phases of the software development life cycle with special emphasis on applications that are about to be deployed. An in-depth discussion on various security testing methods and tool vulnerabilities will be taught with hands-on demo of concepts during the class. Students will learn how to perform penetration testing in a practical way using well-established tools.
The course will cover a wide range of topics such as web architecture, application infrastructure, reconnaissance, discovery, mapping, and exploitation.

Prerequisite: CYBR $353^{C}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with a semester level of Junior 1, Junior 2,
Post Baccalaureate, Senior 1 or Senior 2.
Enrollment limited to students in a Bachelor of Science degree.

## CYBR 471 - Malware Analysis

This course covers foundational knowledge of discovering software vulnerabilities. The topics of reverse engineering and malware investigation will be presented in detail through the study of various cases and hand-on analysis of malware samples. It covers fundamental techniques that are used to analyze both source and binary code to equip the students with enough background knowledge for examining current threats and discussing the actions needed to prevent attackers from taking advantage of both known and unknown vulnerabilities.

Prerequisite: CYBR $401{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1 or Senior 2.
Enrollment limited to students in a Bachelor of Science degree.

## CYBR 490 - Independent Study

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CYBR 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CYBR 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Big Data Science, Certificate Related Links

Data Science Certificate Program Page (https://www.sru.edu/academics/ certificates/data-science-certificate-(online)/)

Mathematics and Statistics Department Page (https://www.sru.edu/ academics/colleges-and-departments/ches/departments/mathematics-and-statistics/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)
CURRICULUM GUIDE
GPA REQUIREMENT
Certificate GPA: 2.0 or higher
CERTIFICATE REQUIREMENTS

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  |  |
| CPSC 146 | Programming Principles | 3 |
| CPSC 210 | Productivity Software | 3 |
| CPSC 323 | Fundamentals of Database Systems | 3 |
| CPSC 405 | Data Mining \& Analysis | 3 |
| CPSC 485 | Big Data Analytics | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Total Hours |  | $\mathbf{1 8}$ |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
CERTIFICATE IN BIG DATA SCIENCE (6BDS)
This program is effective as of Summer 2021
Revised 07.30.2021
UCC: 03.30.2021

## Computing, Bachelor of Science (BS) - Concentration in Computer Science Program Learning Outcomes

- Problem Solving and Critical Thinking: Solve Problems by creating client/server applications that are efficient, user-friendly, and portable
- Formulate project requirements and alternative solutions appropriate to the computing problems
- Integrate design and implementation principles to develop effective applications
- Perform critical analyses of the impacts of decisions based on mathematics
- Implement computing solutions that consist of system and application software written in various programming languages
- Create efficient, user-friendly applications appropriate to the computing problems
- Communication and Interpersonal Skills: Use written, oral and electronic methods for effective communication
- Document all aspects of a system precisely and clearly
- Use written, oral, and electronic communication to convey technical information effectively
- Devise effective user interfaces based on the application
- Work cooperatively in teams and with others
- Ethical and Professional Responsibilities: Discern and articulate the impact of technologies on society
- Determine the economic and organizational effects of information technology on global society
- Recognize important legal issues and demonstrate appropriate social responsibilities in information technology
- Demonstrate an awareness of the codes of professional ethics in the information technology industry
- Plan for and ensure the security, privacy, and integrity of data
- Recognize the need for continuing professional development


## Related Links

Computing - Computer Science, BS Flowchart (https://www.sru.edu/ documents/academics/departments/computer-science/course-flowchart-compsci-computer-science-concentration.pdf)

Computing - Computer Science, BS Program Page (https://www.sru.edu/ academics/majors-and-minors/computing-computer-science/)

Computer Science Department Page (https://www.sru.edu/academics/ colleges-and-departments/ches/departments/computer-science/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

Code Title Hours

Rock Studies Requirements 45
Other Basic Requirements 0-3
Computer Competency 0-3
Major/Concentration Requirements 54

## Electives

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 125 | Precalculus | 4 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 16 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p.1378) |  | 3 |
| Natural Science Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Science Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |

Thematic Thread

| Select 12 Credits $(\text { p. } 1378)^{2}$ | 12 |
| :--- | :--- |

Total Hours

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra | $\mathbf{0 - 3}$ |
| Total Hours |  |  |

## Computer Competency

| Code | Title | Hours |
| :--- | :--- | ---: |
| Demonstrate "computer competency" by one of the following: | $0-3$ |  |
| Pass Computer Competency Exam OR |  |  |$\quad$| Select one of the following at SRU or another post-secondary |  |
| :--- | :--- |
| institution: |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |
| CPSC 110 | Computer Concepts |
| CPSC 130 | Introduction to Computing and |
| Programming |  |

Total Hours 0-3

## Major/Concentration Requirements

- 27 major credits must be taken at SRU or PASSHE
- 27 major credits must be taken at the 300 level or above
Code Title Hours

Required Core Courses

| CPSC 130 | Introduction to Computing and Programming ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| CPSC 146 | Programming Principles ${ }^{1}$ | 3 |
| CPSC 207 | Shell Commands and Scripting ${ }^{1}$ | 3 |
| CPSC 300 | Challenges of Computer Technology ${ }^{1}$ | 3 |
| CPSC 311 | Discrete Computational Structures ${ }^{1}$ | 3 |
| CPSC 323 | Fundamentals of Database Systems ${ }^{1}$ | 3 |
| CPSC 327 | Administration and Security ${ }^{1}$ | 3 |
| CPSC 423 | Computer Networks ${ }^{1}$ | 3 |
| STAT 152 | Elementary Statistics ${ }^{1}$ | 3 |
| Subtotal |  | 27 |
| Computer Science Core Courses |  |  |
| CPSC 246 | Advanced Programming Principles ${ }^{1}$ | 3 |
| CPSC 370 | Computer Organization and Architecture ${ }^{1}$ | 3 |
| CPSC 374 | Algorithms and Data Structures ${ }^{1}$ | 3 |
| CPSC 376 | Programming Language and Theory ${ }^{1}$ | 3 |


| CPSC 474 | Advanced Architecture \& Parallel Computing | 3 |
| :---: | :---: | :---: |
| CPSC 476 | Artificial Intelligence ${ }^{1}$ | 3 |
| CPSC 488 | Software Engineering ${ }^{1}$ | 3 |
| Subtotal |  | 21 |
| Computer Science Electives |  |  |
| Choose one from the following: |  | 3 |
| CPSC 217 | Advanced Web Programming ${ }^{1}$ |  |
| CPSC 236 | Selected Computer Languages ${ }^{1}$ |  |
| CPSC 237 | Mobile App Development for Smart Devices 1 |  |
| CPSC 315 | Internet of Things (IOT) ${ }^{1}$ |  |
| Choose one from the following: |  |  |
| CPSC 405 | Data Mining \& Analysis ${ }^{1}$ |  |
| CPSC 406 | Data Visualization ${ }^{1}$ |  |
| CPSC 450 | Internship ${ }^{1}$ |  |
| CPSC 456 | Introduction to Computer Graphics ${ }^{1}$ |  |
| CPSC 478 | Analysis of Algorithms |  |
| CPSC 480 | Topics in Computer Science: Machine Learning |  |
| CPSC 485 | Big Data Analytics ${ }^{1}$ |  |
| Subtotal |  | 6 |
| Total Hours |  | 54 |

1 Course counts for $50 \%$ of Major requirements and Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes (Learning Community, Cap-Stone Course, Semester Projects)
2. Student-faculty research
3. Service Learning Courses
4. Internships
5. Volunteering (Summer Day Camps, Semester Workshops for K-12 students, Robot demos for visitors/local school districts)
6. Industry Awareness Night

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

3 Concentration in Computer Science (642C)
This program is effective as of Fall 2021.
Revised 07.08.21
UCC 03.02.21

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| CPSC 130 | Introduction to Computing and Programming | 3 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| INDS 101 | FYRST Seminar | 1 |
| MATH 120 or SCI 101 | Intermediate Algebra or Science of Life | 3 |
| ENGL 102 | Critical Writing | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
|  | Hours | 16 |
| Spring |  |  |
| CPSC 146 | Programming Principles | 3 |
| MATH 125 | Precalculus | 4 |
| ENGL 104 | Critical Reading | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Social Science Inquiry (p. 1378) |  | 3 |
|  | Hours | 16 |
| Second Year |  |  |
| Fall |  |  |
| CPSC 207 | Shell Commands and Scripting | 3 |
| CPSC 246 | Advanced Programming Principles | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| SCI 101 | Science of Life (or CS Elective) | 3 |
| Computer Science Elective or Free Elective ${ }^{3}$ |  | 3 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 15 |
| Spring |  |  |
| CPSC 323 | Fundamentals of Database Systems | 3 |
| CPSC 370 | Computer Organization and Architecture (S) | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
| SCI 102 | Understanding the Physical World | 3 |
| Computer Science Elective or Free Elective ${ }^{3}$ |  | 3 |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| CPSC 311 | Discrete Computational Structures | 3 |
| CPSC 300 | Challenges of Computer Technology | 3 |
| CPSC 376 | Programming Language and Theory (F) | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Computer Science Elective or Free Elective ${ }^{3}$ |  | 3 |
|  | Hours | 15 |


| Spring |  |
| :---: | :---: |
| CPSC 327 Administration and Security (S) | 3 |
| CPSC $374 \quad$ Algorithms and Data Structures (S) | 3 |
| Thematic Thread Requirement (p. 1378) | 3 |
| Computer Science Elective or Free Elective ${ }^{3}$ | 3 |
| Computer Science Elective or Free Elective ${ }^{3}$ | 3 |
| Hours | 15 |
| Fourth Year |  |
| Fall |  |
| CPSC 423 Computer Networks (F) | 3 |
| $\begin{array}{ll}\text { CPSC } 474 & \begin{array}{l}\text { Advanced Architecture \& Parallel } \\ \text { Computing (F) }\end{array}\end{array}$ | 3 |
| Thematic Thread Requirement (p. 1378) | 3 |
| Computer Science Elective or Free Elective ${ }^{3}$ | 3 |
| Computer Science Elective or Free Elective ${ }^{3}$ | 3 |
| Hours | 15 |
| Spring |  |
| CPSC 488 Software Engineering (S) | 3 |
| Thematic Thread Requirement (p. 1378) |  |
| CPSC 476 Artificial Intelligence | 3 |
| Computer Science Elective or Free Elective ${ }^{3} 3$ |  |
| Computer Science Elective or Free Elective ${ }^{3} 3$ |  |
| Computer Science Elective or Free Elective ${ }^{3}$ 3 |  |
| Hours | 18 |
| Total Hours** | 125 |

1 Course offered in multiple subjects; cannot take course in first major subject
2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/ ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UldNTi4u) to declare a thread.
3
Computer Science Electives - 9 Credits required: Select one of the following: CPSC 217, CPSC 236, CPSC 237, CPSC 315
Select one of the following: CPSC 405, CPSC 476
Select one of the following: CPSC 406, CPSC 450, CPSC 456, CPSC 478, CPSC 480, CPSC 485

* Students are encouraged to take INDS 101 as a Free Elective.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.


## Major Code: 6420

Concentration: 642C
Revised date: 08.16.2021

## Computing, Bachelor of Science (BS) - Concentration in Computer Science with Concentration in Bioinformatics <br> Program Learning Outcomes

- Problem Solving and Critical Thinking: Solve Problems by creating client/server applications that are efficient, user-friendly, and portable
- Formulate project requirements and alternative solutions appropriate to the computing problems
- Integrate design and implementation principles to develop effective applications
- Perform critical analyses of the impacts of decisions based on mathematics
- Implement computing solutions that consist of system and application software written in various programming languages
- Create efficient, user-friendly applications appropriate to the computing problems
- Communication and Interpersonal Skills: Use written, oral and electronic methods for effective communication
- Document all aspects of a system precisely and clearly
- Use written, oral, and electronic communication to convey technical information effectively
- Devise effective user interfaces based on the application
- Work cooperatively in teams and with others

Ethical and Professional Responsibilities: Discern and articulate the impact of technologies on society

- Determine the economic and organizational effects of information technology on global society
- Recognize important legal issues and demonstrate appropriate social responsibilities in information technology
- Demonstrate an awareness of the codes of professional ethics in the information technology industry
- Plan for and ensure the security, privacy, and integrity of data
- Recognize the need for continuing professional development


## Related Links

Computing - Computer Science Bioinformatics, BS Program Page (https://www.sru.edu/academics/majors-and-minors/computing-computer-science/)

Computer Science Department Page (https://www.sru.edu/academics/ colleges-and-departments/ches/departments/computer-science/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Title | Hours |
| :--- | ---: |
| Code | 45 |
| Rock Studies Requirements | $0-3$ |
| Other Basic Requirements |  |


| Computer Competency | $0-3$ |
| :--- | ---: |
| Major/Concentration Requirements | 54 |
| Bioinformatics Concentration Requirements | 18 |
| Electives | 21 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 125 | Precalculus | 4 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |


| Subtotal | 16 |
| :--- | :---: |
| Integrated Inquiry |  |
| Creative and Aesthetic Inquiry | 3 |
| Select 3 Credits (p. 1378) | 3 |
| Humanities Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Social Science Inquiry |  |
| Select 3 Credits (p. 1378) | 4 |


| BIOL 104 | Principles of Biology with Lab |  |
| :--- | :--- | ---: |
| BIOL 101 | General Biology <br> \& BIOL 100 | and Introductory Biology Laboratory |
| CHEM 107 | General Chemistry I <br> and General Chemistry I Lab | 4 |
| \& CHEM 111 |  | 17 |
| Subtotal |  |  |
| Thematic Thread |  | 12 |
| Select 12 Credits (p. 1378) ${ }^{2}$ | $\mathbf{4 5}$ |  |

1 Course offered in multiple subjects; cannot take course in first major subject
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code Title | Hours |
| :--- | ---: |
| Complete one of the following: | $0-3$ |
| Meet required minimum SAT or ACT math score OR |  |

ESAP 110
Beginning Algebra
Total Hours

## Computer Competency

| Code | Title | Hours |
| :--- | :--- | ---: |
| Demonstrate "computer competency" by one of the following: | $0-3$ |  | | Pass Computer Competency Exam OR |
| :--- | :--- |

## Major/Concentration Requirements

- 27 major credits must be taken at SRU or PASSHE
- 27 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Core Courses |  |  |
| CPSC 130 | Introduction to Computing and Programming ${ }^{1}$ | 3 |
| CPSC 146 | Programming Principles ${ }^{1}$ | 3 |
| CPSC 207 | Shell Commands and Scripting ${ }^{1}$ | 3 |
| CPSC 300 | Challenges of Computer Technology ${ }^{1}$ | 3 |
| or MIS 300 | Challenges of Computer Technology |  |
| CPSC 311 | Discrete Computational Structures ${ }^{1}$ | 3 |
| CPSC 323 | Fundamentals of Database Systems ${ }^{1}$ | 3 |
| or MIS 323 | Data Base Systems |  |
| CPSC 327 | Administration and Security ${ }^{1}$ | 3 |
| CPSC 423 | Computer Networks ${ }^{1}$ | 3 |
| STAT 152 | Elementary Statistics I ${ }^{1}$ | 3 |
| Subtotal |  | 27 |
| Computer Science Core Courses |  |  |
| CPSC 246 | Advanced Programming Principles ${ }^{1}$ | 3 |
| CPSC 370 | Computer Organization and Architecture ${ }^{1}$ | 3 |
| CPSC 374 | Algorithms and Data Structures ${ }^{1}$ | 3 |
| CPSC 376 | Programming Language and Theory ${ }^{1}$ | 3 |
| CPSC 474 | Advanced Architecture \& Parallel Computing | 3 |
| CPSC 488 | Software Engineering ${ }^{1}$ | 3 |

Computer Science Electives
Select one of the following:

| CPSC 217 | Advanced Web Programming ${ }^{1}$ |
| :--- | :--- |
| CPSC 236 | Selected Computer Languages |
| CPSC 237 | Mobile App Development for Smart Devices <br>  |

CPSC $315 \quad$ Internet of Things (IoT) ${ }^{1}$
Select one of the following: 3

| CPSC 405 | Data Mining \& Analysis ${ }^{1}$ |
| :--- | :--- |
| CPSC 476 | Artificial Intelligence ${ }^{1}$ |


| Select one of the following: |  | 3 |
| :---: | :---: | :---: |
| CPSC 406 | Data Visualization ${ }^{1}$ |  |
| CPSC 450 | Internship ${ }^{1}$ |  |
| CPSC 456 | Introduction to Computer Graphics ${ }^{1}$ |  |
| CPSC 478 | Analysis of Algorithms |  |
| CPSC 480 | Topics in Computer Science: Machine Learning |  |
| CPSC 485 | Big Data Analytics ${ }^{1}$ |  |
| Subtotal |  | 9 |

## Total Hours

1 Course counts for 50\% of Major requirements and Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Bioinformatics Concentration

| Code | Title | Hours |
| :--- | :--- | ---: |
| CHEM 201 | Organic Chemistry I | 3 |
| BIOL 325 | Biometry with Lab | 3 |
| BIOL 335 | Cell Biology/Lab | 3 |
| BIOL 370 | Molecular Biology with Lab | 3 |
| CPSC 342 | Introduction to Bioinformatics | 3 |
| CPSC 415 | Advanced Bioinformatics | $\mathbf{3}$ |
| Total Hours |  | $\mathbf{1 8}$ |

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes (Learning Community, Cap-Stone Course, Semester Projects)
2. Student-faculty research
3. Service Learning Courses
4. Internships
5. Volunteering (Summer Day Camps, Semester Workshops for K-12 students, Robot demos for visitors/local school districts)
6. Industry Awareness Night

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
COMPUTING - BS (6420)
Concentration in Computer Science (642C)
w/optional Concentration in Bioinformatics (644C)
This program is effective as of Fall 2019.

## Computing, Bachelor of Science (BS) - Concentration in Computing

## Analytics

## Program Learning Outcomes

- Problem Solving and Critical Thinking: Solve Problems by creating client/server applications that are efficient, user-friendly, and portable
- Formulate project requirements and alternative solutions appropriate to the computing problems
- Integrate design and implementation principles to develop effective applications
- Perform critical analyses of the impacts of decisions based on mathematics
- Implement computing solutions that consist of system and application software written in various programming languages
- Create efficient, user-friendly applications appropriate to the computing problems
- Communication and Interpersonal Skills: Use written, oral and electronic methods for effective communication
- Document all aspects of a system precisely and clearly
- Use written, oral, and electronic communication to convey technical information effectively
- Devise effective user interfaces based on the application
- Work cooperatively in teams and with others
- Ethical and Professional Responsibilities: Discern and articulate the impact of technologies on society
- Determine the economic and organizational effects of information technology on global society
- Recognize important legal issues and demonstrate appropriate social responsibilities in information technology
- Demonstrate an awareness of the codes of professional ethics in the information technology industry
- Plan for and ensure the security, privacy, and integrity of data
- Recognize the need for continuing professional development


## Related Links

Computing - Computing Analytics, BS Flowchart (https://www.sru.edu/ documents/academics/departments/computer-science/course-flowchart-compsci-concentratin-computing-analytics.pdf)

Computing - Computing Analytics, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/computing-computinganalytics/)

Computer Science Department Page (https://www.sru.edu/academics/ colleges-and-departments/ches/departments/computer-science/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

## Summary*

| Title | Hours |
| :--- | ---: |
| Code | 43 |
| Rock Studies Requirements | $0-3$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | 54 |
| Major/Concentration Requirements | 23 |
| Electives |  |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 125 | Precalculus | 4 |

Select one of the following: 3

| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |

Subtotal 16
Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378)
Humanities Inquiry
Select 3 Credits (p. 1378) 3

## Social Science Inquiry

Select 3 Credits (p. 1378) 3

| Natural Sciences Inquiry |
| :--- | :--- |
| SCI $101 \quad$ Science of Life |

Physical Science Inquiry
SCI $102 \quad 3$
Subtotal 15

## Thematic Thread

| Select 12 Credits $(\mathrm{p} .1378)^{2}$ | 12 |
| :--- | :--- |
| Total Hours | 43 |

1 Course offered in multiple subjects; cannot take course in first major subject
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code Title | Hours |
| :--- | ---: |
| Complete one of the following: | $0-3$ |
| Meet required minimum SAT or ACT math score OR |  |

ESAP 110
Beginning Algebra

## Total Hours

## Computer Competency

| Code | Title | Hours |
| :--- | :--- | ---: |
| Demonstrate "computer competency" by one of the following: | $0-3$ |  |
| Pass Computer Competency Exam OR |  |  |

## Major/Concentration Requirements

- 27 major credits must be taken at SRU or PASSHE
- 27 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Core Courses |  |  |
| CPSC 130 | Introduction to Computing and Programming ${ }^{1}$ | 3 |
| CPSC 146 | Programming Principles ${ }^{1}$ | 3 |
| CPSC 207 | Shell Commands and Scripting ${ }^{1}$ | 3 |
| CPSC 300 | Challenges of Computer Technology ${ }^{1}$ | 3 |
| CPSC 311 | Discrete Computational Structures ${ }^{1}$ | 3 |
| CPSC 323 | Fundamentals of Database Systems ${ }^{1}$ | 3 |
| CPSC 327 | Administration and Security ${ }^{1}$ | 3 |
| CPSC 423 | Computer Networks ${ }^{1}$ | 3 |
| STAT 152 | Elementary Statistics I ${ }^{1}$ | 3 |
| Subtotal |  | 27 |


| Computing Analytics Core Courses |  |  |
| :---: | :---: | :---: |
| CPSC 246 | Advanced Programming Principles ${ }^{1}$ | 3 |
| CPSC 370 | Computer Organization and Architecture | 3 |
| CPSC 374 | Algorithms and Data Structures ${ }^{1}$ | 3 |
| CPSC 405 | Data Mining \& Analysis ${ }^{1}$ | 3 |
| CPSC 474 | Advanced Architecture \& Parallel Computing | 3 |
| CPSC 480 | Topics in Computer Science: Machine Learning ${ }^{1}$ | 3 |
| CPSC 485 | Big Data Analytics ${ }^{1}$ | 3 |
| Subtotal |  | 21 |

Computer Science Electives
Choose two from the following:

| MATH 225 | Calculus I |
| :--- | :--- |
| CPSC 406 | Data Visualization $^{1}$ |
| CPSC 450 | Internship $^{1}$ |
| CPSC 456 | Introduction to Computer Graphics $^{1}$ |
| CPSC 476 | Artificial Intelligence $^{1}$ |
| CPSC 478 | Analysis of Algorithms ${ }^{1}$ |


| Subtotal | 6 |
| :--- | ---: |
| Total Hours | 54 |

1 Course counts for $50 \%$ of Major requirements and Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes (Learning Community, Cap-Stone Course, Semester Projects)
2. Student-faculty research
3. Service Learning Courses
4. Internships
5. Volunteering (Summer Day Camps, Semester Workshops for K-12 students, Robot demos for visitors/local school districts)
6. Industry Awareness Night

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
COMPUTING - BS (6420)
Concentration in Computing Analytics (COAN)
This program is effective as of Fall 2019
Revised 09.13.2021
UCC 2.5.2019

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| CPSC 130 | Introduction to Computing and Programming | 3 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| INDS 101 | FYRST Seminar | 1 |
| MATH 120 or SCI 101 | Intermediate Algebra or Science of Life | 3 |
| ENGL 102 | Critical Writing | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
|  | Hours | 16 |
| Spring |  |  |
| CPSC 146 | Programming Principles | 3 |
| MATH 125 | Precalculus | 4 |



| Computer Analytics Electives or Free Electives (p. 422) | 3 |
| :--- | ---: |
| Computer Analytics Electives or Free Electives (p. 422) | 3 |
| Hours | $\mathbf{1 5}$ |
| Total Hours** | $\mathbf{1 2 2}$ |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/
ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UIdNTi4u)to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.


## Computer Analytics Elective Courses

| Code |
| :--- |
| Select six credits of the following: |
| CPSC 406 Data Visualization <br> CPSC 450 Internship $^{1}$ <br> CPSC 456 Introduction to Computer Graphics <br> CPSC 476 Artificial Intelligence <br> CPSC 478 Analysis of Algorithms <br> MATH 225 Calculus I <br>  Jr. or Sr. Computing major with 3.0 GPA. Application required. <br> Work with your Academic Adviser to declare a Thematic Thread by <br> the end of your fall semester in your second year.  |

** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6420
Concentration Code: COAN
Revised date: 09.13.2021

## Computing, Bachelor of Science (BS) - Concentration in Information Technology

## Program Learning Outcomes

- Problem Solving and Critical Thinking: Solve Problems by creating client/server applications that are efficient, user-friendly, and portable
- Formulate project requirements and alternative solutions appropriate to the computing problems
- Integrate design and implementation principles to develop effective applications
- Perform critical analyses of the impacts of decisions based on mathematics
- Implement computing solutions that consist of system and application software written in various programming languages
- Create efficient, user-friendly applications appropriate to the computing problems
- Communication and Interpersonal Skills: Use written, oral and electronic methods for effective communication
- Document all aspects of a system precisely and clearly
- Use written, oral, and electronic communication to convey technical information effectively
- Devise effective user interfaces based on the application
- Work cooperatively in teams and with others
- Ethical and Professional Responsibilities: Discern and articulate the impact of technologies on society
- Determine the economic and organizational effects of information technology on global society
- Recognize important legal issues and demonstrate appropriate social responsibilities in information technology
- Demonstrate an awareness of the codes of professional ethics in the information technology industry
- Plan for and ensure the security, privacy, and integrity of data
- Recognize the need for continuing professional development


## Related Links

Computing - InformationTechnology, BS Flowchart (https://www.sru.edu/ documents/academics/departments/computer-science/course-flowchart-compsci-infotech-concentration.pdf)

Computing - Information Technology, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/computing-informationtechnology/)

Computer Science Department Page (https://www.sru.edu/academics/ colleges-and-departments/ches/departments/computer-science/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

Code Title Hours
Rock Studies Requirements 43

Other Basic Requirements 0-3
Computer Competency 0-3
Major/Concentration Requirements 54
Electives

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |


| MATH 125 | Precalculus | 4 |
| :---: | :---: | :---: |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 16 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p.1378) |  | 3 |
| Natural Sciences Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Science Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |
| Thematic Thread |  |  |
| Select 12 Credits (p. 1378) ${ }^{2}$ |  | 12 |
| Total Hours |  | 43 |
| 1 Course offered in multiple subjects; cannot take course in first major subject |  |  |
| 2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above. |  |  |
| Basic Math Requirement |  |  |
| Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree. |  |  |
| Code | Title | Hours |
| Complete one | following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 Beginning Algebra |  |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate " | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal A |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |

## Total Hours

## Major/Concentration Requirements

- 27 major credits must be taken at SRU or PASSHE
- 27 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Core Courses |  |  |
| CPSC 130 | Introduction to Computing and Programming ${ }^{1}$ | 3 |
| CPSC 146 | Programming Principles ${ }^{1}$ | 3 |
| CPSC 207 | Shell Commands and Scripting ${ }^{1}$ | 3 |
| CPSC 300 | Challenges of Computer Technology ${ }^{1}$ | 3 |
| CPSC 311 | Discrete Computational Structures ${ }^{1}$ | 3 |
| CPSC 323 | Fundamentals of Database Systems ${ }^{1}$ | 3 |
| CPSC 327 | Administration and Security ${ }^{1}$ | 3 |
| CPSC 423 | Computer Networks ${ }^{1}$ | 3 |
| STAT 152 | Elementary Statistics ${ }^{1}$ | 3 |
| Subtotal |  | 27 |
| Information Technology Core Courses |  |  |
| CPSC 217 | Advanced Web Programming ${ }^{1}$ | 3 |
| CPSC 237 | Mobile App Development for Smart Devices 1 | 3 |
| CPSC 315 | Internet of Things (loT) ${ }^{1}$ | 3 |
| CPSC 317 | Server Side Scripting ${ }^{1}$ | 3 |
| CPSC 427 | IT Capstone Project ${ }^{1}$ | 3 |
| Subtotal |  | 15 |

Information Technology Electives
Select two courses in sequence from one of the following areas: 6
Cybersecurity

| CYBR 101 | Cybersecurity in the Era of Evolving <br> Technology ${ }^{1}$ |
| :--- | :--- |
| CPSC 301 Practical Computer Security ${ }^{1}$ <br> Management  <br> MGMT 351 Organizational Behavior ${ }^{1}$ <br> Any MGMT course 300 level or above ${ }^{1}$  |  |
| Information Technology Electives |  |

Select two additional courses from the following (one must be 6 300 level or above):


1 Course counts for 50\% of Major requirements and Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student
success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes (Learning Community, Cap-Stone Course, Semester Projects)
2. Student-faculty research
3. Service Learning Courses
4. Internships
5. Volunteering (Summer Day Camps, Semester Workshops for K-12 students, Robot demos for visitors/local school districts)
6. Industry Awareness Night

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
COMPUTING - BS (6420)
Concentration in Information Technology (643C)
This program is effective as of Fall 2021.
Revised 07.08.2021
UCC 03.02.2021
Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| CPSC 130 | Introduction to Computing and Programming | 3 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| INDS 101 | FYRST Seminar | 1 |
| MATH 120 or SCI 101 | Intermediate Algebra or Science of Life | 3 |
| ENGL 102 | Critical Writing | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
|  | Hours | 16 |
| Spring |  |  |
| CPSC 146 | Programming Principles | 3 |
| MATH 125 | Precalculus | 4 |
| ENGL 104 | Critical Reading | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Social Science Inquiry (p. 1378) |  | 3 |
|  | Hours | 16 |

## Second Year

Fall
CPSC 207
Shell Commands and Scripting
3

| CPSC 217 | Advanced Web Programming | 3 |
| :---: | :---: | :---: |
| STAT 152 | Elementary Statistics I | 3 |
| SCI 101 | Science of Life (or IT Elective) | 3 |
| IT Elective | ctive (p. 425) | 3 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 15 |
| Spring |  |  |
| CPSC 323 | Fundamentals of Database Systems | 3 |
| IT Elective or Free Elective (p. 425) |  | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
| CPSC 300 | Challenges of Computer Technology | 3 |
| SCI 102 | Understanding the Physical World | 3 |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| CPSC 237 | Mobile App Development for Smart Devices | 3 |
| CPSC 311 | Discrete Computational Structures | 3 |
| CPSC 317 | Server Side Scripting | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Select one | wing: | 3 |


| CYBR 101 | Cybersecurity in the Era of Evolving <br> Technology |  |
| :--- | :--- | ---: |
| MGMT3xx/4xx | Management Elective | $\mathbf{1 5}$ |
| Spring | Hours | $\mathbf{3}$ |
| CPSC 315 | Internet of Things (loT) | $\mathbf{3}$ |
| CPSC 327 | Administration and Security | 3 |
| Select one of the following: |  |  |


| CPSC 301 | Practical Computer Security |  |
| :---: | :---: | ---: |
| MGMT 351 | Organizational Behavior |  |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| IT Elective or Free Elective (p. 425) | $\mathbf{3}$ |  |
| Hours | $\mathbf{1 5}$ |  |

## Fourth Year

Fall
CPSC 423 Computer Networks 3
IT Elective or Free Elective (p. 425) 3
IT Elective or Free Elective (p. 425) 3
IT Elective or Free Elective (p. 425) 3

| Thematic Thread Requirement (p. 1378) | 3 |
| :---: | ---: |
| Hours | 15 |

Spring
CPSC 427 IT Capstone Project 3

Thematic Thread Requirement (p. 1378) 3
IT Elective or Free Elective (p. 425) 3
IT Elective or Free Elective (p. 425) 3
IT Elective or Free Elective (p. 425) 3

| Hours | 15 |
| :--- | ---: | ---: |
| Total Hours** | 122 |

[^12]2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/ ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UIdNTi4u)to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.
** Jr. or Sr. Computing major with 3.0 GPA. Application required

| IT Elective Courses |  |  |
| :--- | :--- | ---: |
| Code | Title | Hours |
| CPSC 125 | 3D Modeling for Computing | 3 |
| CPSC 236 | Selected Computer Languages | 3 |
| CPSC 246 | Advanced Programming Principles | 3 |
| CPSC 301 | Practical Computer Security | 3 |
| CPSC 333 | Introduction to Computer Forensics | 3 |
| CPSC 405 | Data Mining \& Analysis | 3 |
| CPSC 406 | Data Visualization | 3 |
| CPSC 417 | Advanced Web Technologies | 3 |
| CPSC 450 | Internship | 3 |
| CSS 354 | Risk Assessment and Fraud Prevention | 3 |

** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6420
Concentration Code: 643C
Revised Date: 08.16.2021

## Computing, Minor

The Computing Minor is designed to offer students the opportunity to learn the fundamentals of computers as well as the critical issues related to the computerization of society, learn the basics of programming languages for developing different types of applications, master shell programming in prevalent operating systems, as well as the ability to manage data repositories.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Computing, Minor Program Page (https://www.sru.edu/academics/ majors-and-minors/computing-computer-science/)

Computer Science Department Page (https://www.sru.edu/academics/ colleges-and-departments/ches/departments/computer-science/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.
- The Computing minor must submit this self-maintained curriculum guide to the Computer Science Department for verification.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Core Requirements |  |  |
| CPSC 130 | Introduction to Computing and Programming | 3 |
| CPSC 146 | Programming Principles | 3 |
| CPSC 207 | Shell Commands and Scripting | 3 |
| CPSC 300 or MIS 300 | Challenges of Computer Technology Challenges of Computer Technology | 3 |
| $\begin{aligned} & \text { CPSC } 323 \\ & \text { or MIS } 323 \end{aligned}$ | Fundamentals of Database Systems Data Base Systems | 3 |
| Computer Science Electives |  |  |
| Select two of | ing courses: | 6 |
| CPSC 217 | Advanced Web Programming |  |
| CPSC 237 | Mobile App Development for Smart Devices |  |
| CPSC 246 | Advanced Programming Principles |  |
| CPSC 315 | Internet of Things (IoT) |  |
| Additional Elective |  |  |
| Select three cr | om the electives below | 3 |
| Additional Electives (p. 425) |  |  |
| Total Hours |  | 24 |

## Additional Electives

| Code | Title | Hours |
| :--- | :--- | ---: |
| CPSC 317 | Server Side Scripting | 3 |
| CPSC 327 | Administration and Security | 3 |
| CPSC 333 | Introduction to Computer Forensics | 3 |
| or MIS 333 | Introduction to Computer Forensics |  |
| CPSC 337 | Introduction to Web Graphics | 3 |
| CPSC 370 | Computer Organization and Architecture | 3 |
| CPSC 374 | Algorithms and Data Structures | 3 |
| CPSC 376 | Programming Language and Theory | 3 |
| CPSC 405 | Data Mining \& Analysis | 3 |
| or CPSC 605 | Data Mining and Data Analysis | 3 |
| CPSC 406 | Data Visualization | 3 |
| or CPSC 606 | Data Visualization | 3 |
| CPSC 417 | Advanced Web Technologies | 3 |
| CPSC 423 | Computer Networks | 3 |
| CPSC 427 | IT Capstone Project | 3 |
| CPSC 450 | Internship | 3 |
| CPSC 456 | Introduction to Computer Graphics | 3 |
| CPSC 464 | Principles of Concurrent Programming and | 3 |
| CPSC 476 | Operating Systems | 3 |
| CPSC 480 | Artificial Intelligence | 3 |
|  | Topics in Computer Science: Machine | 3 |


| CPSC 488 | Software Engineering | 3 |
| :--- | :--- | :--- |
| ART 214 | Intermediate Studio Digital Media | 3 |
| COMM 201 | Digital Imaging | 3 |
| COMM 248 | Interactive Multimedia 1 | 3 |
| COMM 254 | Video Production | 3 |
| COMM 258 | Interactive Multimedia 2 | 3 |
| COMM 350 | Editing for Video | 3 |
| COMM 359 | Interactive Multimedia 3 | 3 |
| ECON 219 | Business Analytics I | 3 |
| or MGMT 219 | Business Analytics I |  |
| MGMT 351 | Organizational Behavior | 3 |
| MIS 265 | Management Information Systems | 3 |
| MIS 413 | Systems Analysis | 3 |
| MRKT 230 | Principles of Marketing | 3 |
| STAT 152 | Elementary Statistics I | 3 |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Minor in Computing (14D)
This program is effective as of Fall 2019.
Revised 07.27.2021
UCC 3.26.2019

## Cybersecurity, Bachelor of Science (BS) - Concentration in Secure Software Development

 Program Learning Outcomes
## - Problem Solving and Critical Thinking

- Formulate project requirements and alternative solutions appropriate to the problem in a secure manner
- Integrate design and implementation principles to develop effective software without introduction of vulnerabilities
- Perform analyze software security and the efficiency of algorithms
- Implement computing solutions that consist of system and application software written for modern computing platforms
- Use appropriate tools and techniques for identifying malware and other vulnerabilities
- Communication and Interpersonal Skills
- Document all aspects of secure software precisely and clearly
- Use written, oral, and electronic communication to convey technical information effectively
- Accurately communicate security analyses, policies, and methodologies
- Work cooperatively in teams and with others
- Ethical and Professional Responsibilities
- Determine the effects of security policy models in a global society
- Recognize the important legal and policy issues in the development of secure systems
- Demonstrate an awareness of the codes of professional ethics in the information technology industry
- Plan for and ensure the security, privacy, and integrity of data
- Recognize the need for continuing professional development


## Related Links

Cybersecurity - Secure Software Development, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/cybersecurity/)

Computer Science Department Page (https://www.sru.edu/academics/ colleges-and-departments/ches/departments/computer-science/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

Code Title Hours
Rock Studies Requirements 43
Other Basic Requirements 0-3
Computer Competency 0-3
Major Requirements 60
Electives 17

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 125 | Precalculus | 4 |
| Select one of the following: | 3 |  |
| COMM 200 |  | Civil Discourse: Theory \& Practice |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy | 16 |
| Subtotal |  |  |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |


| Select 3 Credits (p. 1378) |
| :---: |
| Humanities Inquiry |
| Select 3 Credits (p. 1378) |
| Social Science Inquiry |
| Select 3 Credits (p. 1378) |
| Natural Sciences Inquiry |
| SCI 101 Science of Life |
| Physical Science Inquiry |
| SCI 102 Understanding the Physical World |
| Subtotal |
| Thematic Thread |
| Select 12 Credits (p.1378) ${ }^{2}$ |
| Total Hours |
| Course offered in multiple subjects; cannot take course in first major subject |
| 2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above. |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |

## Major/Concentration Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above
Code Title Hours


## Required Core Courses

| CPSC 130 | Introduction to Computing and Programming ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| CPSC 146 | Programming Principles ${ }^{1}$ | 3 |
| CPSC 207 | Shell Commands and Scripting ${ }^{1}$ | 3 |
| CPSC 300 | Challenges of Computer Technology ${ }^{1}$ | 3 |
| CPSC 301 | Practical Computer Security ${ }^{1}$ | 3 |


| CPSC 311 | Discrete Computational Structures ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| CPSC 323 | Fundamentals of Database Systems ${ }^{1}$ | 3 |
| CPSC 327 | Administration and Security ${ }^{1}$ | 3 |
| CPSC 423 | Computer Networks ${ }^{1}$ | 3 |
| CYBR 101 | Cybersecurity in the Era of Evolving Technology ${ }^{1}$ | 3 |
| Subtotal |  | 30 |
| Secure Software Development Required Courses |  |  |
| CPSC 246 | Advanced Programming Principles ${ }^{1}$ | 3 |
| CPSC 374 | Algorithms and Data Structures ${ }^{1}$ | 3 |
| CPSC 376 | Programming Language and Theory ${ }^{1}$ | 3 |
| CPSC 488 | Software Engineering ${ }^{1}$ | 3 |
| CYBR 301 | Secure Programming | 3 |
| CYBR 353 | Software Assurance ${ }^{1}$ | 3 |
| CYBR 401 | Software Security Analysis ${ }^{1}$ | 3 |
| CYBR 471 | Malware Analysis ${ }^{1}$ | 3 |
| Subtotal |  | 24 |

## Secure Software Development Electives

Select two of the following:

| CPSC 333 | Introduction to Computer Forensics ${ }^{1}$ |
| :---: | :---: |
| CPSC 370 | Computer Organization and Architecture ${ }^{1}$ |
| CPSC 450 | Internship ${ }^{1}$ |
| CPSC 474 | Advanced Architecture \& Parallel Computing ${ }^{1}$ |
| CPSC 478 | Analysis of Algorithms ${ }^{1}$ |
| Subtotal |  |
| Total Hours |  |

1 Course counts for $50 \%$ of Major requirements and Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes (Learning Community, Cap-Stone Course, Semester Projects)
2. Student-faculty research
3. Service Learning Courses
4. Internships
5. Volunteering (Summer Day Camps, Semester Workshops for K-12 students, Robot demos for visitors/local school districts)
6. Industry Awareness Night

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information
on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
CYBERSECURITY (6421)
Concentration in Secure Software Development (SSDE)
This program is effective as of Fall 2019.
Revised 09.13.2021
UCC 2.5.2019
Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| CPSC 130 | Introduction to Computing and Programming | 3 |
| CYBR 101 | Cybersecurity in the Era of Evolving Technology | 3 |
| ENGL 102 | Critical Writing | 3 |
| MATH 120 or SCI 101 | Intermediate Algebra or Science of Life | 3 |
| INDS 101 | FYRST Seminar | 1 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
|  | Hours | 16 |
| Spring |  |  |
| CPSC 146 | Programming Principles | 3 |
| CPSC 301 | Practical Computer Security | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 125 | Precalculus | 4 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |

## Second Year

## Fall

| CPSC 207 | Shell Commands and Scripting | 3 |
| :--- | :--- | :---: |
| CPSC 246 | Advanced Programming Principles | 3 |
| SCI 101 | Science of Life (or CE Elective) | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) | 3 |  |
| Social Science Inquiry $\left(\right.$ p. 1378) $^{\text {Declare a Thematic Thread }}{ }^{2}$ | 3 |  |
| Hours | $\mathbf{1 5}$ |  |


| Spring |  |  |
| :--- | :--- | :--- |
| CPSC 323 | Fundamentals of Database Systems | 3 |
| CYBR 301 | Secure Programming | 3 |
| CPSC 300 | Challenges of Computer Technology | 3 |
| Humanities Inquiry (p. 1378) | 3 |  |
| SCI 102 | Understanding the Physical World (or <br> Cybersecurity Elective) | 3 |
|  | Hours | $\mathbf{1 5}$ |


** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6421
Concentration: SSDE
Revised date: 01.05.2022

## Cybersecurity, Bachelor of Science (BS) - Concentration in Security Governance

## Program Learning Outcomes

- Problem Solving and Critical Thinking
- Formulate project requirements and alternative solutions appropriate to the problem in a secure manner
- Integrate design and implementation principles to develop effective software without introduction of vulnerabilities
- Perform analyze software security and the efficiency of algorithms
- Implement computing solutions that consist of system and application software written for modern computing platforms
- Use appropriate tools and techniques for identifying malware and other vulnerabilities
- Communication and Interpersonal Skills
- Document all aspects of secure software precisely and clearly
- Use written, oral, and electronic communication to convey technical information effectively
- Accurately communicate security analyses, policies, and methodologies
- Work cooperatively in teams and with others
- Ethical and Professional Responsibilities
- Determine the effects of security policy models in a global society
- Recognize the important legal and policy issues in the development of secure systems
- Demonstrate an awareness of the codes of professional ethics in the information technology industry
- Plan for and ensure the security, privacy, and integrity of data
- Recognize the need for continuing professional development


## Related Links

Cybersecurity - Security Governance, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/cybersecurity/)

Computer Science Department Page (https://www.sru.edu/academics/ colleges-and-departments/ches/departments/computer-science/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

## Summary*

| CodeTitle <br> Rock Studies Requirements | Hours |
| :--- | ---: |
| Other Basic Requirements | 43 |
| Computer Competency | $0-3$ |
| Major Requirements | $0-3$ |
| Electives | 60 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 125 | Precalculus | 4 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 16 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Sciences Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Science Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |
| Thematic Thread |  |  |
| Select 12 Credits (p. 1378) ${ }^{2}$ |  | 12 |
| Total Hours |  | 43 |

1 Course offered in multiple subjects; cannot take course in first major subject
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code Title | Hours |
| :--- | ---: |
| Complete one of the following: | $0-3$ |
| Meet required minimum SAT or ACT math score OR |  |


| ESAP 110 | Beginning Algebra |  |
| :--- | :--- | ---: |
| Total Hours | $\mathbf{0 - 3}$ |  |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate "computer competency" by one of the following: | $0-3$ |  |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary |  |  |
| institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and |  |
| PE 202 | Programming |  |

Total Hours

## Major Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| CPSC 130 | Introduction to Computing and Programming ${ }^{1}$ | 3 |
| CPSC 146 | Programming Principles ${ }^{1}$ | 3 |
| CPSC 207 | Shell Commands and Scripting ${ }^{1}$ | 3 |
| CPSC 300 | Challenges of Computer Technology ${ }^{1}$ | 3 |
| CPSC 301 | Practical Computer Security | 3 |
| CPSC 311 | Discrete Computational Structures ${ }^{1}$ | 3 |
| CPSC 323 | Fundamentals of Database Systems ${ }^{1}$ | 3 |
| CPSC 327 | Administration and Security ${ }^{1}$ | 3 |
| CPSC 423 | Computer Networks ${ }^{1}$ | 3 |
| CYBR 101 | Cybersecurity in the Era of Evolving Technology ${ }^{1}$ | 3 |


| Subtotal |  | 30 |
| :---: | :---: | :---: |
| Security Governance Required Courses |  |  |
| CPSC 102 | Collaborative Information Technology and Society ${ }^{1}$ | 3 |
| CPSC 237 | Mobile App Development for Smart Devices 1 | 3 |
| $\begin{aligned} & \text { CPSC } 217 \\ & \quad \text { or CPSC } 246 \end{aligned}$ | Advanced Web Programming ${ }^{1}$ <br> Advanced Programming Principles | 3 |
| CPSC 333 | Introduction to Computer Forensics ${ }^{1}$ | 3 |
| CSS 120 | Introduction to Private Security | 3 |
| CSS 240 | Security Management | 3 |
| MIS 401 | Information Systems Security ${ }^{1}$ | 3 |
| MIS 443 | Project Management ${ }^{1}$ | 3 |
| Subtotal |  | 24 |

Security Governance Electives
Select two of the following:

| CSS 320 | Security Risk and Emergency Management |
| :--- | :--- |
| CSS 351 | Fraud |
| CSS 354 | Risk Assessment and Fraud Prevention |
| CPSC 450 | Internship ${ }^{1}$ |

Subtotal
6
Total Hours
1 Course counts for $50 \%$ of Major requirements and Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes (Learning Community, Cap-Stone Course, Semester Projects)
2. Student-faculty research
3. Service Learning Courses
4. Internships
5. Volunteering (Summer Day Camps, Semester Workshops for K-12 students, Robot demos for visitors/local school districts)
6. Industry Awareness Night

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
CYBERSECURITY (6421)
Concentration in Security Governance (SEGV)
This program is effective as of Fall 2019.
Revised 09.13.2021
UCC 2.5.2019

## Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall | Introduction to Computing and <br> CPSC 130 | Programming |
| CYBR 101 | Cybersecurity in the Era of Evolving <br> Technology | 3 |
| ENGL 102 | Critical Writing | 3 |
| MATH 120 | Intermediate Algebra  <br> or SCI 101 or Science of Life |  |
| INDS 101 | FYRST Seminar |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
|  | Hours | 1 |


| Spring |  |  |
| :---: | :---: | :---: |
| CPSC 102 | Collaborative Information Technology and Society | 3 |
| CPSC 146 | Programming Principles | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 125 | Precalculus | 4 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
|  | Hours | 16 |
| Second Year |  |  |
| Fall |  |  |
| CPSC 207 | Shell Commands and Scripting | 3 |
| $\begin{aligned} & \text { CPSC } 246 \\ & \text { or CPSC } 217 \end{aligned}$ | Advanced Programming Principles or Advanced Web Programming | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
| SCI 101 | Science of Life | 3 |
| Social Science Inquiry (p. 1378) |  | 3 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 15 |
| Spring |  |  |
| CPSC 323 | Fundamentals of Database Systems | 3 |
| CPSC 301 | Practical Computer Security | 3 |
| SCI 102 | Understanding the Physical World | 3 |
| CSS 120 | Introduction to Private Security | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |


| Third Year |  |  |
| :--- | :--- | ---: |
| Fall |  | 3 |
| CPSC 237 | Mobile App Development for Smart Devices | 3 |
| CPSC 300 | Challenges of Computer Technology | 3 |
| CSS 240 | Security Management | 3 |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| Cyber Elective or Free Elective (p. 431) | 3 |  |
|  | Hours | $\mathbf{1 5}$ |


| Spring |  |  |
| :--- | :--- | ---: |
| CPSC 327 | Administration and Security | 3 |
| CPSC 311 | Discrete Computational Structures | 3 |
| CPSC 333 | Introduction to Computer Forensics | 3 |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| Cyber Elective or Free Elective (p. 431) | 3 |  |
|  | Hours | $\mathbf{1 5}$ |

## Fourth Year

Fall

| CPSC $423 \quad$ Computer Networks | 3 |
| :--- | ---: |
| Thematic Thread Requirement (p. 1378) | 3 |
| Cyber Elective or Free Elective (p. 431) | 3 |
| Cyber Elective or Free Elective (p. 431) | 3 |
| Cyber Elective or Free Elective (p. 431) | $\mathbf{3}$ |
| Hours | $\mathbf{1 5}$ |


| Spring |  |  |
| :---: | :---: | :---: |
| MIS 401 | Information Systems Security | 3 |
| MIS 443 | Project Management | 3 |
| Thematic Thread Requirement (p. 1378) |  |  |
| Cyber Elective or Free Elective (p. 431) |  |  |
| Cyber Elective or Free Elective (p. 431) |  |  |
| Hours 15 |  |  |
| Total Hours** 122 |  |  |
| 1 Course offered in multiple subjects; cannot take course in first major subject |  |  |
| 2 Work with your Academic Adviser to declare a The Thread by the end of your fall semester in your seco year. Click here (https://forms.office.com/Pages/ ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9k VJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzR declare a thread. |  |  |
| Cyber | CE Courses |  |


| Code | Title | Hours |
| :--- | :--- | ---: |
| CSS 320 | Security Risk and Emergency Management | 3 |
| CSS 351 | Fraud | 3 |
| CSS 354 | Risk Assessment and Fraud Prevention | 3 |
| CPSC 450 | Internship ${ }^{1}$ | $1-12$ |

1 Jr . or Sr. Computing major with 3.0 GPA. Application required
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6421
Concentration Code: SEGV
Revised date: 09.13.2021

## Cybersecurity, Minor

The Cybersecurity Minor is designed to offer students the necessary technical and non-technical knowledge to identify and adequately mitigate cybersecurity risks, arrange the secure use of computing resources, recognize security breaches, and proficiently use the tools and techniques for analysis and investigation of cybercrimes.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Cybersecurity, Minor Program Page (https://www.sru.edu/academics/ majors-and-minors/cybersecurity/)

Computer Science Department Page (https://www.sru.edu/academics/ colleges-and-departments/ches/departments/computer-science/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide <br> GPA REQUIREMENT <br> Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.
- The Computing minor must submit this self-maintained curriculum guide to the Computer Science Department for verification.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Core Requirements |  |  |
| CPSC 130 | Introduction to Computing and Programming | 3 |
| $\text { CPSC } 300$ <br> or MIS 300 | Challenges of Computer Technology Challenges of Computer Technology | 3 |
| $\begin{aligned} & \text { CPSC } 323 \\ & \text { or MIS } 323 \end{aligned}$ | Fundamentals of Database Systems Data Base Systems | 3 |
| CPSC 301 or MIS 301 | Practical Computer Security Practical Computer Security | 3 |
| Select one of the following: |  | 3 |
| $\begin{aligned} & \text { CPSC } 333 \\ & \text { or MIS } 333 \end{aligned}$ | Introduction to Computer Forensics Introduction to Computer Forensics |  |
| MS 401 | Leadership Dimensions and Concepts |  |
| CSS 120 | Introduction to Private Security | 3 |
| $\begin{aligned} & \text { CSS } 240 \\ & \text { or CSS } 351 \end{aligned}$ | Security Management Fraud | 3 |

Total Hours

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Minor in Cybersecurity (14E)
This program is effective as of Fall 2016
Revised 07.26.2021

# Exercise and Rehabilitative Sciences 

| Chair | Assistant <br> Chair | Secretary | Location |
| :--- | :--- | :--- | :--- |
| Department |  |  |  |
| Phone |  |  |  |

The Exercise and Rehabilitative Sciences Department is comprised of the undergraduate Exercise Science program, the graduate Master of Science in Athletic Training (https://catalog.sru.edu/graduate/ health-engineering-sciences/exercise-rehabilitative-sciences/athletic-training-ms/) program, and the graduate Doctor of Occupational Therapy (https://catalog.sru.edu/graduate/health-engineering-sciences/exercise-rehabilitative-sciences/occupational-therapy-dot/) program.

Exercise Science Program Website URL (https://www.sru.edu/ academics/colleges-and-departments/ches/departments/exercisescience/)
Exercise Science Program Fact Sheet URL (https://www.sru.edu/ documents/programs/factsheets/undergraduate/exsci-fs.pdf)
Exercise Science Program Email: exercise.science@sru.edu

## Faculty

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Exercise \& Rehabilitative Sc
Ph.D., University of Toledo
M.A., Central Michigan University
B.A., Central Michigan University

## Jeremy Dicus

Associate Professor
Exercise \& Rehabilitative Sci
Ph.D., Ohio University
M.S., Ohio University
B.S., High Point University

## Benjamin Gordon

Assistant Professor
Exercise \& Rehabilitative Sci
Ph.D., The University of North Carolina at Charlotte
M.S., East Stroudsburg University
B.S., Western Michigan University

## Michael Holmstrup

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## Seth Jenny

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M.S., University of Edinburgh
B.S., Slippery Rock University

Brock Jensen
Professor
Exercise \& Rehabilitative Sci
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M.S., Northern Michigan University

## B.S., Northern Michigan University

## Kimberly Keeley

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Exercise \& Rehabilitative Sci
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M.S., Ohio University
B.S., Slippery Rock University of Pennsylvania

## Beth Larouere

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M.S., Slippery Rock University
B.S., Slippery Rock University

## Jeffrey Lynn

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M.A., Kent State University
B.A., Kent State University

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## Bonnie Siple

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## Steven Verba

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M.S., University of Pittsburgh
B.S., Slippery Rock University

## Jacqueline Williams

Associate Professor
Exercise \& Rehabilitative Sci
Ph.D., University of Idaho
M.S., Central Washington University
B.S., Minnesota State University

## Programs

All first-year students who enter SRU in the Summer and Fall terms of 2019 and after will follow Rock Studies. Students who entered SRU before Spring 2019 will follow Liberal Studies. All new transfer students beginning Summer 2019 and after will follow Liberal Studies. We anticipate that transfer students will begin to enter under Rock Studies during the Summer/Fall term of 2021.

## Majors

- Exercise Science, Bachelor of Science (BS) (p. 440)
- Exercise Science, Bachelor of Science (BS) / Pre-Athletic Training (SRU) (3+2) (p. 444)
- Exercise Science, Bachelor of Science (BS) / Pre-Athletic Training (SRU) (Traditional) (p. 448)
- Exercise Science, Bachelor of Science (BS) / Pre-Occupational Therapy (SRU) (3+3) (p. 452)
- Exercise Science, Bachelor of Science (BS) / Pre-Occupational Therapy (SRU) (Traditional) (p. 456)
- Exercise Science, Bachelor of Science (BS) / Pre-Physical Therapy (SRU) (3+3) (p. 460)
- Exercise Science, Bachelor of Science (BS) / Pre-Physical Therapy (SRU) (Traditional) (p. 464)
- Exercise Science, Bachelor of Science (BS) / Pre-Physician Assistant (SRU) (3+2) (p. 468)
- Exercise Science, Bachelor of Science (BS) / Pre-Physician Assistant (SRU) (Traditional) (p. 472)


## Courses

ERS 100 - Introduction to Exercise Science: Careers and Content This course introduces students to the exercise science discipline and the numerous sub-disciplines of exercise science. Opportunities are provided to identify the various content areas of exercise science, characteristics of exercise science professionals and current trends in the field. Emphasis is placed on career planning and employment opportunities.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment is limited to students with a major in Exercise Science.

## ERS 101 - Applied Anatomy/Lab

This course focuses on the structure of the human body with emphasis on the musculoskeletal, cardiorespiratory, and nervous systems. The role of the musculoskeletal system in human movement is explored. Laboratory included.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment is limited to students with a major in Exercise Science.
ERS 107 - Introduction to Athletic Training
Introduction to Athletic Training addresses the historical development of athletic training and the scope of present programs, including personnel, space and equipment, necessary supplies, conditioning, pharmacology, classification of sports injuries and tissue response to injuries.

Credits: 3
ERS 117 - Prevention and Emergency Care in Athletic Training
This course is designed to facilitate learning of the cognitive and psychomotor knowledge, skills and abilities utilized in prevention and emergency care in Athletic Training. This course integrates cognitive concepts into progressively higher functional and practical application.

Prerequisites: ERS $101^{B}$ and ERS $107^{B}$
${ }^{B}$ Requires minimum grade of $B$.
Credits: 3
Enrollment is limited to students with a program in Athletic Training. Enrollment limited to students with department of Exercise \& Rehabilitative Sci.

## ERS 139- University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## ERS 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ERS 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## ERS 198-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ERS 201 - Exercise Physiology with Lab

This course focuses on the physiological bases of exercise with emphasis on the responses and adaptations of the human body to a variety of exercise stimuli. Laboratory included. Grade of $C$ or better is required in this course.

Prerequisite: ERS 101 (may be taken concurrently) ${ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment is limited to students with a major in Exercise Science.

## ERS 202-Biomechanics with Lab

This course examines human movement using mechanical principles. Human anatomy and basic physics are combined to understand and analyze human movement with specific emphasis on physical activity and exercise. Laboratory included.

Prerequisite: ERS 101 (may be taken concurrently) ${ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment is limited to students with a major in Exercise Science.

## ERS 204 - Introduction to Esports

Do you like video games? This course will introduce students to the exciting world of competitive video gaming, known as "esports." Topics covered may include history, terminology, games, genres, developers, events, leagues, and venues, with a focus on health and performance implications of esports and esports-related career possibilities.

Credits: 3
Thematic Thread(s): Arts \& Popular Culture, The Future, Innovation, Entrepreneurship, and Positive Change, Transfer Thread Completion Course

## ERS 220 - Clinical Experiences in Athletic Training - I

This course is designed to provide opportunities for students to apply previously acquired athletic training knowledge, skills and abilities in the clinical setting under the direct supervision of a program approved preceptor. Emphasis is placed on practicing and implementing the current NATA Education Competencies designated at Level I in the learning over time model.

Prerequisite: ERS $117^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 1

Enrollment is limited to students with a program in Athletic Training. Enrollment limited to students with department of Exercise \& Rehabilitative Sci.

## Credits: 1-6

Term(s) Typically Offered: Offered as Needed

ERS 221 - Lower Extremity Pathology, Diagnosis and Manual Techniques in Athletic Training
This course is designed to integrate cognitive and psychomotor knowledge, skills and abilities, and facilitate practical application of the psychomotor skills specific to competent diagnosis and management of various injuries, conditions and pathologies incurred to the lower extremity.

Prerequisite: ERS $117^{C}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 4
Enrollment is limited to students with a program in Athletic Training. Enrollment limited to students with department of Exercise \& Rehabilitative Sci.

## ERS 222 - Fundamentals of Research in Athletic Training

This course is designed to introduce a foundational knowledge of research, the types of research, and the role it plays in athletic training. Emphasis is placed on developing library research skills, identifying research, demonstrating basic scientific writing skills, and becoming a knowledgeable consumer of research in order to apply it in the clinical environment.

## Credits: 3

Enrollment is limited to students with a program in Athletic Training. Enrollment limited to students with department of Exercise \& Rehabilitative Sci.

## ERS 230 - Stress Management

This course examines intrapersonal and interpersonal stressors, the effect of stress on the body and the key concepts and theories of stress management. Effective stress evaluations and coping strategies for preventing and managing stress will be integrated. After taking this course, students will be able to demonstrate an understanding of the personal and societal impact of stress management.

Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): 21 st Century Healthcare, Healthy Body, Mind \& Environment, Leadership Development, Transfer Thread Completion Course

## ERS 231-Group Exercise Instruction

This course provides opportunities for practical skills and instruction in various group exercise activities. Emphasis is placed on physiological principles related to group exercise, as well as choreography, safety and modification for divers populations. Current group exercise trends and research are explored.

Prerequisite: ERS $201^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offerings Vary

## ERS 241-Upper Extremity Pathology, Diagnosis and Manual Techniques in Athletic Training

This course is designed to integrate cognitive and psychomotor knowledge, skills and abilities, and facilitate practical application of the psychomotor skills specific to competent diagnosis and management of various injuries, conditions and pathologies incurred to the upper extremity.

Prerequisite: ERS $221^{C}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 4

Enrollment is limited to students with a program in Athletic Training. Enrollment limited to students with department of Exercise \& Rehabilitative Sci.

## ERS 250 - Medical Terminology

This course is designed to provide the students with a basic understanding of the language of medicine. Emphasis is placed on basic medical word construction and medical language derivation related to health care.

Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): 21 st Century Healthcare, Transfer Thread Completion Course

## ERS 277 - Integrative Approach to Athletic Training

Integrate cognitive concepts into progressively higher functional and practical application. This integration is to be achieved after completion of selected athletic training classes and by direct supervision and mentoring.

Credits: 3
Enrollment is limited to students with a major in Athletic Training.

## ERS 290-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ERS 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## ERS 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ERS 300-Research Methods in Exercise Science

This course examines the scientific method and the role of research in developing knowledge in Exercise Science. Students develop skills to become critical consumers of research and other publicly disseminated information. Students design a data collection project using the concepts learned in the class. Grade of $C$ or better is required in this course.

Prerequisites: ERS $201{ }^{\text {C }}$ and ERS $202^{\text {C }}$ and STAT $152^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ERS 301 - Aerobic Exercise Leadership

This course provides opportunities for the development of practical skills to instruct and lead aerobic exercise. Emphasis is placed on construction of a session utilizing various equipment and modes based upon appropriate physiological theories and biomechanical principles. Safety, effectiveness, intensity monitoring and modifications will be addressed. Grade of C or better is required in this course.

Prerequisites: ERS $201^{\text {C }}$ and ERS $202^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Exercise Science.

## ERS 302 - Exercise Leadership: Resistance Training

This course provides both the theoretical knowledge and practical skills to safely and effectively design and implement resistance training programs for health and sports performance. Emphasis is placed on physiological and biomechanical principles associated with resistance exercise techniques. Current trends and research in resistance training are explored. Grade of C or better is required in this course.

Prerequisites: ERS $201{ }^{\text {C }}$ and ERS $202{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Exercise Science.

## ERS 304 - Current Issues in Esports Health and Society

This course is designed to critically examine the current issues confronting esports and video gaming within our increasingly digitized global society, including topics relating to health, performance, and the latest trends in the esports industry.

Credits: 3
Thematic Thread(s): Healthy Body, Mind \& Environment, Transfer Thread Completion Course, Well-Being of Children and Youth
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ERS 305- The Truth About Weight Loss

This course provides the opportunity to understand how body weight is lost or gained in a healthy and sustainable way. Students will demonstrate understanding of fraudulent practices and products related to weight loss will be explored. Emphasis is placed on individualized practical approaches to weight management, and students will create behavior change strategies related to a personal weight management plan.

Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): 21 st Century Healthcare, Healthy Body, Mind \& Environment, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ERS 307 - Concepts of General Medicine in Athletic Training

This course is designed to integrate cognitive knowledge and abilities with the practicel application of psychomotor skills specific to the assessment and management of general medical conditions. This course will provide foundational knowledge and application related to pharmacology.

Prerequisite: ERS $117^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 4
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ERS 310-Clinical Experiences in Athletic Training - II

This course is designed to provide opportunities for students to apply previously acquired athletic training knowledge, skills and abilities in the clinical setting under the direct supervision of a program approved preceptor. Emphasis is placed on practicing and implementing the current NATA Education Competencies designated at Level II in the learning over time model.

Credits: 1
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Athletic Training.
ERS 317- Therapeutic Modalities Theory and Techniques
This course is designed to integrate cognitive knowledge and abilities with the practical application or psychomotor skills specific to the use of contemporary physical modalities. this course will provide foundational knowledge and application related to the indications, contraindications and methods of application.

Prerequisite: ERS $221{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 4
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Athletic Training.

ERS 320 - Clinical Experiences in Athletic Training - III
This course is designed to provide opportunities for students to apply previously acquired athletic training knowledge skills and abilities in the clinical setting under the direct supervision of a program approved preceptor. Emphasis is placed on practicing and implementing the current NATA Education Competencies designated at Level III in the learning over time model.

Prerequisite: ERS $310^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Athletic Training.
Enrollment limited to students with department of Exercise \& Rehabilitative Sci.

## ERS 327 - Therapeutic Modalities Procedures

Familiarizes the athletic training student with the appropriate application and maintenance of therapeutic modalities. To be taken concurrently with ERS 317.

Prerequisite: ERS 317 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ERS 337 - Physical Examination of the Athlete

Presents knowledge and skills for orthopedic evaluation of the spine and extremities. Includes evaluation of the internal organs as well.

Prerequisites: ERS $264^{\text {D }}$ or ERS $101^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Athletic Training.

## ERS 340-Clinical Experiences in Athletic Training - IV

This course is designed to provide opportunities at an increasing professional level for students to apply previously acquired athletic training knowledge, skills and abilities in the clinical setting under the direct supervision of a program approved preceptor. Students will practice and implement the current NATA Education Competencies designated at Level IV in the learning over time model.

Prerequisite: ERS $320^{\circ}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Athletic Training. Enrollment limited to students with department of Exercise \& Rehabilitative Sci.

ERS 347 - Therapeutic Rehabilitation in Athletic Training
this course is designed to facilitate learning specific to the theory and application of therapeutic rehabilitation techniques for a diverse population. Emphasis is placed on the planning and implementation of therapeutic rehabilitation protocols for the prevention and/or care of various injuries.

Prerequisite: ERS $221^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 4
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Athletic Training.

## ERS 350 - Advanced Application of Resistance Training

This course is designed to address advanced theories in the application of resistance training. Selected activities will allow for the application of concepts to individuals with specific goals and considerations (e.g. athletes, diseased populations, etc.). Topics of consideration will include the location and analysis of peer-reviewed resources, individualized needs analysis and the selection of muscular fitness assessments, chronic adaptations to long-term resistance training, and long-term client development and periodization.
Prerequisite: ERS $302{ }^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Summer \& Winter Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ERS 357 - Application of Therapeutic Techniques

Enables students to develop the application of therapeutic techniques for the prevention of injury and/or care of the athlete. To be taken concurrently with ERS 347.

Prerequisite: ERS 347 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Athletic Training.

## ERS 387 - Practicum in Athletic Training

Provides educational experiences/assessments in the area of athletic training psychomotor domain, to be coordinated/supervised/mentored in a varied athletic training practicum (totaling a minimum of 1,000 hours). Students will establish/maintain portfolios, develop proper medical documentation and record keeping skills, and be provided opportunities for orthopedic surgery observation.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Athletic Training.

## ERS 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ERS 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ERS 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ERS 400 - Wellness coaching and Program Management

This course examines the concepts of health, wellness and resilience. Emphasis placed on developing wellness coaching skills and the ability to utilize behavior change theories to develop wellness programming for individuals and groups. Fundamentals of business administration, as they relate to wellness programming, are also covered. Grade of C or better is required in this course.

Prerequisites: ERS $300^{C}$ and ERS $301^{C}$ and ERS $302^{C}$ and BIOL $216^{C}$
${ }^{\mathrm{C}}$ Requires minimum grade of $C$.
Corequisite(s): ERS 401, ERS 402 and ERS 403
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.
Enrollment is limited to students with a major in Exercise Science.

## ERS 401 - Fitness Assessment

This course provides practical experiences in the selection, administration, and interpretation of various health-related fitness tests. Emphasis is placed on proper technique and communication throughout the assessment process. Grade of C or better is required in this course.

Prerequisites: ERS $300^{\circ}$ and ERS $301^{C}$ and ERS $302^{\text {C }}$ and BIOL $216^{C}$
${ }^{C}$ Requires minimum grade of $C$.
Corequisite(s): ERS 400, ERS 402 and ERS 403
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Exercise Science.

## ERS 402 - Exercise Prescription

This course provides the theoretical knowledge and practical skills to design personalized exercise programs that elicit specific physiologic responses and adaptations. Emphasis is placed on prescribing safe and effective individualized cardiorespiratory, musculoskeletal and weight management programs. Grade of $C$ or better is required in this course

Prerequisites: ERS $300^{C}$ and ERS $301^{\text {C }}$ and ERS $302^{C}$ and BIOL $216^{C}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Corequisite(s): ERS 403
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Exercise Science.

## ERS 403 - Advanced Exercise Physiology

This course provides in depth inquiry into the acute responses and long term adaptations of the human body to various types of exercise from the cellular level to the entire system. Emphasis is placed on the physiological demands of exercise and exercising at terrestrial extremes. Laboratory included. Grade of C or better is required in this course.

Prerequisites: ERS $300^{\text {C }}$ and ERS $301^{\text {C }}$ and ERS $302^{\text {C }}$ and BIOL $216^{C}$
${ }^{C}$ Requires minimum grade of $C$.
Corequisite(s): ERS 400, ERS 401 and ERS 402
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.
Enrollment is limited to students with a program in Exercise Science.

## ERS 407 - Healthcare Administration in Athletic Training

Studies topics relevant to management, organization, administration, and professional development in the profession of athletic training. Topics
will include discussions specific to diversity in the health care system.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Athletic Training. Enrollment limited to students with the DEPT. EXER SCIENCE ACCEPTANCE attribute.

## ERS 410 - Clinical Exercise Physiology

This course examines cardiopulmonary exercise physiology, the pathophysiology of selected cardiovascular and respiratory diseases, cardiopulmonary rehabilitation, electrocardiography and clinical graded exercise testing. The influence of age, sex, culture, and ethnicity on risk factors for, prevalence of, and outcomes associated with selected cardiovascular and respiratory diseases are emphasized. Grade of $C$ or better is required in this course.

Prerequisites: ERS $400^{\text {C }}$ and ERS $401^{\text {C }}$ and ERS $402^{C}$ and ERS $403^{C}$ and BIOL $217{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Corequisite(s): ERS 411 and ERS 412

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Exercise Science.

ERS 411 - Exercise Science: Special Populations and Conditions
This course evaluates the impact of physical activity and exercise on youth, older adults, and individuals with various health conditions and controlled diseases. Changes that occur during growth, development, maturation and the aging process in relation to physical activity/ exercise are examined. Pathophysiology, disease management, medications, exercise testing, and acute responses and chronic adaptations of physical activity/exercise programs for individuals with various health conditions and controlled diseases are identified. Special considerations for health, disease, and physical activity / exercise programming for diverse populations are explored. Grade of $C$ or better is required in this course

Prerequisites: ERS $400^{C}$ and ERS $401^{C}$ and ERS $402^{C}$ and ERS $403^{C}$ and BIOL $217{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Corequisite(s): ERS 410 and ERS 412
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Exercise Science.
ERS 412 - Exercise Science: Senior Synthesis
This course provides the opportunity to synthesize knowledge, skills and abilities in both classroom and supervised practical settings. Emphasis is placed on developing, implementing and evaluating comprehensive exercise programs for diverse clientele. Opportunities to enhance professional and personal development are provided. Valid CPR/AED certification and proof of professional liability insurance required. Grade of $C$ or better is required in this course.

Prerequisites: ERS $400^{C}$ and ERS $401^{C}$ and ERS $402^{C}$ and ERS $403^{C}$ and ERS $424^{\star C}$ and BIOL $217^{\text {C }}$ (may be taken concurrently).
${ }^{C}$ Requires minimum grade of $C$.
Corequisite(s): ERS 410 and ERS 411
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Exercise Science.

## ERS 417 - Wellness and Reconditioning in Athletic Training

This course is designed to facilitate learning specific to safe and effective health-related wellness screening, and the design and implementation of fitness programs for a diverse population. Inicorporates theoretical knowledge and skills of helath and wellness.

Prerequisite: ERS $117^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Athletic Training.
Enrollment limited to students with department of Exercise \&
Rehabilitative Sci.

## ERS 424 - Nutrition and Exercise

This course provides an understanding of the dietary standards that dictate nutritional requirements for apparently healthy adults. Emphasis is placed on the evaluation of an recommendations for macronutrients, micronutrients, and hydration status for health, physical activity, and human performance. Grade of $C$ or better is required in this course

Prerequisites: (HLTH $314^{\text {C }}$ or ERS $300^{C}$ ) and ERS $301^{\text {C }}$ and ERS $302^{C}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Every Term
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students in the Coll of Health, Engineer \& Sci college.

## ERS 427 - Mastery in Athletic Training

A capstone course that allows the student to synthesize and apply knowledge and skills of an entry-level athletic trainer in a comprehensive manner.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Athletic Training.

## ERS 430 - Seminar in Strength and Conditioning

This course analyzes advanced strength and conditioning theory and practice. Topics include musculoskeletal and cardiorespiratory physiology, metabolism and nutrition, acute responses to exercise and chronic adaptations to training, biomechanical concepts, measurement and evaluation, resistance training techniques, exercise prescription, speed development, and plyometric training. In addition, this course prepares students to take the Certified Strength and Conditioning Specialist (CSCS) examination provided by the National Strength and Conditioning Association (NSCA).
Prerequisite: ERS $302{ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ERS 431 - Health and Fitness in the Older Adult

This course examines wellness promotion and health fitness programs for the older adult, particularly people age fifty and above. Emphasis is placed upon prevention or delay of chronic diseases or disorders.

Prerequisites: ERS $401^{\text {C }}$ and ERS $402{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ERS 432 - Pediatric Exercise Science

This course examines health, physical activity, and physical fitness status of children and adolescents. Physiological responses to exercise, methodologies for assessing physical fitness and physical activity, and promotion of physical activity are discussed. Current research in various topics related to exercise in children and adolescents are explored.

Prerequisites: ERS $401^{C}$ and ERS $402^{C}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ERS 434 - Physiology of Aging and Physical Activity

This course examines the physiology of the aging process with emphasis on the effects of physical activity on health and on the degenerative process of aging. Emphasis is placed on the physiological responses to aging that are influenced by physical activity.

Prerequisites: ERS $401^{\text {C }}$ and ERS $402{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ERS 435 - Exercise Programming for Cancer

This course provides a foundation for an integration of knowledge and skills regarding the components of cancer, cancer treatments, and the concepts of rehabilitating cancer patients using exercise interventions. Emphasis is placed on physiological alterations that occur during and following cancer therapy and the effects that exercise has on eliminating or reducing these effects. Opportunities to develop individualized exercise programs for cancer patients will be provided.

Prerequisites: ERS $201^{\text {C }}$ and ERS $301^{\text {C }}$ and ERS $302^{\text {C }}$ and ERS $402^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## ERS 450 - Exercise Science Internship

This course provides the opportunity for students to develop and apply exercise science knowledge, skills, and abilities in a supervised university approved setting. Valid CPR/AED certification and proof of professional liability insurance required. Grade of C or better is required in this course

Prerequisites: ERS 400 (may be taken concurrently) ${ }^{\text {C }}$ and ERS $401^{\text {C }}$ and ERS $402^{C}$ and ERS $403^{C}$ and ERS $410^{C}$ and ERS $411^{C}$ and ERS $412^{C}$ and ERS $424^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3-12
Term(s) Typically Offered: Offered Fall, Spring, \& Summer
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Exercise Science.

ERS 490 - Independent Study
Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

ERS 495 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ERS 497 - Clinical Synthesis in Athletic Training

This course provides the students with decision-making opportunities to synthesize and integrate all previously acquired athletic training knowledge, skills and abilities in the classroom and clinical setting under the direct supervision of a program approved preceptor. Students will practice and implement all the current NATA Education Competencies designated at the clinical integration proficiency level.

Prerequisite: ERS $340^{\circ}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Athletic Training Enrollment limited to students with department of Exercise \& Rehabilitative Sci.

## ERS 498-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Exercise Science, Bachelor of Science (BS)

## Program Learning Outcomes

- Professional Competence: To utilize knowledge, skills, and abilities to evaluate health behavior and risk factors; develop, implement, and evaluate evidence-based exercise and wellness programs, and employ behavioral strategies to motivate individuals to adopt and maintain positive lifestyle behaviors.
- Professional Interaction and Communication: To interact and communicate effectively by presenting information in oral and written formats, collaborating with professionals and peers, expressing ideas clearly, and giving and receiving feedback.
- Professional Behavior and Involvement: To model professional behaviors (including preparedness, engagement, and appearance), and demonstrate professional involvement across the major.
- Ethical Reasoning: To make well-informed and unbiased decisions to enhance the well-being of others
- Critical Thinking: To demonstrate clear and accurate reasoning to make decisions and solve problems.


## Academic Policies for Students in the Exercise Science Major

## Effective for all Exercise Science Majors beginning Spring 2021

1. Policy for earning acceptable grades in the Exercise Science program:
a. A student must earn a grade of " C " or better in ALL Required Basic Courses (ERS 100's, ERS 200's, ERS 300's) and Required Upper Level Courses (ERS 400's, ERS 410's, ERS 424, ERS 450).
b. A student must earn a grade of "C" or better in ALL Natural Science and Math College-Wide Requirements (BIOL 216, BIOL 217, STAT 152, PHYS 201).
c. The Exercise Science curriculum is structured with pre-requisites. A student must earn a " C " or better in the pre-requisite course to be able to take the next course. See course catalog for prerequisites.
d. If a student does not earn a " C " or better, they will be required to: i. Retake the course
ii. They will be dropped from any course(s) in the following semester that requires a " $C$ " or better as a pre-requisite (see course catalog for pre-requisites)
iii. Students will need to meet with their Academic Advisor and change their schedule accordingly
2. SRU has a Repeat of Courses Policy as follows and it can be found in the course catalog: Repeat of Courses < Slippery Rock University (sru.edu) (https://catalog.sru.edu/archive/2021-2022/academic-policies/repeat-of-courses/)
a. Students may attempt to improve their grade point average by repeating courses. The most recent grade earned is used in calculating the GPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the grade points and credits previously earned. However, all grades will appear on the transcript. Courses in which a grade was earned at Slippery Rock University may not be repeated at any institution. A grade of W (withdraw) does not count as an earned grade.

Students who repeat a course must do so using the same grading system under which they originally took the course. For example, a student who originally took a course graded A-F may not repeat the course on a P/NC, P/F, or audit basis. Students may not repeat a course by using any Credit by Examination program if they originally took the course on a graded A-F, P/NC, P/F, or audit basis.

Undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career, excluding withdrawal grades.

In addition, repeats of a single course will be limited to a maximum of two. This means, no single course may be taken
more than three times (excluding withdrawal grades). The course repeat policy for post-baccalaureate students is the same as the undergraduate student policy.
3. Once the student has exceeded the SRU Repeat of Courses Policy, the student will have their major changed to Exploratory and ERS Exercise Science Major courses will be removed from their schedule.
4. Policy for changing to the Exercise Science major:
a. A Slippery Rock University student wishing to change their major to Exercise Science MUST have an overall GPA of 2.00.
b. A transfer student who enters from another University must have an overall GPA of 2.00 .
5. Additional costs associated with the Exercise Science major:
a. Lab fees will be collected for exercise science classes with a lab component. This fee enhances the department's ability to offer a high-quality program.
b. A student in the Exercise Science major is required to maintain current CPR/AED, First Aid, and Student Professional Liability Insurance while enrolled in ERS 412 and ERS 450 at their own cost. More information will be provided to students in the upper level ERS courses.
c. ERS 450 Internship: Certain sites may require one or more of the following: physical examinations, record of immunizations, TB test, criminal background checks, drug testing, specific certifications for CPR/AED (e.g., American Heart Association), and HIPAA training. These may require additional costs for students. Fulfilling these requirements and obtaining appropriate documentation is the responsibility of the student.

Updated September 14, 2021

## Related Links

Exercise Science, BS Program Page (https://www.sru.edu/academics/ majors-and-minors/exercise-science/)

Exercise Science Program Page (https://www.sru.edu/academics/ colleges-and-departments/ches/departments/exercise-science/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement - Exercise Science
1st Major: Exercise Science

- Overall GPA: 2.0 or higher
- Major GPA (includes Major Requirements and College Wide Requirements): 2.0 or higher


## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 43 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 57 |


| Natural Science and Math College-Wide Requirements | 12 |
| :--- | :--- |
| Electives | 17 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Select one of the following: | 3 |  |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy | 15 |
| Subtotal |  |  |

Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378)
Humanities Inquiry
Select 3 Credits (p. 1378)
Social Science Inquiry
Select 3 Credits (p. 1378) 3
Natural Sciences Inquiry
BIOL $216 \quad$ Anatomy and Physiology I with Lab
Physical Science Inquiry
PHYS $201 \quad$ Elements of Physics I with Lab 4

| Subtotal | 16 |
| :--- | :--- |

## Thematic Thread

| Select 12 Credits $\left(\right.$ p. 1378) ${ }^{2}$ | 12 |
| :--- | :--- |
| Total Hours | 43 |

1 Course offered in multiple subjects; cannot take course in first major subject
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code Title | Hours |
| :---: | :---: |
| Complete one of the following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |
| ESAP 110 Beginning Algebra |  |
| Total Hours | 0-3 |
| Computer Competency |  |
| Code Title | Hours |
| Demonstrate "computer competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |

Select one of the following at SRU or another post-secondary institution:
CPSC 100 Introduction to Computing for Liberal Arts
CPSC 110 Computer Concepts
CPSC 130 Introduction to Computing and Programming
PE 202 Technology for Wellness
Total Hours
0-3

## Major Requirements

- 29 major credits must be taken at SRU or PASSHE
- 29 major credits must be taken at the 300 level or above
- Students may choose to earn a BS in Exercise Science as preparation for graduate studies in many health care related fields. In this case, the student should learn what prerequisites are required for his/her intended graduate program and take those courses as electives while completing the Exercise Science Program.
- This program prepares you to sit for national examinations. While professional licensure/certification is not required, some employers may require certification.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Basic Courses |  |  |
| Must earn a " C " or better in the following courses |  |  |
| ERS 100 | Introduction to Exercise Science: Careers and Content ${ }^{1,2}$ | 3 |
| ERS 101 | Applied Anatomy/Lab ${ }^{\text {1,2 }}$ | 3 |
| ERS 201 | Exercise Physiology with Lab ${ }^{1,2}$ | 3 |
| ERS 202 | Biomechanics with Lab ${ }^{1,2}$ | 3 |
| ERS 300 | Research Methods in Exercise Science ${ }^{1,2}$ | 3 |
| ERS 301 | Aerobic Exercise Leadership 1,2 | 3 |
| ERS 302 | Exercise Leadership: Resistance Training 1,2 | 3 |

Subtotal 21
Required Upper Level Courses
Must earn a " C " or better in the following courses
ERS $424 \quad$ Nutrition and Exercise ${ }^{1,2}$
or HLTH $424 \quad$ Nutrition and Exercise

| ERS 400 | Wellness coaching and Program Management ${ }^{1,2}$ | 3 |
| :---: | :---: | :---: |
| ERS 401 | Fitness Assessment ${ }^{1,2}$ | 3 |
| ERS 402 | Exercise Prescription ${ }^{1,2}$ | 3 |
| ERS 403 | Advanced Exercise Physiology ${ }^{1,2}$ | 3 |
| ERS 410 | Clinical Exercise Physiology ${ }^{1,2}$ | 3 |
| ERS 411 | Exercise Science: Special Populations and Conditions ${ }^{1,2}$ | 3 |
| ERS 412 | Exercise Science: Senior Synthesis ${ }^{1,2}$ | 3 |
| ERS 450 | Exercise Science Internship 1,2 | 6 |
| ERS 450 | Exercise Science Internship 1,2 | 6 |
| Subtotal |  | 36 |
| Total Hou |  | 57 |

Total Hours
57

[^13]* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

Natural Science and Math College-Wide Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Must earn a " $\mathrm{C}^{\prime}$ or better in the following courses |  |  |
| BIOL 216 | Anatomy and Physiology I with Lab ${ }^{1}$ | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab ${ }^{1}$ | 3 |
| STAT 152 | Elementary Statistics I ${ }^{1}$ | 3 |
| PHYS 201 | Elements of Physics I with Lab ${ }^{1}$ | 4 |
| Total Hours |  | $\mathbf{1 3}$ |

1 Course counts toward Major GPA

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Exercise Science - BS (6149)
This program is effective as of Summer 2021.
Revised 06.30.21
UCC 03.02.2021
Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| Select one of the following: |  | 3 |
| ERS 100 | Introduction to Exercise Science: Careers and Content ${ }^{3}$ |  |
| ERS 101 | Applied Anatomy/Lab ${ }^{3}$ |  |
| PHYS 201 | Elements of Physics I with Lab ${ }^{1,3}$ | 4 |
| SUBJ 139 | University Seminar ${ }^{2}$ | 3 |
| Rock Studies |  | 6 |
| INDS 101 | FYRST Seminar | 1 |
|  | Hours | 17 |

## Spring



## Second Year

Fall


| Spring |  |  |
| :--- | :--- | ---: |
| ERS 400 | Wellness coaching and Program <br> Management $^{3}$ | 3 |
| ERS 401 | Fitness Assessment $^{3}$ | 3 |
| ERS 402 | Exercise Prescription $^{3}$ | 3 |
| ERS 403 | Advanced Exercise Physiology ${ }^{3}$ | 3 |
| Rock Studies/Electives | 3 |  |
| Hours | $\mathbf{1 5}$ |  |

Fourth Year
Fall

| ERS 410 | Clinical Exercise Physiology ${ }^{3}$ | 3 |
| :--- | :--- | :--- |
| ERS 411 | Exercise Science: Special Populations and <br> Conditions $^{3}$ | 3 |
| ERS 412 | Exercise Science: Senior Synthesis ${ }^{3}$ | 3 |

Select one of the following: 3
ERS $424 \quad$ Nutrition and Exercise ${ }^{3}$
HLTH $424 \quad$ Nutrition and Exercise ${ }^{3}$
Rock Studies/Electives 3-4

| Hours | 15-16 |
| :--- | :--- |

Spring
ERS $450 \quad$ Exercise Science Internship (Internship 12 may be taken in the summer) ${ }^{3,4}$

| Hours | 12 |
| :--- | :--- | ---: |
| Total Hours** | $120-121$ |

1 Course satisfies majors and Rock Studies requirements
2 Course offered in multiple subjects; cannot take course in first major subject
3 Must earn a grade of "C" or better

4 ERS 450: Exercise Science Internship may be scheduled Only after all prerequisites are met. Also required are a valid First Aid, CPR/AED certification and proof of student professional liability insurance. ERS 412 provides all necessary information pertaining to the internship registration process and is taken the semester prior to internship.

* Students are encouraged to take INDS 101 as a Free Elective.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6149
Revised: 10.11.2021

## Exercise Science, Bachelor of Science (BS) / Pre-Athletic Training (SRU) (3+2)

## Exercise Science Program Learning Outcomes

- Professional Competence: To utilize knowledge, skills, and abilities to evaluate health behavior and risk factors; develop, implement, and evaluate evidence-based exercise and wellness programs, and employ behavioral strategies to motivate individuals to adopt and maintain positive lifestyle behaviors.
- Professional Interaction and Communication: To interact and communicate effectively by presenting information in oral and written formats, collaborating with professionals and peers, expressing ideas clearly, and giving and receiving feedback.
- Professional Behavior and Involvement: To model professional behaviors (including preparedness, engagement, and appearance), and demonstrate professional involvement across the major.
- Ethical Reasoning: To make well-informed and unbiased decisions to enhance the well-being of others
- Critical Thinking: To demonstrate clear and accurate reasoning to make decisions and solve problems.


## What are your options?

Pre-Athletic Training SRU 3+2: Earn a Master of Science degree in Athletic Training in five years rather than six. In the first three years, you complete your major courses and pre-requisites for the SRU AT graduate program. During your third undergraduate year, you apply for admission into the SRU AT graduate program. If accepted, your first year in the SRU AT graduate program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program.

Pre-Athletic Training (SRU Traditional): Complete the requirements for your major and the pre-requisites for the SRU AT graduate program and apply to the SRU AT graduate program in your senior year.

# Academic Policies for Students in the Exercise Science Major 

Effective for all Exercise Science Majors beginning Spring 2021

1. Policy for earning acceptable grades in the Exercise Science program:
a. A student must earn a grade of " C " or better in ALL Required Basic Courses (ERS 100's, ERS 200's, ERS 300's) and Required Upper Level Courses (ERS 400's, ERS 410's, ERS 424, ERS 450).
b. A student must earn a grade of "C" or better in ALL Natural Science and Math College-Wide Requirements (BIOL 216, BIOL 217, STAT 152, PHYS 201).
c. The Exercise Science curriculum is structured with pre-requisites. A student must earn a " $C$ " or better in the pre-requisite course to be able to take the next course. See course catalog for prerequisites.
d. If a student does not earn a " C " or better, they will be required to:
i. Retake the course
ii. They will be dropped from any course(s) in the following semester that requires a " C " or better as a pre-requisite (see course catalog for pre-requisites)
iii. Students will need to meet with their Academic Advisor and change their schedule accordingly
2. SRU has a Repeat of Courses Policy as follows and it can be found in the course catalog: Repeat of Courses < Slippery Rock University (sru.edu) (https://catalog.sru.edu/archive/2021-2022/academic-policies/repeat-of-courses/)
a. Students may attempt to improve their grade point average by repeating courses. The most recent grade earned is used in calculating the GPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the grade points and credits previously earned. However, all grades will appear on the transcript. Courses in which a grade was earned at Slippery Rock University may not be repeated at any institution. A grade of W (withdraw) does not count as an earned grade.

Students who repeat a course must do so using the same grading system under which they originally took the course. For example, a student who originally took a course graded A-F may not repeat the course on a P/NC, P/F, or audit basis. Students may not repeat a course by using any Credit by Examination program if they originally took the course on a graded $A-F, P / N C, P / F$, or audit basis.

Undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career, excluding withdrawal grades.

In addition, repeats of a single course will be limited to a maximum of two. This means, no single course may be taken more than three times (excluding withdrawal grades). The course repeat policy for post-baccalaureate students is the same as the undergraduate student policy.
3. Once the student has exceeded the SRU Repeat of Courses Policy, the student will have their major changed to Exploratory and ERS Exercise Science Major courses will be removed from their schedule.
4. Policy for changing to the Exercise Science major.
a. A Slippery Rock University student wishing to change their major to Exercise Science MUST have an overall GPA of 2.00.
b. A transfer student who enters from another University must have an overall GPA of 2.00 .
5. Additional costs associated with the Exercise Science major:
a. Lab fees will be collected for exercise science classes with a lab component. This fee enhances the department's ability to offer a high-quality program.
b. A student in the Exercise Science major is required to maintain current CPR/AED, First Aid, and Student Professional Liability Insurance while enrolled in ERS 412 and ERS 450 at their own cost. More information will be provided to students in the upper level ERS courses.
c. ERS 450 Internship: Certain sites may require one or more of the following: physical examinations, record of immunizations, TB test, criminal background checks, drug testing, specific certifications for CPR/AED (e.g., American Heart Association), and HIPAA training. These may require additional costs for students. Fulfilling these requirements and obtaining appropriate documentation is the responsibility of the student.

Updated September 14, 2021

## Related Links

Exercise Science - Pre-Athletic Training, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/exercise-science-pre-athletic-training/)

Exercise Science Program Page (https://www.sru.edu/academics/ colleges-and-departments/ches/departments/exercise-science/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement - Exercise Science

$1^{\text {st }}$ Major: Exercise Science

- Overall GPA: 2.00 or higher
- Major GPA (includes Major Requirements and College Wide Requirements): 2.00 or higher
$2^{\text {nd }}$ Major: Pre-AT SRU 3+2 Exercise Science
- Overall GPA: 3.00 or higher


## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 43 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 45 |
| Natural Science and Math College-Wide Requirements | 12 |
| Electives | 31 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this
is a pre-professional program, credits taken during the $1^{\text {st }}$ year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.


## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| PSYC 105 | Introduction to Psychology | 3 |
| Natural Sciences Inquiry |  |  |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| Physical Science Inquiry |  |  |
| PHYS 201 | Elements of Physics I with Lab | 4 |
| Subtotal |  | 16 |
| Thematic Thread |  |  |
| Select 12 Credi | 378) ${ }^{2}$ | 12 |
| Total Hours |  | 43 |

1 Course offered in multiple subjects; cannot take course in first major subject
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code Title | Hours |
| :---: | :---: |
| Complete one of the following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |
| ESAP 110 Beginning Algebra |  |
| Total Hours | 0-3 |
| Computer Competency |  |
| Code Title | Hours |
| Demonstrate "computer competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |
| Select one of the following at SRU or another post-secondary institution: |  |
| CPSC 100 Introduction to Computing for Liberal Arts |  |


| CPSC 110 | Computer Concepts |
| :--- | :--- |
| CPSC 130 | Introduction to Computing and |
|  | Programming |
| PE 202 | Technology for Wellness |

Total Hours

## Major Requirements

- If you choose to pursue Pre-Athletic Training SRU 3+2 Exercise Science and are not accepted into the AT program, then ERS 450: Internship is required to complete a first major of Exercise Science. Please refer to the Exercise Science Curriculum Guide.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Basic Courses |  |  |
| Must earn a "C" or better in the following courses |  |  |
| ERS 100 | Introduction to Exercise Science: Careers and Content ${ }^{1,2}$ | 3 |
| ERS 101 | Applied Anatomy/Lab ${ }^{\text {1,2 }}$ | 3 |
| ERS 201 | Exercise Physiology with Lab ${ }^{1,2}$ | 3 |
| ERS 202 | Biomechanics with Lab ${ }^{1,2}$ | 3 |
| ERS 300 | Research Methods in Exercise Science ${ }^{1,2}$ | 3 |
| ERS 301 | Aerobic Exercise Leadership 1,2 | 3 |
| ERS 302 | Exercise Leadership: Resistance Training 1,2 | 3 |


| Subtotal |  | 21 |
| :---: | :---: | :---: |
| Required Upper Program) | Courses (24 credits if accepted to SRU AT |  |
| Must earn a "C" or better in the following courses |  |  |
| ERS 424 or HLTH 424 | Nutrition and Exercise ${ }^{1,2}$ <br> Nutrition and Exercise | 3 |
| ERS 400 | Wellness coaching and Program Management ${ }^{1,2}$ | 3 |
| ERS 401 | Fitness Assessment ${ }^{1,2}$ | 3 |
| ERS 402 | Exercise Prescription ${ }^{1,2}$ | 3 |
| ERS 403 | Advanced Exercise Physiology ${ }^{1,2}$ | 3 |
| ERS 410 | Clinical Exercise Physiology ${ }^{1,2}$ | 3 |
| ERS 411 | Exercise Science: Special Populations and Conditions ${ }^{1,2}$ | 3 |
| ERS 412 | Exercise Science: Senior Synthesis ${ }^{1,2}$ | 3 |
| Subtotal |  | 24 |
| Total Hours |  | 45 |

1 Course counts toward Major GPA
2 Course counts for 50\% of Major requirements

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Natural Science and Math College-Wide Requirements <br> Code <br> Title <br> Hours

Must earn a " C " or better in the following courses

| BIOL 216 | Anatomy and Physiology I with Lab ${ }^{1}$ | 3 |
| :--- | :--- | :--- |
| BIOL 217 $^{1}$ | Anatomy and Physiology II with Lab ${ }^{1}$ | 3 |
| STAT 152 $^{\text {1 }}$ | Elementary Statistics I ${ }^{1}$ | 3 |


| PHYS 201 | Elements of Physics I with Lab ${ }^{1}$ | 4 |
| :--- | ---: | ---: |
| Total Hours | 13 |  |
| 1 Course counts toward Major GPA |  |  |

## Additional Athletic Training Prerequisite Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| ERS 250 | Medical Terminology | 3 |
| or HCAM 250 | Medical Terminology for Healthcare <br> BIOL 101 <br> or BIOL 102 <br> or BIOL 104 | General Biology <br> Human Biology |
| CHEM 104 | Principles of Biology with Lab | 3 |
| or CHEM 107 | Introduction Chemistry I |  |

## Athletic Training Graduate Program (Master of Science in Athletic Training) <br> Prerequisite Admission Requirements - Pre-Athletic Training SRU 3+2 <br> For Application Requirements: <br> Please refer to Slippery Rock University's Athletic Training Graduate Program. (Master of Science in Athletic Training) website for requirements: www.sru.edu/AT (http://www.sru.edu/AT/)

Code Title Hours

Pre-Requisite Courses - SRU Athletic Training Graduate Program:

| ERS 201 | Exercise Physiology with Lab | 3 |
| :---: | :---: | :---: |
| ERS 202 | Biomechanics with Lab | 3 |
| ERS 250 <br> or HCAM 250 | Medical Terminology <br> Medical Terminology for Healthcare <br> Administrators | 3 |
| ERS 424 <br> or HLTH 424 | Nutrition and Exercise Nutrition and Exercise | 3 |
| $\begin{aligned} & \text { BIOL } 101 \\ & \quad \text { or BIOL } 102 \\ & \text { or BIOL } 104 \end{aligned}$ | General Biology <br> Human Biology <br> Principles of Biology with Lab | 3 |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| CHEM 104 or CHEM 107 | Introduction Chemistry I General Chemistry I | 3 |
| PHYS 201 | Elements of Physics I with Lab | 4 |
| PSYC 105 <br> or PSYC 244 <br> or PSYC 276 | Introduction to Psychology <br> Developmental Psychology <br> Introduction to Abnormal Psychology | 3 |
| STAT 152 | Elementary Statistics I | 3 |

## Requirements for Pre-Athletic Training SRU 3+2:

If any of these requirements are not met, the $3+2$ designation will be removed from the student's record:

1. A 3.0 or higher overall GPA must be maintained by the student.
2. The student can only be enrolled in the Pre-Athletic Training SRU $3+2$ program for a maximum of three (3) years, full-time continuous enrollment (fall/spring).

## Provision:

Should a Pre-Athletic Training SRU 3+2 student be unsuccessful in completing the 1st three semesters (summer or fall or spring terms) of the Athletic Training Graduate Program and want to complete the original undergraduate degree, it is solely up to the discretion of the undergraduate program Department Chair to determine which, if any, graduate level AT courses will count toward the completion of his/ her undergraduate degree. In addition, students must complete any unfulfilled requirements of their undergraduate major. Students may still apply to the AT program with an earned Bachelor's degree.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
EXERCISE SCIENCE - BS (6149)
PRE-AT SRU $3+2$ (6SAT)
This program is effective as of Fall 2021
Revised 08.02.2021
UCC 03.30.2021
Recommended Three-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| Select one of the following: |  | 3 |
| ERS 100 | Introduction to Exercise Science: Careers and Content ${ }^{3}$ |  |
| ERS 101 | Applied Anatomy/Lab ${ }^{3}$ |  |
| PHYS 201 | Elements of Physics I with Lab ${ }^{\text {1,3 }}$ | 4 |
| PSYC 105 | Introduction to Psychology ${ }^{1}$ | 3 |
| SUBJ 139 | University Seminar ${ }^{2}$ | 3 |
| Rock Studies |  | 3 |
| INDS 101 | FYRST Seminar | 1 |
|  | Hours | 17 |
| Spring |  |  |
| Select one of the following: |  | 3 |
| ERS 100 | Introduction to Exercise Science: Careers and Content ${ }^{3}$ |  |
| ERS 101 | Applied Anatomy/Lab ${ }^{3}$ |  |
| STAT 152 | Elementary Statistics I ${ }^{1,3}$ | 3 |
| Rock Studies |  | 9 |
| Computer Competency Course (only if needed) |  | 0-1 |
|  | Hours | 15-16 |

## Second Year

Fall
ERS 201
ERS 202
Exercise Physiology with Lab ${ }^{3}$
3
ERS 202 Biomechanics with Lab ${ }^{3} 3$

| BIOL 216 | Anatomy and Physiology I with Lab ${ }^{1,3}$ | 3 |
| :---: | :---: | :---: |
| Rock Studies |  | 9 |
|  | Hours | 18 |
| Spring |  |  |
| ERS 300 | Research Methods in Exercise Science ${ }^{3}$ | 3 |
| ERS 301 | Aerobic Exercise Leadership ${ }^{3}$ | 3 |
| ERS 302 | Exercise Leadership: Resistance Training ${ }^{3}$ | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab ${ }^{3}$ | 3 |
| $\begin{aligned} & \text { ERS } 250 \\ & \text { or HCAM } 250 \end{aligned}$ | Medical Terminology or Medical Terminology for Healthcare Administrators | 3 |
| Rock Studies |  | 3 |
|  | Hours | 18 |
| Third Year |  |  |
| Fall |  |  |
| ERS 400 | Wellness coaching and Program Management ${ }^{3}$ | 3 |
| ERS 401 | Fitness Assessment ${ }^{3}$ | 3 |
| ERS 402 | Exercise Prescription ${ }^{3}$ | 3 |
| ERS 403 | Advanced Exercise Physiology ${ }^{3}$ | 3 |
| CHEM 104 or CHEM 107 | Introduction Chemistry I or General Chemistry I | 3 |
|  | Hours | 15 |

## Spring

| ERS 410 | Clinical Exercise Physiology $^{3}$ | 3 |
| :--- | :--- | :--- |
| ERS 411 | Exercise Science: Special Populations and <br> Conditions ${ }^{3}$ | 3 |
|  | Exercise Science: Senior Synthesis ${ }^{3}$ | 3 |
| ERS 412 |  | 3 |


| ERS 424 | Nutrition and Exercise ${ }^{3}$ |  |
| :---: | :--- | ---: |
| HLTH 424 | Nutrition and Exercise ${ }^{3}$ |  |

## Fourth Year

Fall
Senior Year. If not accepted into SRU AT ${ }^{4}$

| ERS 450 | Exercise Science Internship ${ }^{3}$ | 12 |
| :--- | :--- | :--- |
|  | Hours | $\mathbf{1 2}$ |

Total Hours**
113-114
1 Course satisfies majors and Rock Studies requirements.
2 Course offered in multiple subjects; cannot take course in first major subject
3 Must earn a " $C$ " or better in the course.
4 If NOT accepted into SRU AT

* Students are encouraged to take INDS 101 as a Free Elective.

Students must meet all Exercise Science $3+2$ major requirements, SRU
Athletic Training (AT) Graduate Program prerequisites, and Rock studies requirements to apply.

Senior Year- If accepted into the SRU AT Graduate Program: The first year will count as the 4th year of the Exercise Science program. Upon successful completion of the first year of the SRU AT Graduate Program, students will graduate with a BS in Exercise Science. Should an Exercise Science $3+2$ student be unsuccessful in completing the 1 st year of the SRU AT Graduate Program and wants to complete their original undergraduate degree, it is solely up to the discretion of their undergraduate program Department Chair to determine which, if any Athletic Training courses will count toward the completion of their undergraduate degree. In addition, students must complete ERS 450: Exercise Science Internship ( 12 credits).

Senior Year- If not accepted into SRU AT Graduate Program: If you choose to pursue Exercise Science $3+2$ and are not accepted into SRU AT Graduate Program, then ERS 450: Exercise Science Internship (12 credits) is required to complete a first major of Exercise Science. Please refer to the Exercise Science Curriculum Guide.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6149
Pre-Athletic Training SRU 3+2 (6SAT)
Revised: 10.11.2021

## Exercise Science, Bachelor of Science (BS) / Pre-Athletic Training (SRU) (Traditional)

## Exercise Science Program Learning Outcomes

- Professional Competence: To utilize knowledge, skills, and abilities to evaluate health behavior and risk factors; develop, implement, and evaluate evidence-based exercise and wellness programs, and employ behavioral strategies to motivate individuals to adopt and maintain positive lifestyle behaviors.
- Professional Interaction and Communication: To interact and communicate effectively by presenting information in oral and written formats, collaborating with professionals and peers, expressing ideas clearly, and giving and receiving feedback.
- Professional Behavior and Involvement: To model professional behaviors (including preparedness, engagement, and appearance), and demonstrate professional involvement across the major.
- Ethical Reasoning: To make well-informed and unbiased decisions to enhance the well-being of others
- Critical Thinking: To demonstrate clear and accurate reasoning to make decisions and solve problems.


## What are your options?

Pre-Athletic Training SRU 3+2: Earn a Master of Science degree in Athletic Training in five years rather than six. In the first three years, you complete your major courses and pre-requisites for the SRU AT graduate program. During your third undergraduate year, you apply for admission into the SRU AT graduate program. If accepted, your first year in the SRU AT graduate program meets the remaining requirements for your
undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program.

Pre-Athletic Training (SRU Traditional): Complete the requirements for your major and the pre-requisites for the SRU AT graduate program and apply to the SRU AT graduate program in your senior year.

## Academic Policies for Students in the Exercise Science Major

## Effective for all Exercise Science Majors beginning Spring 2021

1. Policy for earning acceptable grades in the Exercise Science program:
a. A student must earn a grade of " C " or better in ALL Required Basic Courses (ERS 100's, ERS 200's, ERS 300's) and Required Upper Level Courses (ERS 400's, ERS 410's, ERS 424, ERS 450).
b. A student must earn a grade of "C" or better in ALL Natural Science and Math College-Wide Requirements (BIOL 216, BIOL 217, STAT 152, PHYS 201).
c. The Exercise Science curriculum is structured with pre-requisites. A student must earn a "C" or better in the pre-requisite course to be able to take the next course. See course catalog for prerequisites.
d. If a student does not earn a " $C$ " or better, they will be required to:
i. Retake the course
ii. They will be dropped from any course(s) in the following semester that requires a " C " or better as a pre-requisite (see course catalog for pre-requisites)
iii. Students will need to meet with their Academic Advisor and change their schedule accordingly
2. SRU has a Repeat of Courses Policy as follows and it can be found in the course catalog: Repeat of Courses < Slippery Rock University (sru.edu) (https://catalog.sru.edu/archive/2021-2022/academic-policies/repeat-of-courses/)
a. Students may attempt to improve their grade point average by repeating courses. The most recent grade earned is used in calculating the GPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the grade points and credits previously earned. However, all grades will appear on the transcript. Courses in which a grade was earned at Slippery Rock University may not be repeated at any institution. A grade of W (withdraw) does not count as an earned grade.

Students who repeat a course must do so using the same grading system under which they originally took the course. For example, a student who originally took a course graded A-F may not repeat the course on a P/NC, P/F, or audit basis. Students may not repeat a course by using any Credit by Examination program if they originally took the course on a graded A-F, P/NC, P/F, or audit basis.
Undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career, excluding withdrawal grades.

In addition, repeats of a single course will be limited to a maximum of two. This means, no single course may be taken more than three times (excluding withdrawal grades). The course
repeat policy for post-baccalaureate students is the same as the undergraduate student policy.
3. Once the student has exceeded the SRU Repeat of Courses Policy, the student will have their major changed to Exploratory and ERS Exercise Science Major courses will be removed from their schedule.
4. Policy for changing to the Exercise Science major:
a. A Slippery Rock University student wishing to change their major to Exercise Science MUST have an overall GPA of 2.00.
b. A transfer student who enters from another University must have an overall GPA of 2.00.
5. Additional costs associated with the Exercise Science major
a. Lab fees will be collected for exercise science classes with a lab component. This fee enhances the department's ability to offer a high-quality program.
b. A student in the Exercise Science major is required to maintain current CPR/AED, First Aid, and Student Professional Liability Insurance while enrolled in ERS 412 and ERS 450 at their own cost. More information will be provided to students in the upper level ERS courses.
c. ERS 450 Internship: Certain sites may require one or more of the following: physical examinations, record of immunizations, TB test, criminal background checks, drug testing, specific certifications for CPR/AED (e.g., American Heart Association), and HIPAA training. These may require additional costs for students. Fulfilling these requirements and obtaining appropriate documentation is the responsibility of the student

Updated September 14, 2021

## Related Links

Exercise Science - Pre-Athletic Training, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/exercise-science-pre-athletic-training/)

Exercise Science Program Page (https://www.sru.edu/academics/ colleges-and-departments/ches/departments/exercise-science/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement - Exercise Science

Overall GPA: 2.00 or higher
Major GPA (includes Major Requirements and College-Wide
Requirements): 2.00 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 43 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 57 |
| Natural Science and Math College-Wide Requirements | 12 |
| Electives | 15 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| PSYC 105 | Introduction to Psychology | 3 |
| Natural Sciences Inquiry |  |  |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| Physical Science Inquiry |  |  |
| PHYS 201 | Elements of Physics I with Lab | 4 |
| Subtotal |  | 16 |
| Thematic Thread |  |  |
| Select 12 Credi | 1378) ${ }^{2}$ | 12 |
| Total Hours |  | 43 |

1 Course offered in multiple subjects; cannot take course in first major subject
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code Title | Hours |
| :---: | :---: |
| Complete one of the following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |
| ESAP 110 Beginning Algebra |  |
| Total Hours | 0-3 |
| Computer Competency |  |
| Code Title | Hours |
| Demonstrate "computer competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |
| Select one of the following at SRU or another post-secondary institution: |  |
| CPSC 100 Introduction to Computing for Liberal Arts |  |


| CPSC 110 | Computer Concepts |
| :--- | :--- |
| CPSC 130 | Introduction to Computing and <br> Programming |
| PE 202 | Technology for Wellness |

Total Hours

## Major Requirements

- 29 major credits must be taken at SRU or PASSHE
- 29 major credits must be taken at the 300 level or above
- Students may choose to earn a BS in Exercise Science as preparation for graduate studies in many health care related fields. In this case, the student should learn what prerequisites are required for his/her intended graduate program and take those courses as electives while completing the Exercise Science Program.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Basic Courses |  |  |
| Must earn a "C" or better in the following courses |  |  |
| ERS 100 | Introduction to Exercise Science: Careers and Content ${ }^{1,2}$ | 3 |
| ERS 101 | Applied Anatomy/Lab ${ }^{\text {1,2 }}$ | 3 |
| ERS 201 | Exercise Physiology with Lab ${ }^{1,2}$ | 3 |
| ERS 202 | Biomechanics with Lab ${ }^{1,2}$ | 3 |
| ERS 300 | Research Methods in Exercise Science ${ }^{1,2}$ | 3 |
| ERS 301 | Aerobic Exercise Leadership 1,2 | 3 |
| ERS 302 | Exercise Leadership: Resistance Training 1,2 | 3 |

## Subtotal

21
## Required Upper Level Courses

Must earn a " C " or better in the following courses

|  |  | 3 |
| :---: | :---: | :---: |
| or HLTH 424 | Nutrition and Exercise |  |
| ERS 400 | Wellness coaching and Program Management ${ }^{1,2}$ | 3 |
| ERS 401 | Fitness Assessment ${ }^{1,2}$ | 3 |
| ERS 402 | Exercise Prescription ${ }^{1,2}$ | 3 |
| ERS 403 | Advanced Exercise Physiology ${ }^{\text {1,2 }}$ | 3 |
| ERS 410 | Clinical Exercise Physiology ${ }^{1,2}$ | 3 |
| ERS 411 | Exercise Science: Special Populations and Conditions ${ }^{1,2}$ | 3 |
| ERS 412 | Exercise Science: Senior Synthesis ${ }^{1,2}$ | 3 |
| ERS 450 | Exercise Science Internship 1,2 | 6 |
| ERS 450 | Exercise Science Internship 1,2 | 6 |
| Subtotal |  | 36 |
| Total Hours |  | 57 |


| Code | Title | Hours |
| :---: | :---: | :---: |
| Must earn a "C" or better in the following courses |  |  |
| BIOL 216 | Anatomy and Physiology I with Lab ${ }^{1}$ | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab ${ }^{1}$ | 3 |
| STAT 152 | Elementary Statistics I ${ }^{1}$ | 3 |
| PHYS 201 | Elements of Physics I with Lab ${ }^{1}$ | 4 |
| Total Hours |  | 13 |

1 Course counts toward Major GPA

## Additional Athletic Training Prerequisite Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| ERS 250 | Medical Terminology | 3 |
| or HCAM 250 | Medical Terminology for Healthcare <br> Administrators |  |
| CHEM 104 | Introduction Chemistry I | 3 |
| or CHEM 107 | General Chemistry I |  |
| BIOL 101 | General Biology | 3 |
| or BIOL 102 | Human Biology |  |
| or BIOL 104 | Principles of Biology with Lab |  |

## Athletic Training Graduate Program (Master of Science in Athletic Training) <br> Prerequisite Admission Requirements <br> For Application Requirements:

Please refer to Slippery Rock University's Athletic Training Graduate Program. (Master of Science in Athletic Training) website for requirements: www.sru.edu/AT (http://www.sru.edu/AT/)

| Code | Title |
| :--- | :--- | ---: |
| Pre-Requisite Courses - SRU Athletic Training Graduate Program: |  | Hours

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled

SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Exercise Science - BS (6149)
PRE-AT (SRU Traditional)
This program is effective as of Summer 2020
Revised 08.02.2021
UCC 03.02.21/04.13.2021

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| Select one of the following: |  | 3 |
| ERS 100 | Introduction to Exercise Science: Careers and Content ${ }^{3}$ |  |
| ERS 101 | Applied Anatomy/Lab ${ }^{3}$ |  |
| PHYS 201 | Elements of Physics I with Lab ${ }^{\text {1,3 }}$ | 4 |
| PSYC 105 | Introduction to Psychology ${ }^{1}$ | 3 |
| SUBJ 139 | University Seminar ${ }^{2}$ | 3 |
| Rock Studie |  | 3 |
| INDS 101 | FYRST Seminar | 1 |
|  | Hours | 17 |
| Spring |  |  |
| Select one of the following: |  | 3 |
| ERS 100 | Introduction to Exercise Science: Careers and Content ${ }^{3}$ |  |
| ERS 101 | Applied Anatomy/Lab ${ }^{3}$ |  |
| STAT 152 | Elementary Statistics $1^{1,3}$ | 3 |
| Rock Studies |  | 9 |
| Computer Competency Course (only if needed) |  | 0-1 |
|  | Hours | 15-16 |

## Second Year

Fall
Select one of the following: 3

| ERS 201 | Exercise Physiology with Lab ${ }^{3}$ |  |
| :---: | :--- | ---: |
| ERS 202 | Biomechanics with Lab ${ }^{3}$ |  |
| BIOL 216 | Anatomy and Physiology I with Lab ${ }^{1,3}$ | $\mathbf{3}$ |
| Rock Studies |  | $\mathbf{9}$ |
|  | Hours | $\mathbf{1 5}$ |

## Spring

Select one of the following: 3

| ERS 201 | Exercise Physiology with Lab |  |
| :---: | :--- | :--- |
| ERS 202 | Biomechanics with Lab |  |
| BIOL 217 | Anatomy and Physiology II with Lab |  |

Rock Studies/Elective
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6149
Pre-Athletic Training SRU Traditional (P2)
Revised: 10.11.2021

## Exercise Science, Bachelor of Science (BS) / Pre-Occupational Therapy (SRU) (3+3) <br> Exercise Science Program Learning Outcomes

- Professional Competence: To utilize knowledge, skills, and abilities to evaluate health behavior and risk factors; develop, implement, and evaluate evidence-based exercise and wellness programs, and employ behavioral strategies to motivate individuals to adopt and maintain positive lifestyle behaviors.
- Professional Interaction and Communication: To interact and communicate effectively by presenting information in oral and written formats, collaborating with professionals and peers, expressing ideas clearly, and giving and receiving feedback.
- Professional Behavior and Involvement: To model professional behaviors (including preparedness, engagement, and appearance), and demonstrate professional involvement across the major.
- Ethical Reasoning: To make well-informed and unbiased decisions to enhance the well-being of others
- Critical Thinking: To demonstrate clear and accurate reasoning to make decisions and solve problems.


## What are your options?

Pre-Occupational Therapy SRU 3+3: Earn a Doctor of Occupational Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU OTD program. At the end of your second year, you apply for admission into the SRU OTD program. If accepted, your first year in the SRU OTD program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

Pre-Occupational Therapy (SRU Traditional): Complete the requirements for your major and the pre-requisites for the SRU OTD program and apply to the SRU OTD program in your senior year.

## Academic Policies for Students in the Exercise Science Major

Effective for all Exercise Science Majors beginning Spring 2021

1. Policy for earning acceptable grades in the Exercise Science program:
a. A student must earn a grade of " C " or better in ALL Required Basic Courses (ERS 100's, ERS 200's, ERS 300's) and Required Upper Level Courses (ERS 400's, ERS 410's, ERS 424, ERS 450).
b. A student must earn a grade of "C" or better in ALL Natural Science and Math College-Wide Requirements (BIOL 216, BIOL 217, STAT 152, PHYS 201).
c. The Exercise Science curriculum is structured with pre-requisites. A student must earn a " $C$ " or better in the pre-requisite course to be able to take the next course. See course catalog for prerequisites.
d. If a student does not earn a " C " or better, they will be required to: i. Retake the course
ii. They will be dropped from any course(s) in the following semester that requires a "C" or better as a pre-requisite (see course catalog for pre-requisites)
iii. Students will need to meet with their Academic Advisor and change their schedule accordingly
2. SRU has a Repeat of Courses Policy as follows and it can be found in the course catalog: Repeat of Courses < Slippery Rock University (sru.edu) (https://catalog.sru.edu/archive/2021-2022/academic-policies/repeat-of-courses/)
a. Students may attempt to improve their grade point average by repeating courses. The most recent grade earned is used in calculating the GPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the grade points and credits previously earned. However, all grades will appear on the transcript. Courses in which a grade was earned at Slippery Rock University may not be repeated at any institution. A grade of W (withdraw) does not count as an earned grade.

Students who repeat a course must do so using the same grading system under which they originally took the course. For example, a student who originally took a course graded A-F may not repeat the course on a $P / N C, P / F$, or audit basis. Students may not repeat a course by using any Credit by Examination program if they originally took the course on a graded A-F, P/NC, P/F, or audit basis.

Undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career, excluding withdrawal grades.

In addition, repeats of a single course will be limited to a maximum of two. This means, no single course may be taken more than three times (excluding withdrawal grades). The course repeat policy for post-baccalaureate students is the same as the undergraduate student policy.
3. Once the student has exceeded the SRU Repeat of Courses Policy, the student will have their major changed to Exploratory and ERS Exercise Science Major courses will be removed from their schedule.
4. Policy for changing to the Exercise Science major.
a. A Slippery Rock University student wishing to change their major to Exercise Science MUST have an overall GPA of 2.00.
b. A transfer student who enters from another University must have an overall GPA of 2.00 .
a. Lab fees will be collected for exercise science classes with a lab component. This fee enhances the department's ability to offer a high-quality program.
b. A student in the Exercise Science major is required to maintain current CPR/AED, First Aid, and Student Professional Liability Insurance while enrolled in ERS 412 and ERS 450 at their own cost. More information will be provided to students in the upper level ERS courses.
c. ERS 450 Internship: Certain sites may require one or more of the following: physical examinations, record of immunizations, TB test, criminal background checks, drug testing, specific certifications for CPR/AED (e.g., American Heart Association), and HIPAA training. These may require additional costs for students. Fulfilling these requirements and obtaining appropriate documentation is the responsibility of the student.

Updated September 14, 2021

## Related Links

Exercise Science - Pre-Occupational Therapy, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/exercise-science-pre-occupational-therapy/)

Exercise Science Program Page (https://www.sru.edu/academics/ colleges-and-departments/ches/departments/exercise-science/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement - Exercise Science
$1^{\text {st }}$ Major. Exercise Science

- Overall GPA: 2.00 or higher
- Major GPA (includes Major Requirements and College Wide Requirements): 2.00 or higher
$2^{\text {nd }}$ Major. Pre-OT SRU 3+3 Exercise Science
- Overall GPA: 3.00 or higher


## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 43 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 45 |
| Natural Science and Math College-Wide Requirements | 12 |
| Electives | 31 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the $1^{\text {st }}$ year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.


## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| PSYC 105 | Introduction to Psychology | 3 |
| Natural Sciences Inquiry |  |  |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| Physical Science Inquiry |  |  |
| PHYS 201 | Elements of Physics I with Lab | 4 |
| Subtotal |  | 16 |
| Thematic Thread |  |  |
| Select 12 Credits (p.1378) ${ }^{2}$ |  | 12 |
| Total Hours |  | 43 |

${ }^{1}$ Course offered in multiple subjects; cannot take course in first major subject
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one | following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Ar |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |

PE 202
Technology for Wellness
Total Hours 0-3

## Major Requirements

- If you choose to pursue Pre-Occupational Therapy SRU 3+3 Exercise Science and are not accepted into the OTD program, then ERS 450: Internship is required to complete a first major of Exercise Science. Please refer to the Exercise Science Curriculum Guide.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Basic Courses |  |  |
| Must earn a "C" or better in the following courses |  |  |
| ERS 100 | Introduction to Exercise Science: Careers and Content ${ }^{1,2}$ | 3 |
| ERS 101 | Applied Anatomy/Lab 1,2 | 3 |
| ERS 201 | Exercise Physiology with Lab ${ }^{1,2}$ | 3 |
| ERS 202 | Biomechanics with Lab ${ }^{1,2}$ | 3 |
| ERS 300 | Research Methods in Exercise Science ${ }^{1,2}$ | 3 |
| ERS 301 | Aerobic Exercise Leadership 1,2 | 3 |
| ERS 302 | Exercise Leadership: Resistance Training 1,2 | 3 |


| Subtotal |  | 21 |
| :---: | :---: | :---: |
| Required Upper Program) | Courses (24 credits if accepted to SRU OT |  |
| Must earn a "C" or better in the following courses |  |  |
| ERS 424 or HLTH 424 | Nutrition and Exercise Nutrition and Exercise | 3 |
| ERS 400 | Wellness coaching and Program Management ${ }^{1,2}$ | 3 |
| ERS 401 | Fitness Assessment ${ }^{1,2}$ | 3 |
| ERS 402 | Exercise Prescription ${ }^{1,2}$ | 3 |
| ERS 403 | Advanced Exercise Physiology ${ }^{1,2}$ | 3 |
| ERS 410 | Clinical Exercise Physiology ${ }^{\text {1,2 }}$ | 3 |
| ERS 411 | Exercise Science: Special Populations and Conditions ${ }^{1,2}$ | 3 |
| ERS 412 | Exercise Science: Senior Synthesis ${ }^{1,2}$ | 3 |
| Subtotal |  | 24 |
| Total Hours |  | 45 |

1 Course counts toward Major GPA
2 Course counts for $50 \%$ of Major requirements

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Natural Science and Math College-Wide Requirements

Code
Title
Hours
Must earn a "C" or better in the following courses

| BIOL 216 | Anatomy and Physiology I with Lab ${ }^{1}$ | 3 |
| :--- | :--- | ---: |
| BIOL 217 $^{1}$ | Anatomy and Physiology II with Lab |  |
| STAT 152 | Elementary Statistics I ${ }^{1}$ | 3 |
| PHYS 201 | Elements of Physics I with Lab ${ }^{1}$ | 3 |
| Total Hours |  | 4 |

1 Course counts toward Major GPA

## Additional Occupational Therapy Prerequisite Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| PSYC 244 | Developmental Psychology | 3 |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |
| ERS 250 | Medical Terminology <br> or HCAM 250 | Medical Terminology for Healthcare <br> Administrators |
| Additional Sociology or Anthropology Course | 3 |  |
| Total Hours |  |  |

## Doctor of Occupational Therapy (OTD) Prerequisite Admission Requirements - PreOccupational Therapy SRU <br> For Application Requirements

Please refer to Slippery Rock University's Occupational Therapy Studies (Master of Science in Occupational Therapy Studies) website for requirements: http://www.sru.edu/OT (http://www.sru.edu/OT/)

## Rock Studies

| Code | Title | Hours |
| :---: | :---: | :---: |
| Prerequisite Courses - SRU Occupational Therapy |  |  |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| $\begin{aligned} & \text { ERS } 250 \\ & \quad \text { or HCAM } 250 \end{aligned}$ | Medical Terminology <br> Medical Terminology for Healthcare <br> Administrators | 3 |
| $\begin{aligned} & \text { PHYS } 201 \\ & \text { or PE } 364 \end{aligned}$ | Elements of Physics I with Lab <br> Biomechanics of Individuals with Disabilities | 4 |
| STAT 152 | Elementary Statistics I | 3 |
| Research Methods ${ }^{1}$ |  | 3 |
| PSYC 105 | Introduction to Psychology | 3 |
| PSYC 244 | Developmental Psychology | 3 |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |
| Anthropology or Sociology ${ }^{1}$ |  | 3 |
| Total Hours |  | 31 |

1 Select one course. See My Rock Audit for specific courses.

## Pre-Occupational Therapy SRU 3+3

If any of these requirements are not met, the $3+3$ designation will be removed from the student's record:

1. A 3.0 or higher overall GPA must be maintained by the student.
2. The student can only be enrolled in the Pre-Occupational Therapy SRU 3+3 program for a maximum of three (3) years, full-time continuous enrollment (fall/spring).

## Provision

Should a Pre-Occupational Therapy SRU 3+3 student be unsuccessful in completing the $1^{\text {st }}$ two semesters (summer or fall) of the Occupational Therapy Program and wants to complete the original undergraduate degree, it is solely up to the discretion of the undergraduate program Department Chair to determine which, if any, Occupational Therapy courses will count toward the completion of his/her undergraduate degree. In addition, students must complete any unfulfilled requirements
of their undergraduate major. Students may still apply to the Doctor of Occupational Therapy Program with an earned Bachelor's degree.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
EXERCISE SCIENCE - BS (6149)
PRE-OT SRU 3+3 (6EOT)
This program is effective as of Fall 2019.
Revised 01.06.2021
UCC 10.13.2020

## Recommended Three-Year Plan



| Spring |  |  |
| :---: | :---: | :---: |
| Select one of the following: |  | 3 |
| ERS 100 | Introduction to Exercise Science: Careers and Content ${ }^{3}$ |  |
| ERS 101 | Applied Anatomy/Lab ${ }^{3}$ |  |
| STAT 152 | Elementary Statistics $1^{1,3}$ | 3 |
| Rock Studies |  | 9 |
| Computer Competency Course (only if needed) |  | 0-1 |
|  | Hours | 5-16 |

## Second Year

Fall

| ERS 201 | Exercise Physiology with Lab $^{3}$ | 3 |
| :--- | :--- | :--- |
| ERS 202 | Biomechanics with Lab $^{3}$ | 3 |
| BIOL 216 | Anatomy and Physiology I with Lab |  |
| PSYC 244 | Developmental Psychology | 3 |
| Rock Studies | 3 <br> Sociology or Anthropology Course (See My Rock Audit for <br> options) | 3 |
|  | Hours | $\mathbf{1 8}$ |


| Spring |  |  |
| :---: | :---: | :---: |
| ERS 300 | Research Methods in Exercise Science ${ }^{3}$ | 3 |
| ERS 301 | Aerobic Exercise Leadership ${ }^{3}$ | 3 |
| ERS 302 | Exercise Leadership: Resistance Training ${ }^{3}$ | 3 |
| $\begin{aligned} & \text { ERS } 250 \\ & \quad \text { or HCAM } 250 \end{aligned}$ | Medical Terminology or Medical Terminology for Healthcare Administrators | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab ${ }^{3}$ | 3 |
| Rock Studies |  | 3 |
|  | Hours | 18 |
| Third Year |  |  |
| Fall |  |  |
| ERS 400 | Wellness coaching and Program Management ${ }^{3}$ | 3 |
| ERS 401 | Fitness Assessment ${ }^{3}$ | 3 |
| ERS 402 | Exercise Prescription ${ }^{3}$ | 3 |
| ERS 403 | Advanced Exercise Physiology ${ }^{3}$ | 3 |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |
| Rock Studies |  | 3 |
|  | Hours | 18 |
| Spring |  |  |
| ERS 410 | Clinical Exercise Physiology ${ }^{3}$ | 3 |
| ERS 411 | Exercise Science: Special Populations and Conditions ${ }^{3}$ | 3 |
| ERS 412 | Exercise Science: Senior Synthesis ${ }^{3}$ | 3 |
| Select one of the following: |  | 3 |
| ERS 424 | Nutrition and Exercise ${ }^{3}$ |  |
| HLTH 424 | Nutrition and Exercise ${ }^{3}$ |  |
| Rock Studies |  | 6 |
|  | Hours | 18 |
| Fourth Year |  |  |
| Fall |  |  |
| Senior Year. If not accepted into SRU ODT ${ }^{4}$ |  |  |
| ERS 450 | Exercise Science Internship ${ }^{3}$ | 12 |
|  | Hours | 12 |
|  | Total Hours** |  |

1 Course satisfies majors and Rock Studies requirements.
2 Course offered in multiple subjects; cannot take course in first major subject
Must earn a "C" or better in the course.
4 Senior Year- If not accepted into SRU ODT: If you choose to pursue Exercise Science $3+3$ and are not accepted into graduate SRU OTD, then ERS 450: Exercise Science Internship (12 credits) is required to complete a first major of Exercise Science. Please refer to the Exercise Science Curriculum Guide.

* Students are encouraged to take INDS 101 as a Free Elective.

Students must meet all Exercise Science 3+3 major requirements, SRU Occupational Therapy Doctorate (OTD) Program prerequisites, and rock studies requirements to apply.

Senior Year- If accepted into the SRU OTD: The first year will count as the 4th year of the Exercise Science program. Upon successful completion of the first year of the SRU OTD, students will graduate with a BS in Exercise

Science. Should an Exercise Science 3+3 student be unsuccessful in completing the $1^{\text {st }}$ year of the SRU OTD and wants to complete their original undergraduate degree, it is solely up to the discretion of their undergraduate program Department Chair to determine which, if any Occupational Therapy courses will count toward the completion of their undergraduate degree. In addition, students must complete ERS 450: Exercise Science Internship (12 credits).
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6149
Pre-Occupational Therapy 3+3 (6EOT)
Revised: 10.11.2021

## Exercise Science, Bachelor of Science (BS) / Pre-Occupational Therapy (SRU) (Traditional) <br> Exercise Science Program Learning Outcomes

- Professional Competence: To utilize knowledge, skills, and abilities to evaluate health behavior and risk factors; develop, implement, and evaluate evidence-based exercise and wellness programs, and employ behavioral strategies to motivate individuals to adopt and maintain positive lifestyle behaviors.
- Professional Interaction and Communication: To interact and communicate effectively by presenting information in oral and written formats, collaborating with professionals and peers, expressing ideas clearly, and giving and receiving feedback.
- Professional Behavior and Involvement: To model professional behaviors (including preparedness, engagement, and appearance), and demonstrate professional involvement across the major.
- Ethical Reasoning: To make well-informed and unbiased decisions to enhance the well-being of others
- Critical Thinking: To demonstrate clear and accurate reasoning to make decisions and solve problems.


## What are your options?

Pre-Occupational Therapy SRU 3+3: Earn a Doctor of Occupational Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU OTD program. At the end of your second year, you apply for admission into the SRU OTD program. If accepted, your first year in the SRU OTD program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

Pre-Occupational Therapy (SRU Traditional): Complete the requirements for your major and the pre-requisites for the SRU OTD program and apply to the SRU OTD program in your senior year.

## Academic Policies for Students in the Exercise Science Major

Effective for all Exercise Science Majors beginning Spring 2021

1. Policy for earning acceptable grades in the Exercise Science program:
a. A student must earn a grade of " C " or better in ALL Required Basic Courses (ERS 100's, ERS 200's, ERS 300's) and Required Upper Level Courses (ERS 400's, ERS 410's, ERS 424, ERS 450).
b. A student must earn a grade of "C" or better in ALL Natural Science and Math College-Wide Requirements (BIOL 216, BIOL 217, STAT 152, PHYS 201).
c. The Exercise Science curriculum is structured with pre-requisites. A student must earn a " $C$ " or better in the pre-requisite course to be able to take the next course. See course catalog for prerequisites.
d. If a student does not earn a " C " or better, they will be required to:
i. Retake the course
ii. They will be dropped from any course(s) in the following semester that requires a " C " or better as a pre-requisite (see course catalog for pre-requisites)
iii. Students will need to meet with their Academic Advisor and change their schedule accordingly
2. SRU has a Repeat of Courses Policy as follows and it can be found in the course catalog: Repeat of Courses < Slippery Rock University (sru.edu) (https://catalog.sru.edu/archive/2021-2022/academic-policies/repeat-of-courses/)
a. Students may attempt to improve their grade point average by repeating courses. The most recent grade earned is used in calculating the GPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the grade points and credits previously earned. However, all grades will appear on the transcript. Courses in which a grade was earned at Slippery Rock University may not be repeated at any institution. A grade of W (withdraw) does not count as an earned grade.

Students who repeat a course must do so using the same grading system under which they originally took the course. For example, a student who originally took a course graded A-F may not repeat the course on a P/NC, P/F, or audit basis. Students may not repeat a course by using any Credit by Examination program if they originally took the course on a graded A-F, P/NC, P/F, or audit basis.

Undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career, excluding withdrawal grades.

In addition, repeats of a single course will be limited to a maximum of two. This means, no single course may be taken more than three times (excluding withdrawal grades). The course repeat policy for post-baccalaureate students is the same as the undergraduate student policy.
3. Once the student has exceeded the SRU Repeat of Courses Policy, the student will have their major changed to Exploratory and ERS Exercise Science Major courses will be removed from their schedule.
4. Policy for changing to the Exercise Science major:
a. A Slippery Rock University student wishing to change their major to Exercise Science MUST have an overall GPA of 2.00.
b. A transfer student who enters from another University must have an overall GPA of 2.00 .
5. Additional costs associated with the Exercise Science major:
a. Lab fees will be collected for exercise science classes with a lab component. This fee enhances the department's ability to offer a high-quality program.
b. A student in the Exercise Science major is required to maintain current CPR/AED, First Aid, and Student Professional Liability Insurance while enrolled in ERS 412 and ERS 450 at their own cost. More information will be provided to students in the upper level ERS courses.
c. ERS 450 Internship: Certain sites may require one or more of the following: physical examinations, record of immunizations, TB test, criminal background checks, drug testing, specific certifications for CPR/AED (e.g., American Heart Association), and HIPAA training. These may require additional costs for students. Fulfilling these requirements and obtaining appropriate documentation is the responsibility of the student.

Updated September 14, 2021

## Related Links

Exercise Science - Pre-Occupational Therapy, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/exercise-science-pre-occupational-therapy/)

Exercise Science Program Page (https://www.sru.edu/academics/ colleges-and-departments/ches/departments/exercise-science/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement - Exercise Science

Overall GPA: 2.00 or higher
Major GPA (includes Major Requirements and College Wide
Requirements): 2.00 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 43 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 57 |
| Natural Science and Math College-Wide Requirements | 12 |
| Electives | 15 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.
Rock Studies Requirements


## Code

Title
Hours
The Rock
SUBJ 139
University Seminar ${ }^{1}$3

| ENGL 102 | Critical Writing | 3 |
| :---: | :---: | :---: |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| PSYC 105 | Introduction to Psychology | 3 |
| Natural Sciences Inquiry |  |  |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| Physical Science Inquiry |  |  |
| PHYS 201 | Elements of Physics I with Lab | 4 |
| Subtotal |  | 16 |
| Thematic Thread |  |  |
| Select 12 Credits (p. 1378) ${ }^{2}$ |  | 12 |
| Total Hours |  | 43 |
| 1 Course offered in multiple subjects; cannot take course in first major subject |  |  |
| 2 From at least 3 categories; no more than 6 credits fro department; 6 credits must be 300 -level or above. |  |  |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra | $\mathbf{0 - 3}$ |
| Total Hours |  |  |

## Computer Competency

| Code | Title | Hours |
| :---: | :---: | :---: |
| Demonstrate "computer competency" by one of the following: |  | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major Requirements

- 29 major credits must be taken at SRU or PASSHE
- 29 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Basic Courses |  |  |
| Must earn a " C " or better in the following courses |  |  |
| ERS 100 | Introduction to Exercise Science: Careers and Content ${ }^{1,2}$ | 3 |
| ERS 101 | Applied Anatomy/Lab ${ }^{\text {1,2 }}$ | 3 |
| ERS 201 | Exercise Physiology with Lab ${ }^{1,2}$ | 3 |
| ERS 202 | Biomechanics with Lab ${ }^{\text {1,2 }}$ | 3 |
| ERS 300 | Research Methods in Exercise Science ${ }^{1,2}$ | 3 |
| ERS 301 | Aerobic Exercise Leadership 1,2 | 3 |
| ERS 302 | Exercise Leadership: Resistance Training 1,2 | 3 |
| Subtotal |  | 21 |
| Required Upper Level Courses |  |  |
| Must earn a "C" or better in the following courses |  |  |
| ERS 424 | Nutrition and Exercise ${ }^{1,2}$ | 3 |
| or HLTH 424 | Nutrition and Exercise |  |
| ERS 400 | Wellness coaching and Program Management ${ }^{1,2}$ | 3 |
| ERS 401 | Fitness Assessment ${ }^{1,2}$ | 3 |
| ERS 402 | Exercise Prescription ${ }^{1,2}$ | 3 |
| ERS 403 | Advanced Exercise Physiology 1,2 | 3 |
| ERS 410 | Clinical Exercise Physiology ${ }^{\text {1,2 }}$ | 3 |
| ERS 411 | Exercise Science: Special Populations and Conditions ${ }^{1,2}$ | 3 |
| ERS 412 | Exercise Science: Senior Synthesis ${ }^{1,2}$ | 3 |
| ERS 450 | Exercise Science Internship 1,2 | 6 |
| ERS 450 | Exercise Science Internship 1,2 | 6 |
| Subtotal |  | 36 |
| Total Hours |  | 57 |

1 Course counts toward Major GPA
2 Course counts for $50 \%$ of Major requirements

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Must earn a "C" or better in the following courses |  |  |
| BIOL 216 | Anatomy and Physiology I with Lab ${ }^{1}$ | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab ${ }^{1}$ | 3 |
| STAT 152 | Elementary Statistics ${ }^{1}$ | 3 |
| PHYS 201 | Elements of Physics I with Lab ${ }^{1}$ | 4 |
| Total Hours |  | 13 |

[^14]Additional Occupational Therapy Prerequisite Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| PSYC 244 | Developmental Psychology | 3 |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |
| ERS 250 | Medical Terminology | 3 |
| or HCAM 250 | Medical Terminology for Healthcare <br> Administrators | 3 |

## Doctor of Occupational Therapy (OTD) Prerequisite Admission Requirements

## For Application Requirements

Please refer to Slippery Rock University's Occupational Therapy Studies
(Master of Science in Occupational Therapy Studies) website for
requirements: http://www.sru.edu/OT (http://www.sru.edu/OT/)

## Rock Studies

| Code | Title | Hours |
| :---: | :---: | :---: |
| Prerequisite Courses - SRU Occupational Therapy |  |  |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| ERS 250 <br> or HCAM 250 | Medical Terminology <br> Medical Terminology for Healthcare <br> Administrators | 3 |
| PHYS 201 or PE 364 | Elements of Physics I with Lab <br> Biomechanics of Individuals with Disabilities | 4 |
| STAT 152 | Elementary Statistics I | 3 |
| Research Methods ${ }^{1}$ |  | 3 |
| PSYC 105 | Introduction to Psychology | 3 |
| PSYC 244 | Developmental Psychology | 3 |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |
| Anthropology or Sociology ${ }^{1}$ |  | 3 |
| Total Hours |  | 31 |

1 Select one course. See My Rock Audit for specific courses.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
EXERCISE SCIENCE - BS (6149)
PRE-OT (SRU Traditional)
Effective Summer 2021
Revised 06.30.2021
UCC 03.02.21

## Recommended Four-Year Plan



Spring

Fourth Year
Fall

## SRU Occupational Therapy Program begins in the Summer.

Course satisfies majors and Rock Studies requirements.
2 Course offered in multiple subjects; cannot take course in first major subject
3 Must earn a grade of "C" or better
4 ERS 450: Exercise Science Internship may be scheduled Only after all prerequisites are met. Also required are a valid First Aid, CPR/AED certification and proof of student professional liability insurance. ERS 412 provides all necessary information pertaining to the internship registration process and is taken the semester prior to internship.

* Students are encouraged to take INDS 101 as a Free Elective.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6149
Pre-Occupational Therapy SRU Traditional (PY)
Revised: 10.11.2021

## Exercise Science, Bachelor of Science (BS) / Pre-Physical Therapy (SRU) (3+3)

## Exercise Science Program Learning Outcomes

- Professional Competence: To utilize knowledge, skills, and abilities to evaluate health behavior and risk factors; develop, implement, and evaluate evidence-based exercise and wellness programs, and employ behavioral strategies to motivate individuals to adopt and maintain positive lifestyle behaviors.
- Professional Interaction and Communication: To interact and communicate effectively by presenting information in oral and written formats, collaborating with professionals and peers, expressing ideas clearly, and giving and receiving feedback.
- Professional Behavior and Involvement: To model professional behaviors (including preparedness, engagement, and appearance), and demonstrate professional involvement across the major.
- Ethical Reasoning: To make well-informed and unbiased decisions to enhance the well-being of others
- Critical Thinking: To demonstrate clear and accurate reasoning to make decisions and solve problems.


## What are your options?

Pre-Physical Therapy SRU 3+3: Earn a Doctor of Physical Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU DPT program. During your third undergraduate year, you apply for admission into the SRU DPT program. If accepted, your first year in the SRU DPT program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

Pre-Physical Therapy (SRU Traditional): Complete the requirements for your major and the pre-requisites for the SRU DPT program and apply to the SRU DPT program in your senior year.

## Academic Policies for Students in the Exercise Science Major

Effective for all Exercise Science Majors beginning Spring 2021

1. Policy for earning acceptable grades in the Exercise Science program:
a. A student must earn a grade of "C" or better in ALL Required Basic Courses (ERS 100's, ERS 200's, ERS 300's) and Required Upper Level Courses (ERS 400's, ERS 410's, ERS 424, ERS 450).
b. A student must earn a grade of "C" or better in ALL Natural Science and Math College-Wide Requirements (BIOL 216, BIOL 217, STAT 152, PHYS 201).
c. The Exercise Science curriculum is structured with pre-requisites. A student must earn a " $C$ " or better in the pre-requisite course to be able to take the next course. See course catalog for prerequisites.
d. If a student does not earn a " C " or better, they will be required to:
i. Retake the course
ii. They will be dropped from any course(s) in the following semester that requires a " $C$ " or better as a pre-requisite (see course catalog for pre-requisites)
iii. Students will need to meet with their Academic Advisor and change their schedule accordingly
2. SRU has a Repeat of Courses Policy as follows and it can be found in the course catalog: Repeat of Courses < Slippery Rock University (sru.edu) (https://catalog.sru.edu/archive/2021-2022/academic-policies/repeat-of-courses/)
a. Students may attempt to improve their grade point average by repeating courses. The most recent grade earned is used in calculating the GPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the grade points and credits previously earned. However, all grades will appear on the transcript. Courses in which a grade was earned at Slippery Rock University may not be repeated at any institution. A grade of W (withdraw) does not count as an earned grade.

Students who repeat a course must do so using the same grading system under which they originally took the course. For example, a student who originally took a course graded A-F may not repeat the course on a P/NC, P/F, or audit basis. Students may not repeat a course by using any Credit by Examination program if they originally took the course on a graded $A-F, P / N C, P / F$, or audit basis.

Undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career, excluding withdrawal grades.

In addition, repeats of a single course will be limited to a maximum of two. This means, no single course may be taken more than three times (excluding withdrawal grades). The course repeat policy for post-baccalaureate students is the same as the undergraduate student policy.
3. Once the student has exceeded the SRU Repeat of Courses Policy, the student will have their major changed to Exploratory and ERS Exercise Science Major courses will be removed from their schedule.
4. Policy for changing to the Exercise Science major:
a. A Slippery Rock University student wishing to change their major to Exercise Science MUST have an overall GPA of 2.00.
b. A transfer student who enters from another University must have an overall GPA of 2.00.
5. Additional costs associated with the Exercise Science major:
a. Lab fees will be collected for exercise science classes with a lab component. This fee enhances the department's ability to offer a high-quality program.
b. A student in the Exercise Science major is required to maintain current CPR/AED, First Aid, and Student Professional Liability Insurance while enrolled in ERS 412 and ERS 450 at their own cost. More information will be provided to students in the upper level ERS courses.
c. ERS 450 Internship: Certain sites may require one or more of the following: physical examinations, record of immunizations, TB test, criminal background checks, drug testing, specific
certifications for CPR/AED (e.g., American Heart Association), and HIPAA training. These may require additional costs for students. Fulfilling these requirements and obtaining appropriate documentation is the responsibility of the student.

Updated September 14, 2021

## Related Links

Exercise Science - Pre-Physical Therapy, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/exercise-science-pre-physical-therapy/)

Exercise Science Program Page (https://www.sru.edu/academics/ colleges-and-departments/ches/departments/exercise-science/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement - Exercise Science

$1^{\text {st }}$ Major. Exercise Science

- Overall GPA: 2.00 or higher
- Major GPA (includes Major Requirements and College Wide Requirements): 2.00 or higher
$2^{\text {nd }}$ Major. Pre-PT SRU 3+3 Exercise Science
- Overall GPA: 3.00 or higher


## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 43 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 45 |
| Natural Science and Math College-Wide Requirements | 12 |
| Electives | 31 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the $1^{\text {st }}$ year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.


## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |
| :---: | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |
| Subtotal |  |

## Integrated Inquiry

Creative and Aesthetic Inquiry
Humanities Inquiry
Select 3 Credits (p. 1378) 3

Social Science Inquiry
PSYC 105 Introduction to Psychology 3

Natural Sciences Inquiry
BIOL 216 Anatomy and Physiology I with Lab 3

| Physical Science Inquiry |  |
| :--- | :--- | :--- |
| PHYS 201 | Elements of Physics I with Lab |

Subtotal 16

## Thematic Thread

Select 12 Credits $(\mathrm{p} .1378)^{2} \quad 12$

Total Hours 43
1 Course offered in multiple subjects; cannot take course in first major subject
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code $\quad$ Title | Hours |  |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |

Total Hours

## Computer Competency

| Code | Title | Hours |
| :---: | :---: | :---: |
| Demonstrate "computer competency" by one of the following: |  | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one institution | ollowing at SRU or another post-secondary |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major Requirements

- If you choose to pursue Pre-Physical Therapy SRU 3+3 Exercise Science and are not accepted into the DPT program, then ERS 450: Internship is required to complete a first major of Exercise Science. Please refer to the Exercise Science Curriculum Guide.

Code
Title
Hours

## Required Basic Courses

Must earn a "C" or better in the following courses

| ERS 100 | Introduction to Exercise Science: Careers and Content ${ }^{1,2}$ |
| :---: | :---: |
| ERS 101 | Applied Anatomy/Lab ${ }^{1,2}$ |
| ERS 201 | Exercise Physiology with Lab ${ }^{1,2}$ |
| ERS 202 | Biomechanics with Lab ${ }^{1,2}$ |
| ERS 300 | Research Methods in Exercise Science ${ }^{1,2}$ |
| ERS 301 | Aerobic Exercise Leadership 1,2 |
| ERS 302 | Exercise Leadership: Resistance Training 1,2 |
| Subtotal |  |
| Required Upper Program) | Courses (24 credits if accepted to SRU DPT |
| Must earn a "C" | tter in the following courses |
| $\text { ERS } 424$ <br> or HLTH 424 | Nutrition and Exercise Nutrition and Exercise |
| ERS 400 | Wellness coaching and Program Management ${ }^{1,2}$ |
| ERS 401 | Fitness Assessment ${ }^{1,2}$ |
| ERS 402 | Exercise Prescription ${ }^{1,2}$ |
| ERS 403 | Advanced Exercise Physiology ${ }^{\text {1,2 }}$ |
| ERS 410 | Clinical Exercise Physiology ${ }^{1,2}$ |
| ERS 411 | Exercise Science: Special Populations and Conditions ${ }^{1,2}$ |
| ERS 412 | Exercise Science: Senior Synthesis ${ }^{1,2}$ |
| Subtotal |  |
| Total Hours |  |
| 1 Course counts toward Major GPA |  |
| 2 Course coun | $50 \%$ of Major requirements |
| * Some cours descriptions specific cour | y require pre-requisites. Please see course termine if there are any pre-requisites for that |

## Natural Science and Math College-Wide Requirements

Code Title Hours

| Must earn a " $\mathrm{C}^{\prime}$ " or better in the following courses |  |  |
| :--- | :--- | :--- |
| BIOL 216 | Anatomy and Physiology I with Lab ${ }^{1}$ | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab ${ }^{1}$ | 3 |
| STAT 152 | Elementary Statistics I ${ }^{1}$ | 3 |
| PHYS 201 | Elements of Physics I with Lab ${ }^{1}$ | 4 |

Total Hours
1 Course counts toward Major GPA

## Additional Physical Therapy Prerequisite Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| CHEM 108 | General Chemistry II | 3 |
| CHEM 112 | General Chemistry II Lab | $\mathbf{1}$ |
| PHYS 202 | Elements of Physics II/ Lab | 4 |
| PSYC | Additional PSYC Course (see Rock Audit) | $\mathbf{3}$ |
| Total Hours |  | $\mathbf{1 5}$ |

## Doctor of Physical Therapy (DPT) Prerequisite Admission Requirements - Pre-Physical Therapy SRU 3+3

## For Application Requirements

Please refer to Slippery Rock University's Physical Therapy (Doctor of Physical Therapy) website for requirements: www.sru.edu/PT (http:// www.sru.edu/PT/)

| Liberal Studies and Rock Studies |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| Prerequisite Courses - SRU Physical Therapy |  |  |
| Select one of the following: |  | 6 |
| BIOL 216 <br> \& BIOL 217 | Anatomy and Physiology I with Lab and Anatomy and Physiology II with Lab |  |
| $\begin{aligned} & \text { BIOL } 340 \\ & \text { \& BIOL } 410 \end{aligned}$ | Vertebrate Anatomy with Lab and Animal Physiology with Lab |  |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
| CHEM 108 <br> \& CHEM 112 | General Chemistry II and General Chemistry II Lab | 4 |
| Select one of the following: |  | 8 |
| PHYS 201 <br> \& PHYS 202 | Elements of Physics I with Lab and Elements of Physics II/ Lab |  |
| PHYS 211 <br> \& PHYS 213 | General Physics I with Lab and General Physics III/ Lab |  |
| STAT 152 | Elementary Statistics I | 3 |
| or BIOL 325 | Biometry with Lab |  |
| PSYC 105 | Introduction to Psychology | 3 |
| Additional Psychology Course ${ }^{1}$ |  | 3 |
| Total Hours |  | 31 |

1 See My Rock Audit for specific courses.

## Requirements for Pre-Physical Therapy SRU 3+3

If any of these requirements are not met, the $3+3$ designation will be removed from the student's record:

1. A 3.0 or higher overall GPA must be maintained by the student.
2. The student can only be enrolled in the Pre-Physical Therapy SRU $3+3$ program for a maximum of three (3) years, full-time continuous enrollment (fall/spring).

## Provision

Should a Pre-Physical Therapy SRU 3+3 student be unsuccessful in completing the 1st two semesters (fall or spring) of the Doctor of Physical Therapy Program and wants to complete the original undergraduate degree, it is solely up to the discretion of the undergraduate program Department Chair to determine which, if any, Physical Therapy courses will count toward the completion of his/ her undergraduate degree. In addition, students must complete any unfulfilled requirements of their undergraduate major. Students may still apply to the Doctor of Physical Therapy Program with an earned Bachelor's degree.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum
categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
EXERCISE SCIENCE - BS (6149)
PRE-PT SRU $3+3$ (61P9)
This program is effective as of Fall 2019.
Revised 01.06.2021
UCC 10.13.2020

## Recommended Three-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| Select one of the following: |  | 3 |
| ERS 100 | Introduction to Exercise Science: Careers and Content ${ }^{3}$ |  |
| ERS 101 | Applied Anatomy/Lab ${ }^{3}$ |  |
| PHYS 201 | Elements of Physics I with Lab ${ }^{1,3}$ | 4 |
| PSYC 105 | Introduction to Psychology ${ }^{1}$ | 3 |
| SUBJ 139 | University Seminar ${ }^{2}$ | 3 |
| Rock Studies |  | 3 |
| INDS 101 | FYRST Seminar | 1 |
|  | Hours | 17 |
| Spring |  |  |
| Select one of the following: |  | 3 |
| ERS 100 | Introduction to Exercise Science: Careers and Content ${ }^{3}$ |  |
| ERS 101 | Applied Anatomy/Lab ${ }^{3}$ |  |
| PHYS 202 | Elements of Physics II/ Lab | 4 |
| STAT 152 | Elementary Statistics $1^{1,3}$ | 3 |
| Rock Studies |  | 6 |
| Computer Competency Course (only if needed) |  | 0-1 |
|  | Hours | 16-17 |

## Second Year

Fall

| ERS 201 | Exercise Physiology with Lab |  |
| :--- | :--- | :---: |
| ERS 202 | Biomechanics with Lab |  |

Spring

| ERS 300 | Research Methods in Exercise Science ${ }^{3}$ | 3 |
| :--- | :--- | :--- |
| ERS 301 | Aerobic Exercise Leadership ${ }^{3}$ | 3 |
| ERS 302 | Exercise Leadership: Resistance Training ${ }^{3}$ | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab ${ }^{3}$ | 3 |
| CHEM 108 | General Chemistry II | 4 |
| \& CHEM 112 | and General Chemistry II Lab |  |


| Rock Studies | 3 |
| :--- | :--- |
| *Additional credits beyond 18 requires an extra fee |  |


| Hours | 19 |
| :--- | :--- |

Third Year
Fall

| ERS 400 | Wellness coaching and Program Management ${ }^{3}$ | 3 |
| :---: | :---: | :---: |
| ERS 401 | Fitness Assessment ${ }^{3}$ | 3 |
| ERS 402 | Exercise Prescription ${ }^{3}$ | 3 |
| ERS 403 | Advanced Exercise Physiology ${ }^{3}$ | 3 |
| Psychology Course (See My Rock Audit for options) |  | 3 |
| Rock Studies |  | 3 |
|  | Hours | 18 |
| Spring |  |  |
| ERS 410 | Clinical Exercise Physiology ${ }^{3}$ | 3 |
| ERS 411 | Exercise Science: Special Populations and Conditions ${ }^{3}$ | 3 |
| ERS 412 | Exercise Science: Senior Synthesis ${ }^{3}$ | 3 |
| Select one of the following: |  | 3 |


| ERS 424 | Nutrition and Exercise $^{3}$ |  |
| :---: | :--- | ---: |
| HLTH 424 | Nutrition and Exercise ${ }^{3}$ |  |
| Rock Studies |  | $\mathbf{6}$ |
|  | Hours | $\mathbf{1 8}$ |

## Fourth Year

Fall

| Senior Year: If not accepted into SRU DPT |  |  |
| :--- | :--- | ---: |
|  |  |  |
| ERS 450 | Exercise Science Internship |  |
|  | Hours | 12 |
|  | Total Hours** | $\mathbf{1 2}$ |

1 Course satisfies majors and Rock Studies requirements.
2 Course offered in multiple subjects; cannot take course in first major subject
3 Must earn a " C " or better in the course.
4 Senior Year- If not accepted into SRU DPT: If you choose to pursue Exercise Science $3+3$ and are not accepted into SRU DPT Graduate Program, then ERS 450: Exercise Science Internship (12 credits) is required to complete a first major of Exercise Science. Please refer to the Exercise Science Curriculum Guide.

* Students are encouraged to take INDS 101 as a Free Elective.

Students must meet all Exercise Science 3+3 major requirements, SRU Doctorate of Physical Therapy (DPT) Program prerequisites, and Rock Studies requirements to apply.

Senior Year- If accepted into the SRU DPT: The first year will count as the 4th year of the Exercise Science program. Upon successful completion of the first year of the SRU DPT Graduate Program, students will graduate with a BS in Exercise Science. Should an Exercise Science $3+3$ student be unsuccessful in completing the 1st year of the SRU DPT Graduate Program and wants to complete their original undergraduate degree, it is solely up to the discretion of their undergraduate program Department Chair to determine which, if any Physical Therapy courses will count toward the completion of their undergraduate degree. In addition, students must complete ERS 450: Exercise Science Internship (12 credits).
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6149
Pre-Physical Therapy 3+3 (61P9)
Revised: 10.11.2021

## Exercise Science, Bachelor of Science (BS) / Pre-Physical Therapy (SRU) (Traditional) <br> Exercise Science Program Learning Outcomes

- Professional Competence: To utilize knowledge, skills, and abilities to evaluate health behavior and risk factors; develop, implement, and evaluate evidence-based exercise and wellness programs, and employ behavioral strategies to motivate individuals to adopt and maintain positive lifestyle behaviors.
- Professional Interaction and Communication: To interact and communicate effectively by presenting information in oral and written formats, collaborating with professionals and peers, expressing ideas clearly, and giving and receiving feedback.
- Professional Behavior and Involvement: To model professional behaviors (including preparedness, engagement, and appearance), and demonstrate professional involvement across the major.
- Ethical Reasoning: To make well-informed and unbiased decisions to enhance the well-being of others
- Critical Thinking: To demonstrate clear and accurate reasoning to make decisions and solve problems.


## What are your options?

Pre-Physical Therapy SRU 3+3: Earn a Doctor of Physical Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU DPT program. During your third undergraduate year, you apply for admission into the SRU DPT program. If accepted, your first year in the SRU DPT program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

Pre-Physical Therapy (SRU Traditional): Complete the requirements for your major and the pre-requisites for the SRU DPT program and apply to the SRU DPT program in your senior year.

## Academic Policies for Students in the Exercise Science Major

Effective for all Exercise Science Majors beginning Spring 2021

1. Policy for earning acceptable grades in the Exercise Science program:
a. A student must earn a grade of " C " or better in ALL Required Basic Courses (ERS 100's, ERS 200's, ERS 300's) and Required Upper Level Courses (ERS 400's, ERS 410's, ERS 424, ERS 450).
b. A student must earn a grade of " C " or better in ALL Natural Science and Math College-Wide Requirements (BIOL 216, BIOL 217, STAT 152, PHYS 201).
c. The Exercise Science curriculum is structured with pre-requisites. A student must earn a " $C$ " or better in the pre-requisite course to be able to take the next course. See course catalog for prerequisites.
d. If a student does not earn a " C " or better, they will be required to:
i. Retake the course
ii. They will be dropped from any course(s) in the following semester that requires a "C" or better as a pre-requisite (see course catalog for pre-requisites)
iii. Students will need to meet with their Academic Advisor and change their schedule accordingly
2. SRU has a Repeat of Courses Policy as follows and it can be found in the course catalog: Repeat of Courses < Slippery Rock University (sru.edu) (https://catalog.sru.edu/archive/2021-2022/academic-policies/repeat-of-courses/)
a. Students may attempt to improve their grade point average by repeating courses. The most recent grade earned is used in calculating the GPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the grade points and credits previously earned. However, all grades will appear on the transcript. Courses in which a grade was earned at Slippery Rock University may not be repeated at any institution. A grade of W (withdraw) does not count as an earned grade.

Students who repeat a course must do so using the same grading system under which they originally took the course. For example, a student who originally took a course graded A-F may not repeat the course on a P/NC, P/F, or audit basis. Students may not repeat a course by using any Credit by Examination program if they originally took the course on a graded A-F, P/NC, P/F, or audit basis.

Undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career, excluding withdrawal grades.

In addition, repeats of a single course will be limited to a maximum of two. This means, no single course may be taken more than three times (excluding withdrawal grades). The course repeat policy for post-baccalaureate students is the same as the undergraduate student policy.
3. Once the student has exceeded the SRU Repeat of Courses Policy, the student will have their major changed to Exploratory and ERS Exercise Science Major courses will be removed from their schedule.
4. Policy for changing to the Exercise Science major.
a. A Slippery Rock University student wishing to change their major to Exercise Science MUST have an overall GPA of 2.00.
b. A transfer student who enters from another University must have an overall GPA of 2.00 .
5. Additional costs associated with the Exercise Science major.
a. Lab fees will be collected for exercise science classes with a lab component. This fee enhances the department's ability to offer a high-quality program.
b. A student in the Exercise Science major is required to maintain current CPR/AED, First Aid, and Student Professional Liability Insurance while enrolled in ERS 412 and ERS 450 at their own cost. More information will be provided to students in the upper level ERS courses.
c. ERS 450 Internship: Certain sites may require one or more of the following: physical examinations, record of immunizations, TB test, criminal background checks, drug testing, specific certifications for CPR/AED (e.g., American Heart Association), and HIPAA training. These may require additional costs for students. Fulfilling these requirements and obtaining appropriate documentation is the responsibility of the student.

Updated September 14, 2021

## Related Links

Exercise Science - Pre-Physical Therapy, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/exercise-science-pre-physical-therapy/)

Exercise Science Program Page (https://www.sru.edu/academics/ colleges-and-departments/ches/departments/exercise-science/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement - Exercise Science

Overall GPA: 2.00 or higher
Major GPA (includes Major Requirements and College-Wide Requirements): 2.00 or higher

## Summary*

| Code Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 43 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 57 |
| Natural Science and Math College-Wide Requirements | 12 |
| Electives | 15 |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Select one of the following: | 3 |  |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy | 15 |
| Subtotal |  |  |

Integrated Inquiry

| Creative and Aesthetic Inquiry |  |
| :---: | :---: |
| Select 3 Credits (p.1378) | 3 |
| Humanities Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Social Science Inquiry |  |
| PSYC 105 Introduction to Psychology | 3 |
| Natural Sciences Inquiry |  |
| BIOL 216 Anatomy and Physiology I with Lab | 3 |
| Physical Science Inquiry |  |
| PHYS 201 Elements of Physics I with Lab | 4 |
| Subtotal | 16 |
| Thematic Thread |  |
| Select 12 Credits (p. 1378) ${ }^{2}$ | 12 |
| Total Hours | 43 |

1 Course offered in multiple subjects; cannot take course in first major subject
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code $\quad$ Title | Hours |  |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra | $\mathbf{0 - 3}$ |
| Total Hours |  |  |
| Computer Competency  <br> Code Title | Hours |  |

Demonstrate "computer competency" by one of the following: 0-3

Pass Computer Competency Exam OR
Select one of the following at SRU or another post-secondary institution:

| CPSC 100 | Introduction to Computing for Liberal Arts |
| :--- | :--- |
| CPSC 110 | Computer Concepts |
| CPSC 130 | Introduction to Computing and |
|  | Programming |

PE 202 Technology for Wellness
Total Hours

## Major Requirements

- 29 major credits must be taken at SRU or PASSHE
- 29 major credits must be taken at the 300 level or above
- Students may choose to earn a BS in Exercise Science as preparation for graduate studies in many health care related fields. In this case, the student should learn what prerequisites are required for his/her intended graduate program and take those courses as electives while completing the Exercise Science Program.



## Recommended Four-Year Plan



Spring

Fourth Year
Fall

Course satisfies majors and Rock Studies requirements.
Course offered in multiple subjects; cannot take course in first major subject
Must earn a grade of "C" or better
4 ERS 450: Exercise Science Internship may be scheduled Only after all prerequisites are met. Also required are a valid First Aid, CPR/AED certification and proof of student professional liability insurance. ERS 412 provides all necessary information pertaining to the internship registration process and is taken the semester prior to internship.

* Students are encouraged to take INDS 101 as a Free Elective.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to egistering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Code: 6149
Pre-Physical Therapy SRU Traditional (PT)
Revised: 10.11.2021

## Exercise Science, Bachelor of Science (BS) / Pre-Physician Assistant (SRU) (3+2) <br> Exercise Science Program Learning Outcomes

- Professional Competence: To utilize knowledge, skills, and abilities to evaluate health behavior and risk factors; develop, implement, and evaluate evidence-based exercise and wellness programs, and employ behavioral strategies to motivate individuals to adopt and maintain positive lifestyle behaviors.
- Professional Interaction and Communication: To interact and communicate effectively by presenting information in oral and written formats, collaborating with professionals and peers, expressing ideas clearly, and giving and receiving feedback.
- Professional Behavior and Involvement: To model professional behaviors (including preparedness, engagement, and appearance), and demonstrate professional involvement across the major.
- Ethical Reasoning: To make well-informed and unbiased decisions to enhance the well-being of others
- Critical Thinking: To demonstrate clear and accurate reasoning to make decisions and solve problems.


## What are your options?

Pre-Physician Assistant SRU 3+2: Earn a Master of Science degree in Physician Assistant Studies in five years rather than six. In the first three years, you complete your major courses and pre-requisites for the SRU PA program. At the end of your second year, you apply for admission into the SRU PA program. If accepted, your first year in the SRU PA program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

Pre-Physician Assistant (SRU Traditional): Complete the requirements for your major and the pre-requisites for the SRU PA program and apply to the SRU PA program in your senior year.

## Academic Policies for Students in the Exercise Science Major

## Effective for all Exercise Science Majors beginning Spring 2021

1. Policy for earning acceptable grades in the Exercise Science program:
a. A student must earn a grade of "C" or better in ALL Required Basic Courses (ERS 100's, ERS 200's, ERS 300's) and Required Upper Level Courses (ERS 400's, ERS 410's, ERS 424, ERS 450).
b. A student must earn a grade of "C" or better in ALL Natural Science and Math College-Wide Requirements (BIOL 216, BIOL 217, STAT 152, PHYS 201).
c. The Exercise Science curriculum is structured with pre-requisites. A student must earn a "C" or better in the pre-requisite course to be able to take the next course. See course catalog for prerequisites.
d. If a student does not earn a " $C$ " or better, they will be required to:
i. Retake the course
ii. They will be dropped from any course(s) in the following semester that requires a " C " or better as a pre-requisite (see course catalog for pre-requisites)
iii. Students will need to meet with their Academic Advisor and change their schedule accordingly
2. SRU has a Repeat of Courses Policy as follows and it can be found in the course catalog: Repeat of Courses < Slippery Rock University (sru.edu) (https://catalog.sru.edu/archive/2021-2022/academic-policies/repeat-of-courses/)
a. Students may attempt to improve their grade point average by repeating courses. The most recent grade earned is used in calculating the GPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the grade points and credits previously earned. However, all grades will appear on the transcript. Courses in which a grade was earned at Slippery Rock University may not be repeated at any institution. A grade of W (withdraw) does not count as an earned grade.

Students who repeat a course must do so using the same grading system under which they originally took the course. For example, a student who originally took a course graded A-F may not repeat the course on a P/NC, P/F, or audit basis. Students may not repeat a course by using any Credit by Examination program if they originally took the course on a graded $A-F, P / N C, P / F$, or audit basis.

Undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career, excluding withdrawal grades.

In addition, repeats of a single course will be limited to a maximum of two. This means, no single course may be taken more than three times (excluding withdrawal grades). The course repeat policy for post-baccalaureate students is the same as the undergraduate student policy.
3. Once the student has exceeded the SRU Repeat of Courses Policy, the student will have their major changed to Exploratory and ERS Exercise Science Major courses will be removed from their schedule.
4. Policy for changing to the Exercise Science major:
a. A Slippery Rock University student wishing to change their major to Exercise Science MUST have an overall GPA of 2.00.
b. A transfer student who enters from another University must have an overall GPA of 2.00.
5. Additional costs associated with the Exercise Science major:
a. Lab fees will be collected for exercise science classes with a lab component. This fee enhances the department's ability to offer a high-quality program.
b. A student in the Exercise Science major is required to maintain current CPR/AED, First Aid, and Student Professional Liability Insurance while enrolled in ERS 412 and ERS 450 at their own cost. More information will be provided to students in the upper level ERS courses.
c. ERS 450 Internship: Certain sites may require one or more of the following: physical examinations, record of immunizations, TB test, criminal background checks, drug testing, specific
certifications for CPR/AED (e.g., American Heart Association), and HIPAA training. These may require additional costs for students. Fulfilling these requirements and obtaining appropriate documentation is the responsibility of the student.

Updated September 14, 2021

## Related Links

Exercise Science - Pre-Physician Assistant, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/exercise-science-pre-physician-assistant/)

Exercise Science Program Page (https://www.sru.edu/academics/ colleges-and-departments/ches/departments/exercise-science/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement - Exercise Science

$1^{\text {st }}$ Major. Exercise Science

- Overall GPA: 2.00 or higher
- Major GPA (includes Major Requirements and College Wide Requirements): 2.00 or higher
$2^{\text {nd }}$ Major. Pre-PA SRU 3+2 Exercise Science
- Overall GPA: 3.25 or higher


## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 43 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 45 |
| Natural Science and Math College-Wide Requirements | 12 |
| Electives | 31 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the $1^{\text {st }}$ year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.


## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics |  |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :--- | :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |

## Integrated Inquiry

Creative and Aesthetic Inquiry

Humanities Inquiry
Select 3 Credits (p. 1378) 3

Social Science Inquiry
PSYC $105 \quad$ Introduction to Psychology 3

Natural Sciences Inquiry
BIOL 216 Anatomy and Physiology I with Lab 3

| Physical Science Inquiry |  |
| :--- | :--- |
| PHYS $201 \quad$ Elements of Physics I with Lab |  |

Subtotal 16

## Thematic Thread

Select 12 Credits $\left(\right.$ p. 1378) ${ }^{2} \quad 12$

Total Hours ..... 43

1 Course offered in multiple subjects; cannot take course in first major subject
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |

Total Hours

## Computer Competency

| Code | Title | Hours |
| :---: | :---: | :---: |
| Demonstrate "computer competency" by one of the following: |  | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one institution | ollowing at SRU or another post-secondary |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major Requirements

- If you choose to pursue Pre-Physician Assistant SRU 3+2 Exercise Science and are not accepted into the PA program, then ERS 450: Internship is required to complete a first major of Exercise Science. Please refer to the Exercise Science Curriculum Guide.

Code
Title
Hours

## Required Basic Courses

Must earn a " C " or better in the following courses

| ERS 100 | Introduction to Exercise Science: Careers and Content ${ }^{1,2}$ | 3 |
| :---: | :---: | :---: |
| ERS 101 | Applied Anatomy/Lab ${ }^{1,2}$ | 3 |
| ERS 201 | Exercise Physiology with Lab ${ }^{1,2}$ | 3 |
| ERS 202 | Biomechanics with Lab ${ }^{1,2}$ | 3 |
| ERS 300 | Research Methods in Exercise Science ${ }^{1,2}$ | 3 |
| ERS 301 | Aerobic Exercise Leadership 1,2 | 3 |
| ERS 302 | Exercise Leadership: Resistance Training 1,2 | 3 |
| Subtotal |  | 21 |
| Required Upper Level Courses ( $\mathbf{2 4}$ credits if accepted to SRU PA Program) |  |  |
| Must earn a " C " or better in the following courses |  |  |
| ERS 424 | Nutrition and Exercise ${ }^{1,2}$ | 3 |
| or HLTH 424 | Nutrition and Exercise |  |
| ERS 400 | Wellness coaching and Program Management ${ }^{1,2}$ | 3 |
| ERS 401 | Fitness Assessment ${ }^{1,2}$ | 3 |
| ERS 402 | Exercise Prescription ${ }^{1,2}$ | 3 |
| ERS 403 | Advanced Exercise Physiology ${ }^{\text {1,2 }}$ | 3 |
| ERS 410 | Clinical Exercise Physiology ${ }^{1,2}$ | 3 |
| ERS 411 | Exercise Science: Special Populations and Conditions ${ }^{1,2}$ | 3 |
| ERS 412 | Exercise Science: Senior Synthesis ${ }^{1,2}$ | 3 |
| Subtotal |  | 24 |
| Total Hours |  | 45 |
| 1 Course counts toward Major GPA |  |  |
| 2 Course coun | $50 \%$ of Major requirements |  |
| * Some cours descriptions specific cou | y require pre-requisites. Please see course termine if there are any pre-requisites for th |  |

## Natural Science and Math College Wide Requirements Code <br> Title <br> Hours

| Must earn a " $C^{\prime}$ " or better in the following courses |  |  |
| :--- | :--- | ---: |
| BIOL 216 | Anatomy and Physiology I with Lab ${ }^{1}$ | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab ${ }^{1}$ | 3 |
| STAT 152 | Elementary Statistics I ${ }^{1}$ | 3 |
| PHYS 201 | Elements of Physics I with Lab ${ }^{1}$ | 4 |
| Total Hours |  | 13 |

1 Course counts toward Major GPA

## Additional Physician Assistant Prerequisite Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| BIOL 104 | Principles of Biology with Lab | 4 |
| BIOL 250 | Genetics with Lab | 4 |
| BIOL 210 | Medical Microbiology with Lab | 3 |
| or BIOL 330 | Microbiology/Lab |  |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| CHEM 108 | General Chemistry II | 3 |
| CHEM 112 | General Chemistry II Lab | 1 |


| CHEM 201 | Organic Chemistry I | 3 |
| :---: | :---: | :---: |
| ERS 250 or HCAM 250 | Medical Terminology <br> Medical Terminology for Healthcare <br> Administrators | 3 |
| Total Hours |  | 25 |
| Physician Assistant Studies (Master of Science in Physician Assistant Studies) <br> Prerequisite Admission Requirements - Pre- Physician Assistant 3+2 |  |  |
| For Application Requirements <br> Please refer to Slippery Rock University's Physician Assistant Studies (Master of Science in Physician Assistant Studies) website for requirements:http://www.sru.edu/pa (http://www.sru.edu/pa/) |  |  |
| Liberal Studies and Rock Studies |  |  |
| Code | Title | Hours |
| Prerequisite Courses - SRU Physician Assistant |  |  |
| BIOL 104 | Principles of Biology with Lab | 4 |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| BIOL 250 | Genetics with Lab | 4 |
| $\begin{aligned} & \text { BIOL } 210 \\ & \text { or BIOL } 330 \end{aligned}$ | Medical Microbiology with Lab Microbiology/Lab | 3 |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
| CHEM 108 \& CHEM 112 | General Chemistry II and General Chemistry II Lab | 4 |
| CHEM 201 | Organic Chemistry I | 3 |
| Inferential Statistics Course ${ }^{1} 3$ |  |  |
| PSYC 105 | Introduction to Psychology | 3 |
| ERS 250 or HCAM 250 | Medical Terminology <br> Medical Terminology for Healthcare Administrators | 3 |

Total Hours

1 Any statistics course with inferential statistics embedded. See My Rock Audit for specific courses.

## Pre-Physician Assistant SRU 3+2 Requirements <br> If any of these requirements are not met, the $3+2$ designation will be removed from the student's record:

1. A 3.25 or higher overall GPA must be maintained by the student.
2. The student can only be enrolled in the Pre-Physician Assistant SRU $3+2$ program for a maximum of three (3) years, full-time continuous enrollment (fall/spring).

## Provision

Should a Pre-Physician Assistant SRU 3+2 student be unsuccessful in completing the $1^{\text {st }}$ two semesters (summer or fall) of the Physician Assistant Program and wants to complete the original undergraduate degree, it is solely up to the discretion of the undergraduate program Department Chair to determine which, if any, Physician Assistant courses will count toward the completion of his/her undergraduate degree. In addition, students must complete any unfulfilled requirements of their
undergraduate major. Students may still apply to the Physician Assistant Studies Program with an earned Bachelor's degree.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
EXERCISE SCIENCE - BS (6149)
PRE-PA SRU $3+2$ (6SPE)
This program is effective as of 2019.
Revised 01.06.2021
UCC 10.13.2020
Recommended Three-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| ERS 100 | Introduction to Exercise Science: Careers and Content ${ }^{3}$ | 3 |
| CHEM 107 | General Chemistry I | 4 |
| \& CHEM 111 | and General Chemistry I Lab |  |
| PHYS 201 | Elements of Physics I with Lab ${ }^{\text {1,3 }}$ | 4 |
| SUBJ 139 | University Seminar ${ }^{2}$ | 3 |
| Rock Studies |  | 3 |
| INDS 101 | FYRST Seminar | 1 |
|  | Hours | 18 |
| Spring |  |  |
| ERS 101 | Applied Anatomy/Lab ${ }^{3}$ | 3 |
| CHEM 108 | General Chemistry II | 4 |
| \& CHEM 112 | and General Chemistry II Lab |  |
| STAT 152 | Elementary Statistics $1^{1,3}$ | 3 |
| PSYC 105 | Introduction to Psychology ${ }^{1}$ | 3 |
| Rock Studies |  | 3 |
| Computer Competency Course (only if needed) |  | 0-1 |
|  | Hours | 16-17 |
| Second Year |  |  |
| Fall |  |  |
| ERS 201 | Exercise Physiology with Lab ${ }^{3}$ | 3 |
| ERS 202 | Biomechanics with Lab ${ }^{3}$ | 3 |
| BIOL 104 | Principles of Biology with Lab | 4 |
| BIOL 216 | Anatomy and Physiology I with Lab ${ }^{1,3}$ | 3 |
| CHEM 201 | Organic Chemistry I | 3 |
| Rock Studies |  | 3 |
|  |  |  |

## Spring

ERS 300
Research Methods in Exercise Science ${ }^{3}$

Students must meet all Exercise Science 3+2 major requirements, SRU PA Program prerequisites, and Rock Studies requirements to apply.
Course satisfies majors and Rock Studies requirements.
Course offered in multiple subjects; cannot take course in first major subject
3 Must earn a " C " or better in the course.
4 May also be taken in the summer.
5 Senior Year- If not accepted into SRU PA: If you choose to pursue Exercise Science 3+2 and are not accepted into SRU PA Graduate Program, then ERS 450: Exercise Science Internship (12 credits) is required to complete a first major of Exercise Science. Please refer to the Exercise Science Curriculum Guide.

* Students are encouraged to take INDS 101 as a Free Elective.

Senior Year- If accepted into the SRU PA: The first year will count as the 4th year of the Exercise Science program. Upon successful completion of the first year of the SRU PA Graduate Program, students will graduate with a BS in Exercise Science. Should an Exercise Science 3+2 student be unsuccessful in completing the $1^{\text {st }}$ year of the SRU PA Graduate Program and wants to complete their original undergraduate degree, it is solely up to the discretion of their undergraduate program Department Chair to determine which, if any Physician Assistant courses will count toward the completion of their undergraduate degree. In addition, students must complete ERS 450: Exercise Science Internship (12 credits).

Senior Year- If not accepted into SRU PA: If you choose to pursue Exercise Science $3+2$ and are not accepted into SRU PA Graduate Program, then ERS 450: Exercise Science Internship (12 credits) is required to complete a first major of Exercise Science. Please refer to the Exercise Science Curriculum Guide.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6149
Pre-Physician Assistant SRU 3+2 (6SPE)
Revised: 10.11.2021

## Exercise Science, Bachelor of Science (BS) / Pre-Physician Assistant (SRU) (Traditional) <br> Exercise Science Program Learning Outcomes

- Professional Competence: To utilize knowledge, skills, and abilities to evaluate health behavior and risk factors; develop, implement, and evaluate evidence-based exercise and wellness programs, and employ behavioral strategies to motivate individuals to adopt and maintain positive lifestyle behaviors.
- Professional Interaction and Communication: To interact and communicate effectively by presenting information in oral and written formats, collaborating with professionals and peers, expressing ideas clearly, and giving and receiving feedback.
- Professional Behavior and Involvement: To model professional behaviors (including preparedness, engagement, and appearance), and demonstrate professional involvement across the major.
- Ethical Reasoning: To make well-informed and unbiased decisions to enhance the well-being of others
- Critical Thinking: To demonstrate clear and accurate reasoning to make decisions and solve problems.


## What are your options?

Pre-Physician Assistant SRU 3+2: Earn a Master of Science degree in Physician Assistant Studies in five years rather than six. In the first three years, you complete your major courses and pre-requisites for the SRU PA program. At the end of your second year, you apply for admission into the SRU PA program. If accepted, your first year in the SRU PA program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can
reapply to the program. The accelerated option is for incoming freshmen only.

Pre-Physician Assistant (SRU Traditional): Complete the requirements for your major and the pre-requisites for the SRU PA program and apply to the SRU PA program in your senior year.

## Academic Policies for Students in the Exercise Science Major

## Effective for all Exercise Science Majors beginning Spring 2021

1. Policy for earning acceptable grades in the Exercise Science program:
a. A student must earn a grade of "C" or better in ALL Required Basic Courses (ERS 100's, ERS 200's, ERS 300's) and Required Upper Level Courses (ERS 400's, ERS 410's, ERS 424, ERS 450).
b. A student must earn a grade of " C " or better in ALL Natural Science and Math College-Wide Requirements (BIOL 216, BIOL 217, STAT 152, PHYS 201).
c. The Exercise Science curriculum is structured with pre-requisites. A student must earn a " $C$ " or better in the pre-requisite course to be able to take the next course. See course catalog for prerequisites.
d. If a student does not earn a " $C$ " or better, they will be required to: i. Retake the course
ii. They will be dropped from any course(s) in the following semester that requires a " $C$ " or better as a pre-requisite (see course catalog for pre-requisites)
iii. Students will need to meet with their Academic Advisor and change their schedule accordingly
2. SRU has a Repeat of Courses Policy as follows and it can be found in the course catalog: Repeat of Courses < Slippery Rock University (sru.edu) (https://catalog.sru.edu/archive/2021-2022/academic-policies/repeat-of-courses/)
a. Students may attempt to improve their grade point average by repeating courses. The most recent grade earned is used in calculating the GPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the grade points and credits previously earned. However, all grades will appear on the transcript. Courses in which a grade was earned at Slippery Rock University may not be repeated at any institution. A grade of W (withdraw) does not count as an earned grade.

Students who repeat a course must do so using the same grading system under which they originally took the course. For example, a student who originally took a course graded A-F may not repeat the course on a P/NC, P/F, or audit basis. Students may not repeat a course by using any Credit by Examination program if they originally took the course on a graded A-F, P/NC, P/F, or audit basis.

Undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career, excluding withdrawal grades.

In addition, repeats of a single course will be limited to a maximum of two. This means, no single course may be taken more than three times (excluding withdrawal grades). The course
repeat policy for post-baccalaureate students is the same as the undergraduate student policy.
3. Once the student has exceeded the SRU Repeat of Courses Policy, the student will have their major changed to Exploratory and ERS Exercise Science Major courses will be removed from their schedule.
4. Policy for changing to the Exercise Science major.
a. A Slippery Rock University student wishing to change their major to Exercise Science MUST have an overall GPA of 2.00.
b. A transfer student who enters from another University must have an overall GPA of 2.00 .
5. Additional costs associated with the Exercise Science major:
a. Lab fees will be collected for exercise science classes with a lab component. This fee enhances the department's ability to offer a high-quality program.
b. A student in the Exercise Science major is required to maintain current CPR/AED, First Aid, and Student Professional Liability Insurance while enrolled in ERS 412 and ERS 450 at their own cost. More information will be provided to students in the upper level ERS courses.
c. ERS 450 Internship: Certain sites may require one or more of the following: physical examinations, record of immunizations, TB test, criminal background checks, drug testing, specific certifications for CPR/AED (e.g., American Heart Association), and HIPAA training. These may require additional costs for students. Fulfilling these requirements and obtaining appropriate documentation is the responsibility of the student.

Updated September 14, 2021

## Related Links

Exercise Science - Pre-Physician Assistant, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/exercise-science-pre-physician-assistant/)

Exercise Science Program Page (https://www.sru.edu/academics/ colleges-and-departments/ches/departments/exercise-science/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement - Exercise Science

Overall GPA: 2.00 or higher
Major GPA (includes Major Requirements and College-Wide
Requirements): 2.00 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 43 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 57 |
| Natural Science and Math College-Wide Requirements | 12 |
| Electives | 15 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| PSYC 105 | Introduction to Psychology | 3 |
| Natural Sciences Inquiry |  |  |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| Physical Science Inquiry |  |  |
| PHYS 201 | Elements of Physics I with Lab | 4 |
| Subtotal |  | 16 |
| Thematic Thread |  |  |
| Select 12 Credi | 1378) ${ }^{2}$ | 12 |
| Total Hours |  | 43 |

1 Course offered in multiple subjects; cannot take course in first major subject
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code Title | Hours |
| :---: | :---: |
| Complete one of the following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |
| ESAP $110 \quad$ Beginning Algebra |  |
| Total Hours | 0-3 |
| Computer Competency |  |
| Code Title | Hours |
| Demonstrate "computer competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |
| Select one of the following at SRU or another post-secondary institution: |  |
| CPSC 100 Introduction to Computing for Liberal Arts |  |


| CPSC 110 | Computer Concepts |
| :--- | :--- |
| CPSC 130 | Introduction to Computing and <br>  <br> Programming |

Total Hours
0-3

## Major Requirements

- 29 major credits must be taken at SRU or PASSHE
- 29 major credits must be taken at the 300 level or above
- Students may choose to earn a BS in Exercise Science as preparation for graduate studies in many health care related fields. In this case, the student should learn what prerequisites are required for his/her intended graduate program and take those courses as electives while completing the Exercise Science Program.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Basic Courses |  |  |
| Must earn a " C " or better in the following courses |  |  |
| ERS 100 | Introduction to Exercise Science: Careers and Content ${ }^{1,2}$ | 3 |
| ERS 101 | Applied Anatomy/Lab ${ }^{\text {1,2 }}$ | 3 |
| ERS 201 | Exercise Physiology with Lab ${ }^{1,2}$ | 3 |
| ERS 202 | Biomechanics with Lab ${ }^{1,2}$ | 3 |
| ERS 300 | Research Methods in Exercise Science ${ }^{1,2}$ | 3 |
| ERS 301 | Aerobic Exercise Leadership 1,2 | 3 |
| ERS 302 | Exercise Leadership: Resistance Training 1,2 | 3 |

## Subtotal

Required Upper Level Courses
Must earn a " C " or better in the following courses

| ERS 424 | Nutrition and Exercise ${ }^{1,2}$ | 3 |
| :---: | :---: | :---: |
| or HLTH 424 | Nutrition and Exercise |  |
| ERS 400 | Wellness coaching and Program Management ${ }^{1,2}$ | 3 |
| ERS 401 | Fitness Assessment ${ }^{1,2}$ | 3 |
| ERS 402 | Exercise Prescription ${ }^{1,2}$ | 3 |
| ERS 403 | Advanced Exercise Physiology ${ }^{1,2}$ | 3 |
| ERS 410 | Clinical Exercise Physiology 1,2 | 3 |
| ERS 411 | Exercise Science: Special Populations and Conditions ${ }^{1,2}$ | 3 |
| ERS 412 | Exercise Science: Senior Synthesis ${ }^{1,2}$ | 3 |
| ERS 450 | Exercise Science Internship 1,2 | 6 |
| ERS 450 | Exercise Science Internship 1,2 | 6 |
| Subtotal |  | 36 |
| Total Hours |  | 57 |

1 Course counts toward Major GPA
2 Course counts for 50\% of Major requirements

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.
Natural Science and Math College-Wide Requirements
Code $\quad$ Title Hours

| BIOL 216 | Anatomy and Physiology I with Lab ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| BIOL 217 | Anatomy and Physiology II with Lab ${ }^{1}$ | 3 |
| STAT 152 | Elementary Statistics I ${ }^{1}$ | 3 |
| PHYS 201 | Elements of Physics I with Lab ${ }^{1}$ | 4 |
| Total Hours |  | 13 |

1 Course counts toward Major GPA

## Additional Physician Assistant Prerequisite Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| BIOL 104 | Principles of Biology with Lab | 4 |
| BIOL 250 | Genetics with Lab | 4 |
| BIOL 210 | Medical Microbiology with Lab | 3 |
| or BIOL 330 | Microbiology/Lab |  |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| CHEM 108 | General Chemistry II | 3 |
| CHEM 112 | General Chemistry II Lab | 1 |
| CHEM 201 | Organic Chemistry I | 3 |
| ERS 250 | Medical Terminology | 3 |
| or HCAM 250 | Medical Terminology for Healthcare |  |
|  | Administrators |  |

1 Physician Assistant Studies (Master of Science in Physician Assistant Studies) Prerequisite Admission Requirements

## For Application Requirements

Please refer to Slippery Rock University’s Physician Assistant Studies
(Master of Science in Physician Assistant Studies) website for requirements: http://www.sru.edu/pa (http://www.sru.edu/pa/)

| Liberal Studies and Rock Studies |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| Prerequisite Courses - SRU Physician Assistant |  |  |
| BIOL 104 | Principles of Biology with Lab | 4 |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| BIOL 250 | Genetics with Lab | 4 |
| $\begin{aligned} & \text { BIOL } 210 \\ & \text { or BIOL } 330 \end{aligned}$ | Medical Microbiology with Lab Microbiology/Lab | 3 |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
| CHEM 108 <br> \& CHEM 112 | General Chemistry II and General Chemistry II Lab | 4 |
| CHEM 201 | Organic Chemistry I | 3 |
| Inferential Statistics Course ${ }^{1}$ |  | 3 |
| PSYC 105 | Introduction to Psychology | 3 |
| ERS 250 <br> or HCAM 250 | Medical Terminology <br> Medical Terminology for Healthcare <br> Administrators | 3 |

Total Hours

1 Any statistics course with inferential statistics embedded. See My Rock Audit for specific courses.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Exercise Science - BS (6149)
PRE-PA (SRU Traditional)
Effective Summer 2021
Revised 06.30.2021
UCC 03.02.21

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| Select one of the following: |  | 3 |
| ERS 100 | Introduction to Exercise Science: Careers and Content ${ }^{3}$ |  |
| ERS 101 | Applied Anatomy/Lab ${ }^{3}$ |  |
| PHYS 201 | Elements of Physics I with Lab ${ }^{\text {1,3}}$ | 4 |
| PSYC 105 | Introduction to Psychology ${ }^{1}$ | 3 |
| SUBJ 139 | University Seminar ${ }^{2}$ | 3 |
| Rock Studies |  | 3 |
| INDS 101 | FYRST Seminar | 1 |
|  | Hours | 17 |

## Spring

| Select one of the following: |  | 3 |
| :---: | :---: | :---: |
| ERS 100 | Introduction to Exercise Science: Careers and Content ${ }^{3}$ |  |
| ERS 101 | Applied Anatomy/Lab ${ }^{3}$ |  |
| STAT 152 | Elementary Statistics $1^{1,3}$ | 3 |
| BIOL 104 | Principles of Biology with Lab (or Rock Studies) | 4 |
| Rock Studies |  | 6 |
| Computer Competency Course (only if needed) |  | 0-1 |
|  | Hours | 6-17 |


| Second Year |  |  |
| :---: | :---: | :---: |
| Fall |  |  |
| Select one of the following: |  | 3 |
| ERS 201 | Exercise Physiology with Lab ${ }^{3}$ |  |
| ERS 202 | Biomechanics with Lab ${ }^{3}$ |  |
| BIOL 104 | Principles of Biology with Lab (or Rock Studies) ${ }^{3}$ | 4 |
| BIOL 216 | Anatomy and Physiology I with Lab ${ }^{1,3}$ | 3 |

$\left.\begin{array}{llr}\text { CHEM 107 } & \begin{array}{l}\text { General Chemistry I } \\ \text { \& CHEM 111 }\end{array} & \text { and General Chemistry I Lab }\end{array}\right] 4$

| Spring |  |  |
| :---: | :---: | :---: |
| Select one of the following: |  |  |
| ERS 201 | Exercise Physiology with Lab ${ }^{3}$ |  |
| ERS 202 | Biomechanics with Lab ${ }^{3}$ |  |
| BIOL 217 | Anatomy and Physiology II with Lab ${ }^{3}$ | 3 |
| CHEM 108 <br> \& CHEM 112 | General Chemistry II and General Chemistry II Lab | 4 |
| ERS 250 | Medical Terminology | 3 |
| Rock Studies |  | 3 |
|  | Hours | 13 |
| Third Year |  |  |
| Fall |  |  |
| ERS 300 | Research Methods in Exercise Science ${ }^{3}$ | 3 |
| ERS 301 | Aerobic Exercise Leadership ${ }^{3}$ | 3 |
| ERS 302 | Exercise Leadership: Resistance Training ${ }^{3}$ | 3 |
| BIOL 250 | Genetics with Lab | 4 |
| CHEM 201 | Organic Chemistry I | 3 |
|  | Hours | 16 |
| Spring |  |  |
| ERS 400 | Wellness coaching and Program Management ${ }^{3}$ | 3 |
| ERS 401 | Fitness Assessment ${ }^{3}$ | 3 |
| ERS 402 | Exercise Prescription ${ }^{3}$ | 3 |
| ERS 403 | Advanced Exercise Physiology ${ }^{3}$ | 3 |
| Rock Studies |  | 3 |
| $\begin{aligned} & \text { BIOL } 330 \\ & \quad \text { or BIOL } 210 \end{aligned}$ | ```Microbiology/Lab 4 or Medical Microbiology with Lab``` | 3 |
|  | Hours | 18 |

## Fourth Year

Fall

| ERS 410 | Clinical Exercise Physiology ${ }^{3}$ | 3 |
| :---: | :---: | :---: |
| ERS 411 | Exercise Science: Special Populations and Conditions ${ }^{3}$ | 3 |
| ERS 412 | Exercise Science: Senior Synthesis ${ }^{3}$ | 3 |
| Select one of the following: |  |  |
| ERS 424 | Nutrition and Exercise ${ }^{3}$ |  |
| HLTH 424 | Nutrition and Exercise ${ }^{3}$ |  |
| Rock Studies |  | 6 |
|  | Hours | 15 |
| Spring |  |  |
| ERS 450 | Exercise Science Internship ${ }^{3,5}$ | 12 |
|  | Hours | 12 |
|  | Total Hours** | 125 |

## SRU Physician Assistant Program begins in the Summer.

Course satisfies majors and Rock Studies requirements.
2 Course offered in multiple subjects; cannot take course in first major subject
3 Must earn a grade of "C" or better

4 If BIOL 330 or BIOL 210 is not taken, replace with Rock Studies and take BIOL 210 in Fall Fourth Year.
5 ERS 450: Exercise Science Internship may be scheduled Only after all prerequisites are met. Also required are a valid First Aid, CPR/AED certification and proof of student professional liability insurance. ERS 412 provides all necessary information pertaining to the internship registration process and is taken the semester prior to internship.

* Students are encouraged to take INDS 101 as a Free Elective.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6149
Pre-Physician Assistant SRU Traditional (PA)
Revised: 10.08.2021

## Geography, Geology, and the Environment

| Chair | Secretary | Location | Department <br> Phone |
| :--- | :--- | :--- | :--- |
| Dr. Stentor | Cindy Schnur | 319 Advanced <br> Technology and | 724-738-2048 <br> Danielson |
|  |  | Science Hall |  |

Department Web Site URL (https://www.sru.edu/academics/colleges-and-departments/ches/departments/geography-geology-and-theenvironment/)
Department Fact Sheet URL (https://www.sru.edu/documents/programs/ factsheets/undergraduate/gge-fs.pdf)

## The Rock Difference

Geology and Geography are recognized for their contributions to the better understanding of the earth, nature-society relations, and global and regional situations as well as local issues. Our department's educational mission is to advance the perspectives and insights of geology, geography, and environmental science and studies via high quality curricular programs for our majors and high quality liberal studies courses for non-majors. Complementary missions are to extend knowledge in our disciplines through research and to provide service to the university and our region.

The Department of Geography, Geology, and the Environment offers a variety of field based perspectives on the study of the earth and people's relation to it. Students can focus on the physical nature of the earth, on the nature of places on the earth's surface, or on the geographic study of economic, political, and cultural processes. Or students may take a more interdisciplinary approach and integrate knowledge from many disciplines in the study of environmental issues.

## Faculty

Patrick Burkhart
Professor
Geography, Geology \& Environm
Ph.D., Lehigh University

## M.S., Wright State University <br> B.A., Case Western Reserve

## Patricia Campbell

Associate Professor
Geography, Geology \& Environm
Ph.D., University of Pittsburgh
M.S., University of Pittsburgh
B.S., University of Pittsburgh

## Xianfeng Chen

Associate Professor
Geography, Geology \& Environm
Ph.D., West Virginia University
M.S., Institute of Geography Chinese Academy of Sciences
B.S., Xinjian University (China)

## Stentor Danielson

Associate Professor
Geography, Geology \& Environm
Ph.D., Clark University
B.A., Colgate University

## Heike Hartmann

## Professor

Geography, Geology \& Environm
Ph.D., Justus Liebig University-Germany
M.S., Justus Liebig University-Germany
B.S., University of Wurzburg-Germany

## Robert Livingston

Associate Professor
Geography, Geology \& Environm
Ph.D., University of Kansas
M.A., University of Kansas
B.A., Augusta College

## Tamra Schiappa

Professor
Geography, Geology \& Environm
Ph.D., University of Idaho
B.S., State University of New York at Plattsburgh

## Langdon Smith

## Professor

Geography, Geology \& Environm
Ph.D., University of Kansas
B.S., University of Wyoming

## Julie Snow

## Professor

Geography, Geology \& Environm
Ph.D., University of Rhode Island
M.S., University of Rhode Island
B.S., Wittenberg University

## Jialing Wang

Associate Professor
Geography, Geology \& Environm
Ph.D., Florida State University
M.M.S., Nanjing University (China)
B.S., Nanjing University (China)

## Programs

All first-year students who enter SRU in the Summer and Fall terms of 2019 and after will follow Rock Studies. Students who entered SRU before Spring 2019 will follow Liberal Studies. All new transfer students beginning Summer 2019 and after will follow Liberal Studies. We anticipate that transfer students will begin to enter under Rock Studies during the Summer/Fall term of 2021.

## Majors

- Environmental Geoscience, Bachelor of Arts (BA) (p. 487)
- Environmental Geoscience, Bachelor of Science (BA) - Pre-Masters of Education (p. 491)
- Environmental Geoscience, Bachelor of Science (BS) - Concentration in Environmental Science (p. 495)
- Environmental Geoscience, Bachelor of Science (BS) - Concentration in Geology (p. 499)
- Geography, Bachelor of Science (BS) - Concentration in Applied Geographic Technology (p. 504)
- Geography, Bachelor of Science (BS) - Concentration in Environmental Studies \& Sustainability (p. 507)
- Geography, Bachelor of Science (BS) - Concentration in Global Studies (p. 511)


## Minors

- Environmental Science, Minor (p. 502)
- Geographic Information Technology, Minor (p. 503)
- Geology, Minor (p. 515)
- Geophysics, Minor (p. 516)
- Meteorology, Minor (p. 516)


## Certificates

- Geographic Information Science, Certificate (p. 503)
- Sustainability, Certificate (p. 517)


## Courses

## EGEO Courses

## EGEO 100 - Environmental Geology

The course examines problems of mineral, energy and water resources, waste disposal, soils and health, geologic hazards, and land use.
Resources are the common property of all people. Sustainable use of resources is poised by equitable distribution of cost and benefits among diverse peoples.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Becoming America, Environmental Problems Toolkit, Sustainable International Development, Sustainability, Transfer Thread Completion Course, Transnational Culture

## EGEO 101 - Physical Geology

Emphasis is placed upon those processes acting to create earth materials, landforms, and structures in and on the earth.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## EGEO 110 - Environmental Geology Lab

Complement to EGEO 100; laboratory study of geologic hazards and geologic resources with a focus on local environmental issues. Course may require a weekend field trip.
Prerequisite: EGEO 100 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 1

Term(s) Typically Offered: Offered Fall \& Spring Terms

## EGEO 111 - Physical Geology Lab

Complement to EGEO 101; laboratory studies of minerals and rocks illustrate the concepts of EGEO 101.

Prerequisite: EGEO 101 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 1

Term(s) Typically Offered: Offered as Needed

## EGEO 121 - Meteorology/Lab

Introduction to principles controlling weather and their effect on people and the environment. Includes lab.

Credits: 4
Term(s) Typically Offered: Offered Fall \& Spring Terms
EGEO 131-Oceanography
Introduction to the physical, chemical and biological aspects of the marine environment.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Sustainability, Transfer Thread Completion Course

## EGEO 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## EGEO 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## EGEO 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## EGEO 198-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
EGEO 201 - Earth Materials and Processes/Lab
Overview of the composition and structure of Earth. Introduction to fundamental physical and chemical Earth processes. Identification of rocks and minerals based on observation and study of physical properties. Includes lab.

Credits: 4
Term(s) Typically Offered: Offered Fall Terms

## EGEO 202 - Earth History/Lab

The evolutionary history of the earth and its life. Two Saturday field trips required.

Prerequisite: EGEO $201{ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 4
Term(s) Typically Offered: Offered Spring Terms

## EGEO 203-Quantitative Methods

Review of mathematical techniques and principles. Training in the application of quantitative methods to the understanding and analysis of geological and environmental problems. Students will apply a variety of mathematical techniques to a range of geological and environmental problems. Emphasis will be placed on practical applications of quantitative methodology and the development and use of spreadsheets to manage, analyze, and present data sets.
Prerequisites: EGEO $202^{\text {D }}$ and (MATH $125^{\text {D }}$ or MATH $225^{\text {D }}$ or MATH $230^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms

## EGEO 221 - Weather and Climate Forecasting

An analysis and use of local and regional computer-collected surface and upper air weather data to forecast weather. A study of past records of climate as clues to future changes. Includes lab.

Prerequisite: EGEO $121^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3

## EGEO 231 - Aerial Photography Interpretation

Introduction to photogrammetry, remote sensing, and interpretation of geologic and cultural imagery.

Prerequisites: EGEO $101^{\text {D }}$ or EGEO $201^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3

## EGEO 251 - Aviation Meteorology

This course is a study of weather conditions commonly encountered in aviation. The subject is treated from the viewpoint of the forecaster and the pilot. Includes lab.

Prerequisite: EGEO $121^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3

## EGEO 271-Geotechniques: Lab

Training in laboratory techniques and instruments for geological, geophysical and environmental surveys.

## Credits: 2

## EGEO 272 - Introduction to Georeports/Lab

Training in the grammatical and stylistic conventions of technical writing in environmental, geoscientific and geographical disciplines.
Prerequisite: ENGL $102^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 1

Term(s) Typically Offered: Offered Spring Terms

## EGEO 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## EGEO 295-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## EGEO 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## EGEO 303-Paleontology/Lab

An introduction to the fossil record and evolution of life through earth history, including the nature of science, marine and land dwelling organisms and basic theories of evolution and extinction of organisms.

Prerequisites: EGEO $201^{\text {D }}$ and EGEO $202{ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 4

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 323 - Planetary Geology

Systematic study of geological processes that have operated on the planets, natural satellites, and minor bodies in the Solar System. Course will cover solar system formation and evolution, planetary interiors, surficial processes, the structure and history of individual planetary bodies. Quantitative techniques will be used to examine data from current and historic exploration missions.

Prerequisites: EGEO $202^{\text {D }}$ and EGEO $203^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## EGEO 327 - Structural Geology

Origin and description of primary and secondary structures of sedimentary, igneous, and metamorphic rocks.

Prerequisites: EGEO $201^{\text {D }}$ and (EGEO $2022^{\text {D }}$ or PNGE 201 ${ }^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 4

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 328 - Plate Tectonics

Plate tectonics is the study of the motion of the lithosphere and deformation of the earth's crust on a regional scale. The course will evaluate the plate tectonic paradigm in terms of its historical evolution and modern application to understanding earth processes. The course examines a broad range of tectonic phenomena and considers the specific geological and geophysical processes involved. Topics covered include the uplift, deformation and metamorphism of mountain belts, the formation of ocean basins, the subsidence of sedimentary basins, the collision of continents and volcanic arcs, earthquake seismology of plate boundaries, magmatism related to plate processes, and tectonics and landscapes.
Prerequisite: EGEO $202{ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 340-Air Pollution Meteorology

A study of meteorological parameters of air pollution concentration, dispersion, and removal. Includes air pollution forecasting and modeling.

Prerequisite: EGEO $121^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 341-Geomorphology/Lab

A study of landforms, their origin and relation to geologic processes, structure and climate.

Prerequisites: EGEO $201^{\text {D }}$ or GES $150^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 342- Glacial Geology/Lab

A study of erosional and depositional landforms left by glaciers and their meltwaters. Glacial landforms and soils are examined on maps, air photos and in the field.

Prerequisites: GES $150^{\mathrm{D}}$ or EGEO $202^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 351 - Mineralogy/Lab

Systematic crystallography, crystal chemistry, physics, genesis, occurrence, and identification of minerals.

Prerequisites: EGEO $201^{\mathrm{D}}$ and CHEM $108^{\mathrm{D}}$ and CHEM $112^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 4

Term(s) Typically Offered: Offered Fall Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 352 - Petrology/Lab

Classification, occurrence, and genesis of igneous, sedimentary and metamorphic rocks. Identification using hand specimens and polarizing microscope (thin sections).

Prerequisite: EGEO $351{ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 4
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 358 - Introduction to Geophysics/Lab

An introduction to geophysics and geophysical methods and their use in the study of Earth's interior. Emphasis will be placed on illuminating subsurface geological features and applications in fields such as groundwater studies, development of energy resources and environmental studies.

Prerequisites: PHYS $211^{\mathrm{C}}$ and MATH $225^{\mathrm{C}}$ and EGEO $201^{\mathrm{C}}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 360 - Introduction to Hydrology/Lab

A study of the occurrence and movement of water and human's effect on this basic resource.

Prerequisite: EGEO $201{ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 362-Stratigraphy/Lab

Principles of stratigraphy, stratigraphic mapping, and graphic techniques used in stratigraphic interpretation. Two Saturday field trips may be required.

Prerequisites: EGEO $201^{\mathrm{D}}$ and EGEO 202 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 4

Term(s) Typically Offered: Offered Fall Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 368 - Women in Science

This course will explore the issues of women in science. Specifically it will address the issues of gender in relation to the theory and practice of science and technology. The course content will use case studies to explore women that have made significant contributions to science despite barriers limiting their access to education and professional organizations. The content will cover topics including how the development of educational systems and professions affected women over the centuries, how scientific approaches have evolved, and how women meet challenges in today"s scientific community. The case studies will provide students with the opportunity to analyze and synthesize the information presented into an understanding on the evolution of scientific thought and women's roles in science.

Credits: 3
Term(s) Typically Offered: Offered Winter Terms
Thematic Thread(s): Gender and Diversity, Transfer Thread Completion

## Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## Credits: 1-6

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
EGEO 399 - Field Camp
Field Camp is a final requirement and is usually conducted at a field study location.

Credits: 1-9
Term(s) Typically Offered: Offered as Needed

## EGEO 448 - X-ray Spectrometry

Concepts of x-ray production and interaction with crystalline materials.
Application of x-ray diffraction methods for identification of minerals, and x-ray fluorescence techniques for chemical analysis. One lecture and one two-hour laboratory per week.

Prerequisites: EGEO $201^{\text {D }}$ and CHEM $107^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 450 - Internship

Supervised placement and research in selected public and private
agencies. Permission of chairperson.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 451-Geochemistry/Lab

Basic thermodynamics applied to the geochemistry of natural systems. The course will focus on low temperature inorganic reactions that are important for the environmental fate and transport of contaminants in the environment. The course will require the use of computer spreadsheets and models to solve geochemical problems covered in lecture. Three hours of lecture and one hour of computer lab.

Prerequisites: EGEO $201^{\mathrm{D}}$ and CHEM $108^{\mathrm{D}}$ and CHEM $112^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 4

Term(s) Typically Offered: Offered Fall Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 453-Geotechniques: Geochemistry

Laboratory and field experiments to study the geochemistry of local environmental systems. Field sampling, in-field and laboratory analysis, and construction of experimental systems will be conducted. Field trips for sample collection will occur weekly.

Prerequisite: EGEO 451 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 1

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 458-Geophysical Field Methods/Lab

An introduction to seismic field methods and their use in the study of Earth's interior. Emphasis will be placed on the use of seismic methods to characterize subsurface geological features and applications in fields such as groundwater studies, development of energy resources and environmental studies.

Prerequisite: EGEO 358 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 460 - Hydrogeology

A study of the quantitative and qualitative interrelationships of geologic materials and processes with ground water.

Prerequisite: EGEO $360^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 469 - Field Investigations in the Geosciences

This course will provide students with the opportunity to practice the nature of fieldwork by observing, interpreting, collecting data and analyzing physical and human landscapes, and the natural, cultural and economic forces that are shaping them.

Credits: 1-3
Term(s) Typically Offered: Offered Summer Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
EGEO 476-Geotechniques: Geophysics
Lab and field techniques.
Prerequisite: EGEO 460 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Corequisite(s): EGEO 327
Credits: 1
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

## EGEO 481-Geologic Map Interpretation

A seminar for advanced undergraduates in whom students and staff participate in map interpretation. One two-hour lab per week. Senior standing or permission of the instructor.

Corequisite(s): EGEO 362
Credits: 1
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

## EGEO 482 - Senior Seminar

A seminar for advanced undergraduates in which students and staff participate in discussions concerning classical and current geological problems. Senior standing or permission of the instructor.

Credits: 1
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 490 - Independent Study

Independent work on a topic in the earth sciences selected by the student with permission and advice of the instructor. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## ENVS Courses

## ENVS 139-University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

## ENVS 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ENVS 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## ENVS 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## ENVS 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ENVS 295-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## ENVS 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ENVS 311 - Environmental Monitoring and Sampling

The course will focus on the development and implementation of successful sampling plans for water, soil and sediment. Basic sampling and analysis methods will be presented followed by hands-on field exercises employing these techniques. Field notebook documentation and report preparation will be emphasized. At least one field trip will be scheduled for a Saturday during the semester to give students hands-on experience with collection of environmental sample

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students with department of Chemistry, Geography, Geology \& Environm or Biology.

## ENVS 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENVS 395-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENVS 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENVS 440 - Science, Technology and the Environment

A scientific study of interactions of global systems in the geosphere and biosphere. Selected global problems, such as waste production and disposal, energy use, atmospheric warming, ozone depletion, and acid deposition are analyzed along with possible alternatives. Four courses completed in the natural sciences and mathematics area of the liberal studies program.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENVS 450 - Environmental Science Internship

Academic credit may be earned through a practicum experience, working for an agency or business. A minimum of 16 credits completed in the major and approval of the agency or business, the program director and the advisor.

Credits: 1-12
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENVS 480 - Environmental Systems Analysis

The student will investigate an environmental problem in conjunction with an appropriate faculty member as a research project. A minimum of 16 credits completed in the major and the approval of the program director and the advisor.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENVS 490 - Independent Study

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENVS 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## Credits: 1-6

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENVS 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES Courses

## GES 105 - World Regional Geography

This course provides an introduction to the regional concept, classification of major culture regions throughout the world and a description of the physiocultural character of those regions.

Credits: 3
Term(s) Typically Offered: Offered as Needed
GES 115 - Introduction to Geospatial Technologies
Provides fundamental concepts and basic skills regarding map use and interpretation. Overview of major geospatial technologies, including geographic information systems, global positioning systems, spatial visualization, and remote sensing.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Sustainable International Development, Transfer Thread Completion Course

## GES 135 - Introduction to Environmental Problems

An introduction to some of the more crucial environmental problems and alternative solutions that are available.

Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): Environmental Problems Toolkit, Healthy Body, Mind \& Environment, Sustainable International Development, Sustainability, Transfer Thread Completion Course

## GES 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## GES 150 - The Natural Environment

An introduction to interrelationships among the physical elements of the environment, including the study of vegetation, soils and landforms.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Enrollment is limited to students with a program in Geography or Geography.

## GES 170 - Discover Geography

An inquiry course that examines why people live differently in different parts of the world, with respect to political and economic systems, culture, demographics, and relationships with the natural world. This course introduces students to topics and methods of human geography, and enables students to apply them to addressing important global, regional, and local social issues.

Credits: 3
Term(s) Typically Offered: Offered Every Term

## GES 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## GES 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## GES 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
GES 201 - Latin America and the Caribbean
Consideration is given to physical, historical, cultural, political, and economic patterns in Latin America and the Caribbean.

## Credits: 3

Term(s) Typically Offered: Offered as Needed

## GES 202 - United States and Canada

An introductory course that surveys the patterns, connections, and evolution of environments, cultures, and economies of the U.S. and Canada.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## GES 204 - Post-Soviet Union

Study of the Soviet Union and Soviet-bloc nations with emphasis on economic, physical, political, and cultural aspects.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## GES 205 - Cultural Geography

This course serves as an introduction to human, social and cultural geography. Course content will cover cultural landscapes and place identity, discourses and cultural interpretation of the environment, the cultural and spatial impacts of demographic and economic changes, and cultural contestation over space and place.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms Odd

## GES 215 - Planning for Sustainable Communities

An introduction to social and physical planning for rural areas, towns and cities.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Environmental Problems Toolkit, Sustainability, Transfer Thread Completion Course

## GES 220-General Methods of Fieldwork

A survey of how field research is done in geography, including designing a research question, data collection techniques, and qualitative and quantitative data analysis.

Prerequisite: GES 115 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms

## GES 235 - Conservation

An examination of the earth's complex resource base which places special emphasis on the geographic location of resources and on conservation/preservation practices.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Sustainability, Transfer Thread Completion Course

## GES 242 - Geography of Religion

The distribution and arrangement of world religions, giving consideration to the comparative influence of religion on the cultural landscape and on regional development.

Credits: 3

## GES 245 - Population and Resources

Basic demographic principles and their relationship to regional development.

Credits: 3

## GES 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## GES 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## GES 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## GES 301-Geography of Rural Areas

Analyzes the structure and primary functional patterns of rural areas, with an emphasis on agricultural and industrial land use, problems of rural development, and population shifts.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 303-Asia

A survey of the major regions of Asia emphasizing their physical, cultural, and political characteristics. Several countries are selected for special emphasis.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Thematic Thread(s): Transfer Thread Completion Course, Transnational Culture
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 305 - Environmental Economic Geography

Environmental economic geography takes a geographical approach to the interface between nature and the economy, with an emphasis on patterns and trends in environmental services and resource management.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 307 - Australia

This course will introduce students to the environments and peoples of Australia. Australia's natural environment, Aboriginal and white culture, economy, politics, and major current public issues will be covered.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
GES 308 - Europe
The evolution of nations, the cultural landscape, and the spatial-economic organization of Europe.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 309-Africa

This course surveys the patterns, connections, and evolution of environments, cultures, nations, and economies of Africa, with an emphasis on maps, regions, and images.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 310 - Urban Geography

The course is designed to provide insights into the nature of cities and smaller urban places.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 315 - Cartography I

Basic elements of computer-assisted thematic map design are discussed. Cartographic projects serve as a means of applying major concepts such as map projections, data classification, color theory, and qualitative/quantitative symbology. Includes a lab.

Prerequisite: GES $115^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

GES 321 - Introduction to UAS for Remote Sensing and Monitoring This course introduces students to Unmanned Aerial Systems and their use in acquisition of remotely sensed data. Course content will cover topics necessary for students to sit for the FAA Part 107 Commercial Remote Pilot Certification examination. Students will also be introduced to basic concepts of remote sensing and aerial imaging, UAS mission planning and spatial data processing.

Prerequisite: GES $115^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1 or Freshman 2 may not enroll.

## GES 324 - Environmental Law and Policy

The study of political control of the environment. Focus on the roles played by individuals and groups. Cross-listed with POLS 324.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Being American, Environmental Problems Toolkit,
Sustainability, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
GES 325 - Introduction to Geographic Information Science
This course introduces students to integrated computer tools for the capture, storage, manipulation, analysis, and printout of earth-referenced data. Computers are used to store maps, analyze maps, and produce new maps along with their attributes to address societal issues. Includes a lab.

Prerequisite: GES $115^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Environmental Problems Toolkit, Fighting Social
Problems, Transfer Thread Completion Course
Students with a semester level of Freshman 1 or Freshman 2 may not enroll.

## GES 330 - Political Geography

The effects of politics on geography and the effects of geographic factors on politics.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 331 - Economic Geography

Examines human use and economic organization of the earth.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Thematic Thread(s): Transfer Thread Completion Course, Violence
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## GES 344 - Environmental Justice

This course will teach students to evaluate situations as just or unjust according to well-understood principles of environmental justice. Students will apply this analysis to important environmental justice topics such as unequal distribution of environmental harms and resources, treatment of indigenous people, animal and ecosystem rights and international environmental negotiations.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Thematic Thread(s): African-American Studies, Civil Rights \& Social Movements, Environmental Problems Toolkit, Food, Wellness \&
Environment Across Cultures, Sustainability, Transfer Thread Completion Course, Transnational Culture, Violence
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 345 - Population Analysis

A study of the techniques of population analysis with respect to growth, distribution, fertility, migration, and other demographic characteristics. Some background in algebra or statistics.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 355 - Earth's Changing Climate

This course examines the interrelationship between climate and human activities. We will study the processes that control Earth's climate with a focus on the flow of energy through the Earth system and a study of the interactions between the atmosphere, the ocean, and the land surface. We will investigate climate change on variable time scales with a focus on how climate affects humans and the environment. Further, we will examine which factors influence society's decisions in response to climate change.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Global Citizenship, Healthy Body, Mind \&
Environment, International Business, Revolutions, Sustainability, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 356 - Earth's Changing Climate Laboratory

This course examines Earth's climate changes through an investigation of climate data and climate models. We will investigate climate change on variable time scales and in different geographic regions with a quantitative focus.

Prerequisite: GES 355 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Geography, Geology \& Environm.

## GES 361-Gender and the Environment

Gender and the Environment will explore the ways that human interaction with the natural environment is shaped by gender roles and gender inequality in cultures around the world. Topics covered will include gender differences in resource access, connections between environmental degradation and women's oppression, cultural metaphors that link nature and gender (e.g. "mother earth") and the way that gender shapes environmental movements.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Thematic Thread(s): Gender and Diversity, Transfer Thread Completion
Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 362 - Applications in Sustainability

This course explores the history of the sustainability movement, and the current and emerging science and practices of sustainability. Students will also be introduced to the research tools and methods needed to evaluate the sustainability of energy systems, technology, the built environment and environmental regulations and policy.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Environmental Problems Toolkit, Sustainable International Development, Sustainability, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 363 - Energy and Society

Students will develop a working knowledge of energy technologies and policies, and their impacts on both the environment and society. Discussions and case studies will include analysis of current and emerging energy sources and consumption.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 375 - Geography of Intolerance

Analyzes cross-culturally the impact on resource allocation and the spatial implications of gender, racial, religious, political and class discrimination.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## GES 395-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 398-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 410 - Remote Sensing

Covers the electromagnetic and thermal properties of earth objects, principles and operations of sensors, and the practical applications of remote sensing. Lectures will be supplemented with exercises requiring computer processing of satellite data.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 415 - Cartography II

Advanced issues and theory of cartographic design are discussed. Cartographic applications include flow maps, bivariate statistical mapping, cartograms, interactive maps, and map animation. Includes a lab.

Prerequisite: GES $315^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 420 - Historical Geography of Anglo-America

A study of settlement patterns, land utilization, and sequent occupancies for selected periods since 1500. A student is expected to have background in geography and American history.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

GES 425 - Advanced Geographic Information Systems
This course investigates and applies advanced Geographic Information Systems (GIS) techniques. Students will learn current techniques for the collection, evaluation, input, analysis, and output of spatial data with various GIS tools. Students will apply these techniques to real world problems in areas such as environmental monitoring, environ-mental modeling, urban planning, and economic location. Includes a lab.

Prerequisites: (GES $325^{\mathrm{D}}$ or GES $410^{\mathrm{D}}$ ) and GES $315^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 426 - Environmental Modeling

Environmental models quantify processes such as runoff generation, water pollution, erosion, landscape change, and change of biodiversity. In this course, these models will be applied to real-world examples. Includes a lab.

Prerequisite: GES $325^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 435 - Preservation Planning

A study of the American preservation movement as it relates to features of the cultural landscape. The origin and diffusion of building styles and the methods and problems associated with their preservation are emphasized.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 444 - World Environmental Cultures

Students will explore and evaluate geographic and environmental ideas from western and non-western cultures.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Thematic Thread(s): Global Citizenship, Transfer Thread Completion
Course, Transnational Culture
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 445-Regional Planning

Deals with planning for the future of regions that are larger than any single local government. Consideration is given to economic development, land use, transportation, and other regional planning concerns. Cross-listed with PUBA 445.

Prerequisites: GES $215^{\text {D }}$ or PUBA $215^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 450 - Internship

Supervised placement and field experience in a selected public or private agency.

Credits: 1-12
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 469 - Field Investigations in the Geosciences

This course will provide students with the opportunity to practice the nature of fieldwork by observing, interpreting, collecting data and analyzing physical and human landscapes, and the natural, cultural and economic forces that are shaping them.

Credits: 1-3
Term(s) Typically Offered: Offered Summer Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 489 - Applied Geospatial Technologies

This course involves the application of geospatial technologies in humanities, social sciences, and natural and environmental sciences.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 490 - Independent Study

In-depth reading and/or research with the guidance of a faculty member in an area selected by the student. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## GES 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 498-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Environmental Geoscience, Bachelor of Arts (BA)

The environmental geoscience (BA) focuses on providing students with a scientific understanding of the Earth and surrounding environment. The student in geology gains an understanding of the various terrestrial
processes and features (mountains, oceans, volcanoes, glaciers); the immenseness of geologic time, the history of the earth and organisms that inhabit it (fossils); the role of water, fuel, and mineral resources in the development of civilization; and the close interaction between the geologic and organic environments.

Students seeking state certification in secondary education must also complete requirements for a Master of Education degree, a one-year program at SRU. All of our programs are designed to steadily develop the quantitative, deductive and inductive reasoning skills that environmental geoscientists must have.

## Program Learning Outcomes

## Environmental Geoscience, BA

- Outcome 1 (EGEO): Each graduate shall develop general knowledge and understanding of the composition, history, and structure of the planet, and of the physical, chemical, and biological processes involved in the interactions between the geosphere, hydrosphere, atmosphere, and biosphere.
- Each graduate will demonstrate an understanding of plate tectonic theory and be able to describe how it operates
- Each graduate will demonstrate an understanding of the geologic time scale and the timing of major events in Earth history
- Each graduate will demonstrate the ability to characterize and identify important rocks and minerals, and to interpret the processes by which they formed
- Each graduate will demonstrate an understanding of the history, causes, and effects of global climate change
- Each graduate will demonstrate an understanding of evolutionary theory and its evidence in the fossil record
- Each graduate will demonstrate an understanding of the internal structure of Earth
- Each graduate will be able to explain the fundamental principles of the hydrologic cycle


## Geology, Geology, and the Environment, Overall

- Outcome 1: Each graduate will develop strong written and oral communication skills, demonstrate the ability to work in a collaborative environment, and exhibit professional attitudes and behavior.
- Each graduate will deliver oral presentations, demonstrating the ability to effectively communicate discipline-specific concepts
- Each graduate will write scholarly papers using acceptable format and organization with proper citations to appropriate literature.
- Each graduate will actively participate in collaborative projects and in academic field trips
- Each graduate will demonstrate professionalism and integrity in his/her academic conduct
- Each graduate shall develop the ability to respect and integrate diverse worldviews in problem-solving frameworks
- Outcome 2: Each graduate shall possess and apply critical thinking and problem solving skills.
- Each graduate will demonstrate the ability to develop valid research questions and hypotheses
- Each graduate will demonstrate the ability to apply proper techniques for data acquisition and interpretation in a problemsolving context
- Each graduate will demonstrate the ability to solve open-ended problems using scientific methodology
- Each graduate will develop the ability to make informed, scientifically-based decisions regarding environmental issues
- Outcome 3: Each graduate shall develop skills in quantitative, qualitative, technological, laboratory, and field procedures.
- Each graduate will learn and employ accepted laboratory and field techniques, protocols, and safety procedures
- Each graduate will learn to read, construct, and comprehend thematic maps and derive perspective output from a map
- Each graduate will demonstrate the ability to apply knowledge, concepts and techniques from complementary disciplines to solve problems


## Related Links

Environmental Geoscience, BA Program Page
Geography, Geology, and the Environment Department Page
Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | $43-45$ |
| Modern Language Requirement | $0-9$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | $43-48$ |
| Natural Science and Math College-Wide Requirements | 12 |
| Electives | 22 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 125 | Precalculus | 4 |
| or MATH 225 | Calculus I |  |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 16 |
| Integrated Inquiry |  |  |
| Creative and Aest | Inquiry |  |


| Select 3 Credits (p. 1378) | 3 |
| :---: | :---: |
| Humanities Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Social Science Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Natural Sciences Inquiry |  |
| Select one of the following: | 3-4 |
| SCI 101 Science of Life |  |
| CHEM 1xx 100 Level Chemistry \& Lab |  |
| BIOL 1xx 100 Level Biology \& Lab |  |
| Physical Science Inquiry |  |
| Select one of the following: | 3-4 |
| SCI 102 Understanding the Physical World |  |
| EGEO 1xx 100 Level Environmental Geoscience \& Lab |  |
| Subtotal | 15-17 |
| Thematic Thread |  |
| Select 12 Credits (p. 1378) ${ }^{2}$ | 12 |
| Total Hours | 43-45 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2
From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete $0-9$ credits | $0-9$ |  |
| Total Hours | $\mathbf{0 - 9}$ |  |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate "computer competency" by one of the following: |  | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal A |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |

PE 202
Technology for Wellness
Total Hours

## Major Requirements

- 22 major credits must be taken at SRU or PASSHE
- 22 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :--- | :--- | ---: |
| Core Major Requirements |  |  |
| EGEO 1XX | Any 100-level EGEO course | $3-4$ |
| EGEO 201 | Earth Materials and Processes/Lab | 4 |
| EGEO 202 | Earth History/Lab | 4 |
| EGEO 272 | Introduction to Georeports/Lab | 1 |
| GES 115 | Introduction to Geospatial Technologies | 3 |
| GES 205 | Cultural Geography | 3 |
| GES 324 | Environmental Law and Policy | 3 |
| GES 325 | Introduction to Geographic Information | 3 |

Subtotal 24-25
Capstone Experience
Select one of the following: 3

| GES 444 | World Environmental Cultures |
| :---: | :--- |
| EGEO 469 | Field Investigations in the Geosciences |
| or GES 469 | Field Investigations in the Geosciences |
| EGEO 450 | Internship |
| or GES 450 | Internship |

Subtotal
Focus Area
Choose 10 credits from one of the following Focus Areas: 10
A: Geology
Select 10 credits (p. 489)
B: Geospatial Technology
Select 10 credits (p. 490)
C: Environmental Science
Select 10 credits (p. 490)
D: Global Studies
Select 10 credits (p. 490)
E: Sustainable Communities
Select 10 credits (p. 490)
Subtotal10

Electives
Any EGEO or GES 300 OR 400-level course 3-4
Any EGEO or GES 300 OR 400-level course 3-4
Subtotal 6-8
Total Hours 43-46

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Geology

| Code | Title | Hours |
| :--- | :--- | ---: |
| EGEO 303 | Paleontology/Lab | 4 |


| EGEO 327 | Structural Geology | 4 |
| :--- | :--- | :--- |
| EGEO 328 | Plate Tectonics | 3 |
| EGEO 358 | Introduction to Geophysics/Lab | 3 |
| EGEO 342 | Glacial Geology/Lab | 3 |
| EGEO 351 | Mineralogy/Lab | 4 |
| EGEO 341 | Geomorphology/Lab | 3 |

## Geospatial Technology

| Code | Title | Hours |
| :--- | :--- | ---: |
| GES 315 | Cartography I | 3 |
| GES 321 | Introduction to UAS for Remote Sensing | 3 |
|  | and Monitoring | 3 |
| GES 410 | Remote Sensing | 3 |
| GES 415 | Cartography II | 3 |
| GES 425 | Advanced Geographic Information Systems | 3 |
| GES 426 | Environmental Modeling | 3 |

## Environmental Science

| Code | Title | Hours |
| :--- | :--- | ---: |
| EGEO 131 | Oceanography | 3 |
| EGEO 360 | Introduction to Hydrology/Lab | 3 |
| EGEO 340 | Air Pollution Meteorology | 3 |
| EGEO 451 | Geochemistry/Lab | 4 |
| EGEO 460 | Hydrogeology | 3 |
| GES 355 | Earth's Changing Climate | 4 |
| \& GES 356 | and Earth's Changing Climate Laboratory |  |
| Global Studies |  |  |
| Code | Title | Hours |
| GES 201 | Latin America and the Caribbean | 3 |
| GES 303 | Asia | 3 |
| GES 307 | Australia | 3 |
| GES 331 | Economic Geography | 3 |
| GES 345 | Population Analysis | 3 |
| GES 355 | Earth's Changing Climate | 4 |
| \& GES 356 | and Earth's Changing Climate Laboratory |  |


| Sustainable Communities |  |  |
| :--- | :--- | ---: |
| Code | Title | Hours |
| GES 215 | Planning for Sustainable Communities | 3 |
| GES 235 | Conservation | 3 |
| GES 344 | Environmental Justice | 3 |
| GES 362 | Applications in Sustainability | 3 |
| GES 361 | Gender and the Environment | 3 |
| GES 355 | Earth's Changing Climate | 4 |
| \& GES 356 | and Earth's Changing Climate Laboratory |  |


| Natural Science and Math College-Wide Requirements |  |  |
| :--- | :--- | ---: |
| Code | Title | Hours |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| MATH 125 | Precalculus | 4 |
| or MATH 225 | Calculus I |  |
| PHYS 201 | Elements of Physics I with Lab | 4 |

or PHYS $216 \quad$ University Physics 1 with Lab
Total Hours

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. Student-faculty research
3. Service Learning Courses
4. Internships
5. Volunteering

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Environmental Geosciences - BA (6 35)
w/optional Pre Masters in Education (7-12) (PX)
This program is effective as of Fall 2020.
Revised 12.06.2021
UCC 10.26.2021

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| GES 115 | Introduction to Geospatial Technologies | 3 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| EGEO 131 | Oceanography | 3 |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar | 1 |
|  | Hours | 13 |
| Spring |  |  |
| ENGL 104 | Critical Reading | 3 |
| EGEO 201 | Earth Materials and Processes/Lab | 4 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
| Free elective/minor |  | 3 |
|  | Hours | 17 |
| Second Year |  |  |
| Fall |  |  |
| EGEO 202 | Earth History/Lab | 4 |
| Social Science Inquir | (p. 1378) | 3 |
| Major elective |  | 3-4 |



- Each graduate will demonstrate the ability to characterize and identify important rocks and minerals, and to interpret the processes by which they formed
- Each graduate will demonstrate an understanding of the history, causes, and effects of global climate change
- Each graduate will demonstrate an understanding of evolutionary theory and its evidence in the fossil record
- Each graduate will demonstrate an understanding of the internal structure of Earth
- Each graduate will be able to explain the fundamental principles of the hydrologic cycle


## Geology, Geology, and the Environment, Overall

- Outcome 1: Each graduate will develop strong written and oral communication skills, demonstrate the ability to work in a collaborative environment, and exhibit professional attitudes and behavior.
- Each graduate will deliver oral presentations, demonstrating the ability to effectively communicate discipline-specific concepts
- Each graduate will write scholarly papers using acceptable format and organization with proper citations to appropriate literature.
- Each graduate will actively participate in collaborative projects and in academic field trips
- Each graduate will demonstrate professionalism and integrity in his/her academic conduct
- Each graduate shall develop the ability to respect and integrate diverse worldviews in problem-solving frameworks
- Outcome 2: Each graduate shall possess and apply critical thinking and problem solving skills.
- Each graduate will demonstrate the ability to develop valid research questions and hypotheses
- Each graduate will demonstrate the ability to apply proper techniques for data acquisition and interpretation in a problemsolving context
- Each graduate will demonstrate the ability to solve open-ended problems using scientific methodology
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- Outcome 3: Each graduate shall develop skills in quantitative, qualitative, technological, laboratory, and field procedures.
- Each graduate will learn and employ accepted laboratory and field techniques, protocols, and safety procedures
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- Each graduate will demonstrate the ability to apply knowledge, concepts and techniques from complementary disciplines to solve problems


## Related Links

Environmental Geoscience - Pre-Masters of Education, BA Program Page

## Geography, Geology, and the Environment Department Page

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide <br> \section*{GPA Requirement}

Major GPA: 2.0 or higher Overall GPA: 2.0 or higher

## Summary*

Code Title Hours
Rock Studies Requirements ..... 43-45
Modern Language Requirement ..... 0-9
Other Basic Requirements ..... 0-3
Computer Competency ..... 0-3
Major Requirements ..... 43-48
Concentration Requirements ..... 6
Natural Science and Math College-Wide Requirements ..... 12
Electives ..... 22

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 125 | Precalculus | 4 |
| or MATH 225 | Calculus I |  |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 16 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Sciences Inquiry |  |  |
| Select one of the following: |  | 3-4 |
| SCI 101 | Science of Life |  |
| CHEM 1xx | 100 Level Chemistry \& Lab |  |
| BIOL 1xx | 100 Level Biology \& Lab |  |
| Physical Science Inquiry |  |  |
| Select one of the following: |  | 3-4 |
| SCI 102 | Understanding the Physical World |  |
| EGEO 1xx | 100 Level Environmental Geoscience \& Lab |  |
| Subtotal |  | 15-17 |
| Thematic Thread |  |  |

Select 12 Credits (p. 1378) ${ }^{2}$

## Total Hours

43-45
1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete $0-9$ credits | $0-9$ |  |
| Total Hours | $\mathbf{0 - 9}$ |  |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one | following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | uter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |

## Major Requirements

- 22 major credits must be taken at SRU or PASSHE
- 22 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :--- | :--- | ---: |
| Core Major Requirements |  |  |
| EGEO 1XX | Any 100-level EGEO course | $3-4$ |
| EGEO 201 | Earth Materials and Processes/Lab | 4 |
| EGEO 202 | Earth History/Lab | 4 |
| EGEO 272 | Introduction to Georeports/Lab | 1 |
| GES 115 | Introduction to Geospatial Technologies | 3 |
| GES 205 | Cultural Geography | 3 |
| GES 324 | Environmental Law and Policy | 3 |
| GES 325 | Introduction to Geographic Information | 3 |
|  | Science |  |
| Subtotal |  | $24-25$ |

## Capstone Experience

\(\left.\begin{array}{llr}Select one of the following: \& 3 <br>
GES 444 \& World Environmental Cultures \& <br>
EGEO 469 \& Field Investigations in the Geosciences <br>

or GES 469 \& Field Investigations in the Geosciences\end{array}\right]\)| EGEO 450 | Internship <br> or GES 450 <br> Internship |
| :--- | :--- |
| Subtotal |  |
| Focus Area | 3 |
| Choose 10 credits from one of the following Focus Areas: | 10 |

A: Geology
Select 10 credits (p. 493)
B: Geospatial Technology
Select 10 credits (p. 493)
C: Environmental Science
Select 10 credits (p. 494)
D: Global Studies
Select 10 credits (p. 494)
E: Sustainable Communities
Select 10 credits (p. 494)
Subtotal 10
Electives
Any EGEO or GES 300 OR 400-level course 3-4
Any EGEO or GES 300 OR 400-level course 3-4
Subtotal 6-8
Total Hours 43-46

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

| Geology |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| EGEO 303 | Paleontology/Lab | 4 |
| EGEO 362 | Stratigraphy/Lab | 4 |
| EGEO 327 | Structural Geology | 4 |
| EGEO 328 | Plate Tectonics | 3 |
| EGEO 358 | Introduction to Geophysics/Lab | 3 |
| EGEO 342 | Glacial Geology/Lab | 3 |
| EGEO 351 | Mineralogy/Lab | 4 |
| EGEO 341 | Geomorphology/Lab | 3 |

## Geospatial Technology

| Code | Title | Hours |
| :--- | :--- | ---: |
| GES 315 | Cartography I | 3 |
| GES 321 | Introduction to UAS for Remote Sensing | 3 |
|  | and Monitoring | 3 |
| GES 410 | Remote Sensing | 3 |
| GES 415 | Cartography II | 3 |
| GES 425 | Advanced Geographic Information Systems | 3 |
| GES 426 | Environmental Modeling | 3 |


| Environmental | Science |  |
| :--- | :--- | ---: |
| Code | Title | Hours |
| EGEO 131 | Oceanography | 3 |
| EGEO 360 | Introduction to Hydrology/Lab | 3 |
| EGEO 340 | Air Pollution Meteorology | 3 |
| EGEO 451 | Geochemistry/Lab | 4 |
| EGEO 460 | Hydrogeology | 3 |
| GES 355 | Earth's Changing Climate | 4 |
| \& GES 356 | and Earth's Changing Climate Laboratory |  |
| Global Studies |  |  |
| Code | Title | Hours |
| GES 201 | Latin America and the Caribbean | 3 |
| GES 303 | Asia | 3 |
| GES 307 | Australia | 3 |
| GES 331 | Economic Geography | 3 |
| GES 345 | Population Analysis | 3 |
| GES 355 | Earth's Changing Climate | 4 |
| \& GES 356 | and Earth's Changing Climate Laboratory |  |

## Sustainable Communities

| Code | Title | Hours |
| :--- | :--- | ---: |
| GES 215 | Planning for Sustainable Communities | 3 |
| GES 235 | Conservation | 3 |
| GES 344 | Environmental Justice | 3 |
| GES 362 | Applications in Sustainability | 3 |
| GES 361 | Gender and the Environment | 3 |
| GES 355 | Earth's Changing Climate | 4 |
| \& GES 356 | and Earth's Changing Climate Laboratory |  |

Natural Science and Math College-Wide Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| MATH 125 | Precalculus | 4 |
| or MATH 225 | Calculus I | 4 |
| PHYS 201 | Elements of Physics I with Lab |  |
| or PHYS 211 | General Physics I with Lab | $\mathbf{4}$ |
| Total Hours |  | $\mathbf{1 2}$ |

## Recommended Courses for Optional Environmental Geoscience Pre Masters in Education

| Code | Title | Hours |
| :--- | :--- | ---: |
| SPED 121 | Overview of Special Education | 3 |
| SEFE 338 | Standards-Based Instruction \& Assessment | 3 |
|  | in the Inclusionary Classroom |  |

Consult your adviser for additional courses

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. Student-faculty research
3. Service Learning Courses
4. Internships
5. Volunteering

Environmental Geosciences - BA (6 35)
w/optional Pre Masters in Education (7-12) (PX)
This program is effective as of Fall 2019.
Revised 10-2019
UCC 4.23.2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall |  |  |
| GES 115 | Introduction to Geospatial |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| EGEO 131 | Oceanography | 3 |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar | 3 |
|  | Hours | 1 |

Spring

| ENGL 104 | Critical Reading | 3 |
| :--- | :--- | ---: |
| EGEO 201 | Earth Materials and Processes/Lab | 4 |
| Creative and Aesthetic Inquiry | 3 |  |
| CHEM 107 | General Chemistry I |  |
| \& CHEM 111 | and General Chemistry I Lab | 4 |
| Free elective/minor |  | 3 |
|  | Hours | $\mathbf{1 7}$ |

## Second Year

Fall

| EGEO 202 | Earth History/Lab | 4 |
| :--- | :--- | ---: |
| Social Science Inquiry | 3 |  |
| Major elective |  | $3-4$ |
| MATH 125 | Precalculus | 4 |

Free elective/minor 3

Declare a Thematic Thread ${ }^{2}$

|  | Hours | $\mathbf{1 7 - 1 8}$ |
| :--- | :--- | ---: |
| Spring |  |  |
| EGEO 272 | Introduction to Georeports/Lab | 1 |
| COMM 200 | Civil Discourse: Theory \& Practice | 3 |
| Humanities Inquiry |  | 3 |
| Thread course |  | 3 |



## Environmental Geoscience, Bachelor of Science (BS) - Concentration in Environmental Science

Environmental science is the integration of scientific knowledge from many disciplines in order to understand the interrelationships between human activities and the environment. Environmental science majors are exposed to the general principles of biology, chemistry, geology, geography, meteorology, and physics. Thus, it is not a focus on one of these disciplines, but involves all of them and their interaction within environmental systems.

Environmental science majors could enter several general fields:

- Industry and Consulting, monitoring and investigating the contamination of the air, land and water. Responsibilities could range from working to reduce potential environmental contamination in an industrial setting, to remediating contamination that resulted from past disposal practices.
- Local, State, or Federal Environmental Agencies, working to monitor, enforce, and develop environmental policy and regulations.
- Environmental Research, working to understand and solve environmental problems. Students would continue their education in a graduate program focusing on an area of interest to them.

The program is rich in laboratory and field experiences that support our lecture classes. Students gain important practical experience working in the field studying environmental systems and problems. In addition, students are required to complete an approved internship or research project. We train our students not only with a liberal arts education and a broad-based scientific background, but with the skills that will enable them to succeed in a competitive work force. The department encourages undergraduate student research. Opportunities abound for students to work directly with the faculty on independent research projects.

ENVS 450 or ENVS 480 must be completed during the summer after your Junior or Senior year.

## Program Learning Outcomes

## Environmental Geoscience, BS

- Outcome 1 (EGEO): Each graduate shall develop general knowledge and understanding of the composition, history, and structure of the planet, and of the physical, chemical, and biological processes involved in the interactions between the geosphere, hydrosphere, atmosphere, and biosphere.
- Each graduate will demonstrate an understanding of plate tectonic theory and be able to describe how it operates
- Each graduate will demonstrate an understanding of the geologic time scale and the timing of major events in Earth history
- Each graduate will demonstrate the ability to characterize and identify important rocks and minerals, and to interpret the processes by which they formed
- Each graduate will demonstrate an understanding of the history, causes, and effects of global climate change
- Each graduate will demonstrate an understanding of evolutionary theory and its evidence in the fossil record
- Each graduate will demonstrate an understanding of the internal structure of Earth
- Each graduate will be able to explain the fundamental principles of the hydrologic cycle


## Geology, Geology, and the Environment, Overall

- Outcome 1: Each graduate will develop strong written and oral communication skills, demonstrate the ability to work in a collaborative environment, and exhibit professional attitudes and behavior.
- Each graduate will deliver oral presentations, demonstrating the ability to effectively communicate discipline-specific concepts
- Each graduate will write scholarly papers using acceptable format and organization with proper citations to appropriate literature.
- Each graduate will actively participate in collaborative projects and in academic field trips
- Each graduate will demonstrate professionalism and integrity in his/her academic conduct
- Each graduate shall develop the ability to respect and integrate diverse worldviews in problem-solving frameworks
- Outcome 2: Each graduate shall possess and apply critical thinking and problem solving skills.
- Each graduate will demonstrate the ability to develop valid research questions and hypotheses
- Each graduate will demonstrate the ability to apply proper techniques for data acquisition and interpretation in a problemsolving context
- Each graduate will demonstrate the ability to solve open-ended problems using scientific methodology
- Each graduate will develop the ability to make informed, scientifically-based decisions regarding environmental issues
- Outcome 3: Each graduate shall develop skills in quantitative, qualitative, technological, laboratory, and field procedures.
- Each graduate will learn and employ accepted laboratory and field techniques, protocols, and safety procedures
- Each graduate will learn to read, construct, and comprehend thematic maps and derive perspective output from a map
- Each graduate will demonstrate the ability to apply knowledge, concepts and techniques from complementary disciplines to solve problems


## Related Links

Environmental Geoscience - Environmental Science, BS Program Page
Geography, Geology, and the Environment Department Page
Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide <br> GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

Code Title Hours

Rock Studies Requirements 45
Other Basic Requirements 0-3
Computer Competency 0-3
Major Requirements 60
Natural Science and Math College-Wide Requirements ..... 12
Electives ..... 15

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 225 | Calculus I | 4 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 16 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Sciences Inquiry |  |  |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab ${ }^{2}$ | 4 |
| Physical Science Inquiry |  |  |
| PHYS 216 | University Physics 1 with Lab ${ }^{2}$ | 4 |
| Subtotal |  | 17 |
| Thematic Thread |  |  |
| Select 12 Credits (p.1378) ${ }^{3}$ |  | 12 |
| Total Hours |  | 45 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 Course counts for $50 \%$ of Major requirements and Major GPA
3 From at least 3 categories; no more than 6 credits from one department; 6 credits must be $300-$ level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra | $\mathbf{0 - 3}$ |
| Total Hours |  |  |

## Computer Competency

| Code | Title | Hours |
| :--- | :--- | ---: |
| Demonstrate "computer competency" by one of the following: | $0-3$ |  |
| Pass Computer Competency Exam OR |  |  |$\quad$| Select one of the following at SRU or another post-secondary |  |
| :--- | :--- |
| institution: |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |
| CPSC 110 | Computer Concepts <br> CPSC 130 |
| Programming |  |

Total Hours

## Major Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :--- | :--- | ---: |
| Environmental Geoscience Core |  |  |
| EGEO 131 | Oceanography | 3 |
| EGEO 201 | Earth Materials and Processes/Lab ${ }^{2}$ | 4 |
| EGEO 202 | Earth History/Lab ${ }^{2}$ | 4 |
| EGEO 203 | Quantitative Methods ${ }^{2}$ | 3 |
| EGEO 272 | Introduction to Georeports/Lab ${ }^{2}$ | 1 |
| Subtotal |  | 15 |
| Environmental Science Core Requirements |  |  |
| EGEO 121 | Meteorology/Lab ${ }^{1}$ | 4 |
| EGEO 360 | Introduction to Hydrology/Lab ${ }^{2}$ | 3 |
| EGEO 451 | Peochemistry/Lab ${ }^{2}$ | 4 |
| BIOL 104 | Ecology with Lab ${ }^{2}$ | 4 |
| BIOL 401 | Fundamentals of Organic Chemistry | 3 |
| CHEM 200 | Organic Chemistry I | 3 |
| or CHEM 201 | Environmental Law and Policy ${ }^{2}$ |  |
| GES 324 | Earth's Changing Climate | 3 |
| GES 355 |  | 3 |
| Subtotal |  | 27 |


| Electives - Environmental Science |  |  |
| :--- | ---: | ---: |
| 18 credits required |  | 18 |
| ENVS 450 | Environmental Science Internship <br> (Optional) | $0-3$ |


| Atmosphere |  |
| :--- | :--- |
| EGEO 340 | Air Pollution Meteorology |
| ENVS 311 | Environmental Monitoring and Sampling |
| ENVS 480 | Environmental Systems Analysis |
| GES 356 | Earth's Changing Climate Laboratory |
| CHEM 340 | Air Quality Assessment |

Hydrosphere/Lithosphere

| EGEO 327 | Structural Geology |
| :--- | :--- |
| EGEO 341 | Geomorphology/Lab |
| EGEO 342 | Glacial Geology/Lab |
| EGEO 362 | Stratigraphy/Lab |
| EGEO 460 | Hydrogeology |
| CHEM 370 | Water Quality Assessment |


| MARS XXX | Marine Science Summer Course |
| :---: | :---: |
| Biosphere |  |
| BIOL 305 | Wetlands and Aquatic Plants/Lab |
| BIOL 306 | Freshwater Biomonitoring/Lab |
| BIOL 357 | Environmental Microbiology with Lab |
| Geotechniques |  |
| $\begin{aligned} & \text { EGEO } 469 \\ & \text { or GES } 469 \end{aligned}$ | Field Investigations in the Geosciences <br> Field Investigations in the Geosciences |
| GES 315 | Cartography I |
| GES 321 | Introduction to UAS for Remote Sensing and Monitoring |
| GES 325 | Introduction to Geographic Information Science |
| GES 410 | Remote Sensing |
| GES 426 | Environmental Modeling |
| BIOL 325 | Biometry with Lab |
| Anthroposphere |  |
| EGEO 368 | Women in Science |
| GES 331 | Economic Geography |
| GES 344 | Environmental Justice |
| GES 345 | Population Analysis |
| GES 361 | Gender and the Environment |
| GES 362 | Applications in Sustainability |
| GES 444 | World Environmental Cultures |
| Total Hours | 60 |
| Course counts for $50 \%$ of Major requirements but not for Major Course counts for $50 \%$ of Major requirements and Major GPA Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course. |  |
|  |  |
| Required Related |  |
| Code | Title Hours |
| These credits DO NOT count towards the major |  |
| CHEM 108 | General Chemistry II 3 |
| CHEM 112 | General Chemistry II Lab 1 |
| PHYS 217 | University Physics 2 with Lab 4 |
| Course counts for 50\% of Major requirements and Major GPA |  |

## Natural Science and Math College-Wide Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| MATH 225 | Calculus I | 4 |
| PHYS 216 | University Physics 1 with Lab | $\mathbf{4}$ |
| Total Hours |  | $\mathbf{1 2}$ |

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. Student-faculty research
3. Service Learning Courses
4. Internships
5. Volunteering

ENVIRONMENTAL GEOSCIENCE - BS (6124)
Concentration in Environmental Science (ENSC)
This program is effective as of Effective Fall 2020
Revised 12.06.2021
UCC 10.26.2021

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| GES 115 | Introduction to Geospatial Technologies | 3 |
| EGEO 131 | Oceanography | 3 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar | 1 |
|  | Hours | 13 |
| Spring |  |  |
| ENGL 104 | Critical Reading | 3 |
| EGEO 201 | Earth Materials and Processes/Lab | 4 |
| BIOL 104 | Principles of Biology with Lab | 4 |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
|  | Hours | 15 |
| Second Year |  |  |
| Fall |  |  |
| EGEO 202 | Earth History/Lab | 4 |
| Social Science Inquiry (p. 1378) |  | 3 |
| EGEO 121 | Meteorology/Lab | 4 |
| MATH 225 | Calculus I | 4 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 18 |
| Spring |  |  |
| EGEO 203 | Quantitative Methods | 3 |
| EGEO 272 | Introduction to Georeports/Lab | 1 |
| Select one of the following: |  | 3 |


| PHIL 110 | Ethics and Civil Discourse |  |
| :--- | :--- | ---: |
| POLS 235 | Civil Discourse and Democracy |  |
| Humanities Inquiry (p. 1378) | 3 |  |
| Major elective |  | 4 |
|  | Hours | $\mathbf{1 4}$ |
| Third Year |  |  |
| Fall |  | 4 |
| EGEO 451 | Geochemistry/Lab | 3 |
| EGEO 360 | Introduction to Hydrology/Lab | 3 |
| CHEM 200 | Fundamentals of Organic Chemistry | $\mathbf{4}$ |
| PHYS 216 | University Physics 1 with Lab | $\mathbf{4}$ |
|  | Hours | $\mathbf{1 4}$ |


| Spring |  |  |
| :--- | :--- | ---: |
| GES 324 | Environmental Law and Policy | 3 |
| PHYS 217 | University Physics 2 with Lab | 4 |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| Major elective |  | 3 |
| Major elective |  | 3 |
|  | Hours | $\mathbf{1 6}$ |

## Fourth Year

Fall

| BIOL 401 | Ecology with Lab | 3 |
| :--- | :--- | ---: |
| BIOL 357 | Environmental Microbiology with Lab | 4 |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| Free elective/minor |  | 3 |
|  | Hours | $\mathbf{1 6}$ |
| Spring |  | 3 |
| BIOL 325 | Biometry with Lab | $3-4$ |
| Major elective |  | 3 |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| Free elective/minor |  | $\mathbf{2 - 3}$ |
| Free elective/minor |  | $\mathbf{1 4 - 1 6}$ |
|  | Hours | $\mathbf{1 2 0 - 1 2 2}$ |

1 Course offered in multiple subjects; cannot take course in first major subject
2
ork with your Academic Adviser to declare a Thematic
Thread by the end of your fall semester in your second
year. Click here (https://forms.office.com/Pages/
ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UIdNTi4u)to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6124
Concentration Code: ENSC

# Environmental Geoscience, Bachelor of Science (BS) - Concentration in Geology 

The environmental geoscience (BS) track in geology focuses on providing students with a scientific understanding of the Earth and surrounding environment. The student in geology gains an understanding of the various terrestrial processes and features (mountains, oceans, volcanoes, glaciers); the immenseness of geologic time, the history of the earth and organisms that inhabit it (fossils); the role of water, fuel, and mineral resources in the development of civilization; and the close interaction between the geologic and organic environments.

Demand for the professional geologist comes from the needs of engineering, hydrogeologic and environmental firms; geological surveys; oil, gas and mining companies; state and national parks; museums; conservation agencies; planning commissions; and teaching institutions. A student who completes a bachelor of science in geology will have the basis for entry to graduate schools or for employment as a geologist.

Candidates completing this program are eligible to sit for the two-part Association State Boards of Geology (ASBOG) examination required for a Professional Geologist license in Pennsylvania. The first examination, Fundamentals of Geology, can be taken upon graduation. The second examination, Principles and Practices of Geology, can be taken after working for five years. Regulations for licensing vary by state and you are urged to check with the licensing board in the state you will be working.

## Program Learning Outcomes

## Environmental Geoscience, BS

- Outcome 1 (EGEO): Each graduate shall develop general knowledge and understanding of the composition, history, and structure of the planet, and of the physical, chemical, and biological processes involved in the interactions between the geosphere, hydrosphere, atmosphere, and biosphere.
- Each graduate will demonstrate an understanding of plate tectonic theory and be able to describe how it operates
- Each graduate will demonstrate an understanding of the geologic time scale and the timing of major events in Earth history
- Each graduate will demonstrate the ability to characterize and identify important rocks and minerals, and to interpret the processes by which they formed
- Each graduate will demonstrate an understanding of the history, causes, and effects of global climate change
- Each graduate will demonstrate an understanding of evolutionary theory and its evidence in the fossil record
- Each graduate will demonstrate an understanding of the internal structure of Earth
- Each graduate will be able to explain the fundamental principles of the hydrologic cycle


## Geology, Geology, and the Environment, Overall

- Outcome 1: Each graduate will develop strong written and oral communication skills, demonstrate the ability to work in a collaborative environment, and exhibit professional attitudes and behavior.
- Each graduate will deliver oral presentations, demonstrating the ability to effectively communicate discipline-specific concepts
- Each graduate will write scholarly papers using acceptable format and organization with proper citations to appropriate literature.
- Each graduate will actively participate in collaborative projects and in academic field trips
- Each graduate will demonstrate professionalism and integrity in his/her academic conduct
- Each graduate shall develop the ability to respect and integrate diverse worldviews in problem-solving frameworks
- Outcome 2: Each graduate shall possess and apply critical thinking and problem solving skills.
- Each graduate will demonstrate the ability to develop valid research questions and hypotheses
- Each graduate will demonstrate the ability to apply proper techniques for data acquisition and interpretation in a problemsolving context
- Each graduate will demonstrate the ability to solve open-ended problems using scientific methodology
- Each graduate will develop the ability to make informed, scientifically-based decisions regarding environmental issues
- Outcome 3: Each graduate shall develop skills in quantitative, qualitative, technological, laboratory, and field procedures.
- Each graduate will learn and employ accepted laboratory and field techniques, protocols, and safety procedures
- Each graduate will learn to read, construct, and comprehend thematic maps and derive perspective output from a map
- Each graduate will demonstrate the ability to apply knowledge, concepts and techniques from complementary disciplines to solve problems


## Related Links

Environmental Geoscience - Geology, BS Program Page
Geography, Geology, and the Environment Department Page
Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher Overall GPA: 2.0 or higher

## Summary*

Code Title Hours
Rock Studies Requirements 45
Other Basic Requirements 0-3
Computer Competency ..... 0-3
Major/Concentration Requirements ..... 58
Natural Science and Math College-Wide Requirement ..... 12
Electives ..... 17

[^15]
## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 225 | Calculus I | 4 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :---: | :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 16 |

Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378)

Humanities Inquiry
Select 3 Credits (p. 1378) 3
Social Science Inquiry
Select 3 Credits (p. 1378) 3

Natural Sciences Inquiry

| CHEM 107 | General Chemistry I |
| :--- | :--- |
| \& CHEM 111 | and General Chemistry I Lab ${ }^{2}$ |

Physical Science Inquiry
PHYS $216 \quad 4$
Subtotal 17

Thematic Thread

| Select 12 Credits $(\mathrm{p} .1378)^{3}$ | 12 |
| :--- | :--- |
| Total Hours | 45 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 Course counts for $50 \%$ of Major requirements and Major GPA
3 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.


| CPSC 130 | Introduction to Computing and <br> Programming |
| :--- | :--- |
| PE 202 | Technology for Wellness |

## Total Hours

## Major/Concentration Requirements

- 29 major credits must be taken at SRU or PASSHE
- 29 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :--- | :--- | ---: |
| Environmental Geoscience Core |  |  |
| EGEO 1XX | Any 100-level EGEO course ${ }^{1}$ | 3 |
| EGEO 201 | Earth Materials and Processes/Lab $^{1}$ | 4 |
| EGEO 202 | Earth History/Lab $^{1}$ | 4 |
| EGEO 203 | Quantitative Methods $^{1}$ | 3 |
| EGEO 272 | Introduction to Georeports/Lab $^{1}$ | 1 |
| Subtotal |  | 15 |

Geology Core Program Requirements
EGEO 303 Paleontology/Lab ${ }^{1}$ 4
EGEO 327 Structural Geology ${ }^{1}$ 4
EGEO 341 Geomorphology/Lab ${ }^{1} 3$
EGEO $351 \quad$ Mineralogy/Lab ${ }^{1}$ 4
EGEO $352 \quad$ Petrology/Lab ${ }^{1}$ 4
EGEO 362 Stratigraphy/Lab ${ }^{1}$ 4
Subtotal 23

## Electives

Select nine credits from the following: 9

| EGEO 271 | Geotechniques: Lab $^{1}$ |
| :--- | :--- |
| EGEO 323 | Planetary Geology $^{1}$ |
| EGEO 328 | Plate Tectonics $^{1}$ |
| EGEO 342 | Glacial Geology/Lab $^{1}$ |
| EGEO 358 | Introduction to Geophysics/Lab $^{1}$ |
| EGEO 360 | Introduction to Hydrology/Lab $^{1}$ |
| EGEO 448 | X-ray Spectrometry $^{1}$ |
| EGEO 451 | Geochemistry/Lab $^{1}$ |
| EGEO 453 | Geotechniques: Geochemistry $^{1}$ |
| EGEO 458 | Geophysical Field Methods/Lab $^{1}$ |
| EGEO 460 | Hydrogeology $^{1}$ |
| EGEO 469 | Field Investigations in the Geosciences $^{1}$ |
| EGEO 476 | Geotechniques: Geophysics $^{1}$ |
| EGEO 482 | Senior Seminar ${ }^{1}$ |
| EGEO 498 | Selected Topics ${ }^{1}$ |
| ENVS 311 | Environmental Monitoring and Sampling ${ }^{1}$ |

Subtotal 9

Field Camp
$\begin{array}{ll}\text { Select four credits minimum at an acceptable field station } \\ \text { EGEO } 399 & \text { Field Camp }{ }^{1}\end{array}$

| EGEO 399 | Field Camp | 4 |
| :--- | :--- | :--- |
| Subtotal | 4 |  |

Related Courses

| GES 325 | Introduction to Geographic Information <br> Science ${ }^{1}$ | 3 |
| :---: | :--- | ---: |
| or GES 410 | Remote Sensing |  |
| MATH 230 | Calculus II $^{1}$ | 4 |


| Subtotal 7 |  |  |
| :---: | :---: | :---: |
| Total Hours |  | 58 |
| 1 Course counts for 50\% of Major requirements and Major GPA |  |  |
| * Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course. |  |  |
| Required Related Courses |  |  |
| Code | Title | Hours |
| These credits do not count towards the major |  |  |
| CHEM 108 | General Chemistry II | 3 |
| CHEM 112 | General Chemistry II Lab | 1 |
| PHYS 217 | University Physics 2 with Lab | 4 |
| Total Hours |  | 8 |
| Natural Science \& Math College-Wide Requirement |  |  |
| Code | Title | Hours |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| MATH 225 | Calculus I | 4 |
| PHYS 216 | University Physics 1 with Lab | 4 |
| Total Hours |  | 12 |

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. Student-faculty research
3. Service-learning classes
4. Internships
5. Volunteering

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
ENVIRONMENTAL GEOSCIENCE - BS (6124)
Concentration in Geology (GEOL)
This program is effective as of Fall 2020
Revised 12.06.2021
UCC 10.26.2021

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| EGEO 131 | Oceanography | 3 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar | 1 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
|  | Hours | 16 |
| Spring |  |  |
| ENGL 104 | Critical Reading | 3 |
| EGEO 201 | Earth Materials and Processes/Lab | 4 |
| Social Science Inquiry (p. 1378) |  | 3 |
| MATH 125 | Precalculus | 4 |
| Elective |  | 3 |
|  | Hours | 17 |
| Second Year |  |  |
| Fall |  |  |
| EGEO 202 | Earth History/Lab | 4 |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
| MATH 225 | Calculus I | 4 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 15 |
| Spring |  |  |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| CHEM 108 <br> \& CHEM 112 | General Chemistry II and General Chemistry II Lab | 4 |
| MATH 230 | Calculus II | 4 |
| EGEO 203 | Quantitative Methods | 3 |
| EGEO 272 | Introduction to Georeports/Lab | 1 |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| EGEO 360 | Introduction to Hydrology/Lab | 3 |
| EGEO 362 | Stratigraphy/Lab | 4 |
| PHYS 211 | General Physics I with Lab | 4 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Major Elective |  | 3 |
|  | Hours | 17 |
| Spring |  |  |
| EGEO 303 | Paleontology/Lab | 4 |
| EGEO 341 | Geomorphology/Lab | 3 |
| PHYS 213 | General Physics III/ Lab | 4 |
| Thematic Thread Requirement (Upper Level) (p. 1378) |  | 3 |


| Major elective |  | 3 |
| :--- | :--- | ---: |
|  | Hours | $\mathbf{1 7}$ |
| Fourth Year |  |  |
| Fall | Introduction to Geographic Information | 3 |
| GES 325 | Science |  |
|  | Mineralogy/Lab | 4 |
| EGEO 351 | Structural Geology | 4 |
| EGEO 327 |  | 3 |
| Major Elective | Thematic Thread Requirement (p. 1378) | $\mathbf{3}$ |
|  | Hours | $\mathbf{1 7}$ |


| Spring | Hours | 17 |
| :--- | :--- | ---: |
| GES 410 | Remote Sensing | 3 |
| EGEO 352 | Petrology/Lab | 4 |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| Major elective | 3 |  |
| Field Camp (summer) | $\mathbf{0 - 4}$ |  |
|  | Hours | $\mathbf{1 3 - 1 7}$ |
| Total Hours** |  |  |

1 Course offered in multiple subjects; cannot take course in first major subject
2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/ ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UIdNTi4u)to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.

Major Code: 6124
Concentration: GEOL
Revised: 08.27.2021

## Environmental Science, Minor

Environmental science is the integration of scientific knowledge from many disciplines in order to understand the interrelationships between human activities and the environment. Environmental science minors are exposed to the general principles of biology, chemistry, geology, geography, meteorology, and physics. Students learn how the interactions of all of these processes contribute to the operation of our earth system. This knowledge can prepare students for careers in water and air quality management, nature conservation, or planning for climate change.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Environmental Science, Minor Program Page (https://www.sru.edu/ academics/majors-and-minors/environmental-geosciences-environmental-science/)

Geography, Geology, and the Environment Department Page (https:// www.sru.edu/academics/colleges-and-departments/ches/departments/ geography-geology-and-the-environment/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide <br> GPA Requirement

Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.


| Electives |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| BIOL 305 | Wetlands and Aquatic Plants/Lab | 3 |
| BIOL 306 | Freshwater Biomonitoring/Lab | 3 |
| BIOL 357 | Environmental Microbiology with Lab | 4 |
| BIOL 401 | Ecology with Lab | 3 |
| CHEM 340 | Air Quality Assessment | 4 |
| CHEM 370 | Water Quality Assessment | 4 |
| EGEO 327 | Structural Geology | 4 |
| EGEO 340 | Air Pollution Meteorology | 3 |
| EGEO 341 | Geomorphology/Lab | 3 |
| EGEO 362 | Stratigraphy/Lab | 4 |
| EGEO 451 | Geochemistry/Lab | 4 |
| EGEO 460 | Hydrogeology | 3 |
| GES 315 | Cartography I | 3 |
| GES 321 | Introduction to UAS for Remote Sensing and Monitoring | 3 |
| GES 324 | Environmental Law and Policy | 3 |
| GES 325 | Introduction to Geographic Information Science | 3 |
| GES 344 | Environmental Justice | 3 |
| GES 362 | Applications in Sustainability | 3 |
| GES 410 | Remote Sensing | 3 |
| GES 469 | Field Investigations in the Geosciences | 3 |
| or EGEO 469 | Field Investigations in the Geosciences |  |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN ENVIRONMENTAL SCIENCE (26A)
This program is effective as of Fall 2020.
Revised 03.12.2021
UCC 04.21.20

## Geographic Information Science, Certificate

To access Certificate Requirements, please view the Curriculum Guide tab.

The certificate is specifically designed to provide specialized skills to individuals who currently work with spatial data in their chosen field or would like to leverage geospatial data in future employment. The curriculum is designed to support the increasing importance of geospatial data and analysis across diverse disciplines including geography, biological and environmental sciences, business and logistics, resource management and geosciences, planning and conservation.

The curriculum consists of twelve credits that can be completed in two semesters of coursework. The scope of coursework is designed to support individuals already familiar with basic computer concepts and descriptive statistics principles.

## Related Links

Geographic Information Science, Certificate Program Page (https:// www.sru.edu/academics/certificates/geographic-information-sciencecertificate/)

Geography, Geology, and the Environment Department Page (https:// www.sru.edu/academics/colleges-and-departments/ches/departments/ geography-geology-and-the-environment/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Certificate GPA: 2.0 or higher

## Certificate Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| CPSC 130 | Introduction to Computing and Programming | 3 |
| GES 315 | Cartography I | 3 |
| GES 325 | Introduction to Geographic Information Science | 3 |
| Select 2 classes from the following: |  | 6 |
| GES 410 | Remote Sensing |  |
| GES 415 | Cartography II |  |
| GES 425 | Advanced Geographic Information Systems |  |
| GES 426 | Environmental Modeling |  |

Total Hours

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
CERTIFICATE IN GEOGRAPHIC INFORMATION SCIENCE (6130)
This program is effective as of Summer 2018.
Revised 11.09.2021

## Geographic Information Technology, Minor

The Geographic Information Technology minor is designed to prepare students for employment in technical occupations and planning by becoming proficient in the fast growing field of geographic information technology. This program emphasizes the collection, analysis, and representation of earth data at scales ranging from the local to the global. Opportunities abound for students to engage in fieldwork, internships, and in the production of research in our department. If you enjoy learning about the Earth and its peoples and landscapes, either in your back yard or far away, please consider the opportunities our program provides. Representative employment areas for our graduates include environmental consulting, pollution remediation, environmental monitoring, environmental law or public policy, resource management, geographic information systems analysis, nonprofit environmental organizations, and planning.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Geographic Information Technology, Minor Program Page (https:// www.sru.edu/academics/majors-and-minors/geographic-information-technology-minor/)

Geography, Geology, and the Environment Department Page (https:// www.sru.edu/academics/colleges-and-departments/ches/departments/ geography-geology-and-the-environment/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  |  |
| GES 220 | General Methods of Fieldwork | 3 |
| GES 315 | Cartography I | 3 |
| GES 325 | Introduction to Geographic Information | 3 |
|  | Science | 3 |
| GES 410 | Remote Sensing | 3 |
| GES 415 | Cartography II | 3 |
| GES 425 | Advanced Geographic Information Systems | 3 |
| GES 450 | Internship | $\mathbf{2 1}$ |
| Total Hours |  |  |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN GEOGRAPHIC INFORMATION TECHNOLOGY (32C)
This program is effective as of Fall 2003.
Revised 8-2019

## Geography, Bachelor of Science (BS) - Concentration in Applied Geographic Technology

Students in the Applied Geographic Technology program study the links between human beings and their environment as well as the links between one area of the earth's surface with another. This program is designed to prepare students for employment in technical occupations, planning, or postgraduate studies. The applied geographic technology student investigates the geographic study of environmental, economic, cultural, and political processes and becomes proficient in the fast growing field of geographic information technology. This program emphasizes the collection, analysis, and representation of earth data at scales ranging from the local to the global. Opportunities abound for students to engage in fieldwork, internships, and in the production of research in our department. If you enjoy learning about the Earth and its peoples and landscapes, either in your back yard or far away, please consider the opportunities our program provides.

The Applied Geographic Technology program provides students with a base in liberal arts skills (critical thinking, writing, and speaking) and in analytical skills such as data collection in the field, in the library, and on the computer; the use of global positioning systems; and the use of mapping, spreadsheet, and database software. Many of our students have found work that allows them to address important environmental and social issues in the private or public sector. Representative employment areas for our graduates include environmental consulting, pollution remediation, environmental monitoring, environmental law or public policy, resource management, geographic information systems analysis, nonprofit environmental organizations, and planning.

## Program Learning Outcomes

## Geography, BS

- Outcome 1 (GES): Each graduate shall develop general knowledge and understanding of the concepts of location, place, human environment interactions, movement, and region.
- Each graduate will demonstrate an understanding of physical features and patterns of the physical environment
- Each graduate will demonstrate an understanding of features and patterns of the human environment
- Each graduate will demonstrate an understanding of concepts such as absolute and relative location, proximity, separation, direction, region, hierarchy, density, and dispersion, and methods that are used to describe and analyze spatial patterns
- Each graduate will demonstrate an understanding of absolute location systems such as latitude-longitude and alpha-numeric grids
- Each graduate will demonstrate an understanding of major spatial features and patterns in the natural environment such as those relating to climate, oceans, soils, landforms, and vegetation
- Each graduate will demonstrate an understanding of the major processes, such as evolution, atmospheric circulation, weathering and erosion, ocean currents, plate tectonics, and volcanism that shape patterns in the natural environment.
- Each graduate will demonstrate an understanding of the major spatial features and patterns in the cultural environment such as language, religion, and agriculture and economic, political, and demographic regions
- Each graduate will demonstrate an understanding of the major processes such as settlement, migration, trade, technological development, diffusion, and landscape transformation that shape cultural patterns


## Geology, Geology, and the Environment, Overall

- Outcome 1: Each graduate will develop strong written and oral communication skills, demonstrate the ability to work in a collaborative environment, and exhibit professional attitudes and behavior.
- Each graduate will deliver oral presentations, demonstrating the ability to effectively communicate discipline-specific concepts
- Each graduate will write scholarly papers using acceptable format and organization with proper citations to appropriate literature
- Each graduate will actively participate in collaborative projects and in academic field trips
- Each graduate will demonstrate professionalism and integrity in his/her academic conduct
- Each graduate shall develop the ability to respect and integrate diverse worldviews in problem-solving frameworks
- Outcome 2: Each graduate shall possess and apply critical thinking and problem solving skills.
- Each graduate will demonstrate the ability to develop valid research questions and hypotheses
- Each graduate will demonstrate the ability to apply proper techniques for data acquisition and interpretation in a problemsolving context
- Each graduate will demonstrate the ability to solve open-ended problems using scientific methodology
- Each graduate will develop the ability to make informed, scientifically-based decisions regarding environmental issues
- Outcome 3: Each graduate shall develop skills in quantitative, qualitative, technological, laboratory, and field procedures
- Each graduate will learn and employ accepted laboratory and field techniques, protocols, and safety procedures
- Each graduate will learn to read, construct, and comprehend thematic maps and derive perspective output from a map
- Each graduate will demonstrate the ability to apply knowledge, concepts and techniques from complementary disciplines to solve problems


## Related Links

Geography - Applied Geographic Technology, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/geography-applied-geographic-technology/)

## Geography, Geology, and the Environment Department Page

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide <br> GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | $42-44$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major/Concentration Requirements | 25 |
| Electives | 25 |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p.1378) |  | 3 |
| Natural Sciences Inquiry |  |  |
| Select one of the following: |  | 3-4 |
| SCI 101 Science of Life |  |  |
| 100 Level Chemistry \& Lab (CHEM) |  |  |
| 100 Level Biology \& Lab (BIOL) |  |  |
| Physical Sciences Inquiry |  |  |
| Select one of the following: |  | 3-4 |
| SCI 102 | Understanding the Physical World |  |
| 100 Level Environmental Geoscience \& Lab (EGEO) |  |  |
| Subtotal |  | 15-17 |
| Thematic Thread |  |  |
| Select 12 Credits (p.1378) ${ }^{2}$ |  | 12 |
| Total Hours |  | 42-44 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal A |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major/Concentration Requirements

- 27 major credits must be taken at SRU or PASSHE
- 27 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :---: | :---: | :---: |
| Basic Core |  |  |
| GES 150 | The Natural Environment ${ }^{1}$ | 3 |
| GES 205 | Cultural Geography ${ }^{1}$ | 3 |
| GES 315 | Cartography ${ }^{1}$ | 3 |
| GES 331 | Economic Geography ${ }^{1}$ | 3 |
| Subtotal |  | 12 |
| Techniques Core |  |  |
| GES 115 | Introduction to Geospatial Technologies ${ }^{1}$ | 3 |
| GES 220 | General Methods of Fieldwork ${ }^{1}$ | 3 |
| GES 325 | Introduction to Geographic Information Science ${ }^{1}$ | 3 |
| EGEO 272 | Introduction to Georeports/Lab ${ }^{1}$ | 1 |
| Subtotal |  | 10 |


| Applied Geographic Technology Core |  |  |
| :---: | :---: | :---: |
| GES 345 | Population Analysis ${ }^{1}$ | 3 |
| GES 410 | Remote Sensing ${ }^{1}$ | 3 |
| GES 415 | Cartography II ${ }^{1}$ | 3 |
| GES 425 | Advanced Geographic Information Systems 1 | 3 |
| GES 426 | Environmental Modeling ${ }^{1}$ | 3 |
| Subtotal |  | 15 |


| Other Required Technology Core |  |  |
| :--- | :--- | :---: |
| CPSC 130 | Introduction to Computing and <br> Programming | 3 |
| CPSC 146 | Programming Principles | 6 |
| Subtotal | 6 |  |
| Capstone Experience | 3 |  |


| GES 450 | Internship ${ }^{1}$ |
| :--- | :--- |
| GES 489 | Applied Geospatial Technologies ${ }^{1}$ |


| GES $490 \quad$ Independent Study ${ }^{1}$ |  |
| :--- | ---: |
| Subtotal | 3 |
| Special Interest Area |  |
| Select four courses from special interest area ${ }^{2}$ | $\mathbf{1 2 - 1 4}$ |
| Total Hours | $\mathbf{5 8 - 6 0}$ |

1 Course counts for 50\% of Major requirements and Major GPA
2 Example: geography, geology, economics, biology, criminal, political science, marketing, communication, history, parks and recreation, public health and so on under consultation with student's Academic Adviser.
Note: at least four courses must be 300 level or above.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. Student-faculty research
3. Service-learning classes
4. Internships
5. Volunteering

GEOGRAPHY - BS (6142)
Concentration in Applied Geographic Technology (AGET)
This program is effective as of Fall 2019.
Revised 8-2019
UCC 11/27/2018

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall | The Natural Environment |  |
| GES 150 | Introduction to Geospatial Technologies | 3 |
| GES 115 | Oceanography | 3 |
| EGEO 131or Understanding the Physical World  <br> or 102 University Seminar ${ }^{1}$ | 3 |  |
| SUBJ 139 | Critical Writing | 3 |
| ENGL 102 |  | 3 |


| INDS 101 | FYRST Seminar | $\mathbf{1}$ |
| :--- | :--- | ---: |
|  | Hours | $\mathbf{1 6}$ |
| Spring |  |  |
| ENGL 104 | Critical Reading | 3 |
| SCI 101 | Science of Life | 3 |
| CPSC 130 | Introduction to Computing and | 3 |
|  | Programming |  |
| Creative \& Aesthetic | Inquiry (p. 1378) | 3 |
| Free elective/minor |  | 3 |
|  | Hours | $\mathbf{1 5}$ |


| Second Year |  |  |
| :---: | :---: | :---: |
| Fall |  |  |
| GES 220 | General Methods of Fieldwork | 3 |
| CPSC 146 | Programming Principles | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Social Science Inquiry (p. 1378) |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 15 |
| Spring |  |  |
| EGEO 272 | Introduction to Georeports/Lab | 1 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Humanities Inquiry (p. 1378) |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Free elective/minor |  | 3 |

## Third Year

Fall

| GES 315 | Cartography I | 3 |
| :--- | :--- | ---: |
| GES 325 | Introduction to Geographic Information | 3 |
|  | Science |  |
| GES 205 | Cultural Geography | 3 |
| Free elective/minor |  | 3 |
| Free elective/minor |  | 3 |
|  | Hours | $\mathbf{1 5}$ |


| Spring |  |  |
| :--- | :--- | ---: |
| GES 415 | Cartography II | 3 |
| GES 426 | Environmental Modeling | 3 |
| Major elective |  | 3 |
| Major elective |  | 3 |
| Thematic Thread Requirement (p. 1378) | 3 |  |
|  | Hours | $\mathbf{1 5}$ |

Fourth Year
Fall
GES 410 Remote Sensing 3
Major Elective ..... 3
Major Elective ..... 3
Thematic Thread Requirement (p. 1378) ..... 3


## Geography, Bachelor of Science (BS) - Concentration in Environmental Studies \& Sustainability

Students in the environmental studies program study the links between humans and their environment. This program takes an interdisciplinary approach and integrates knowledge from the social and natural sciences in the study of environmental issues. An important goal of the program is for students to understand the relationships that exist between social, behavioral, and environmental systems. We emphasize the collection, analysis, and representation of earth data at scales ranging from the local to the global. Toward the end of their studies, students identify a research problem, gather and analyze data, and prepare a formal paper and presentation on their topic. Opportunities abound for students to engage in fieldwork, internships, and in the production of research in our department.

The environmental studies program provides students with a base in liberal arts skills (critical thinking, writing, and speaking) and in analytical skills such as data collection in the field, in the library, and on the computer; the use of global positioning systems; the use of mapping, spreadsheet, and database software. Many of our students have found work that allows them to address important environmental and social issues in the private or public sector. Representative employment areas for our graduates include environmental consulting, pollution remediation, environmental law or public policy, outdoor education,
resource management, geographic information systems analysis, nonprofit environmental organizations, and planning.

## Program Learning Outcomes

## Geography, BS

- Outcome 1 (GES): Each graduate shall develop general knowledge and understanding of the concepts of location, place, human environment interactions, movement, and region.
- Each graduate will demonstrate an understanding of physical features and patterns of the physical environment
- Each graduate will demonstrate an understanding of features and patterns of the human environment
- Each graduate will demonstrate an understanding of concepts such as absolute and relative location, proximity, separation, direction, region, hierarchy, density, and dispersion, and methods that are used to describe and analyze spatial patterns
- Each graduate will demonstrate an understanding of absolute location systems such as latitude-longitude and alpha-numeric grids
- Each graduate will demonstrate an understanding of major spatial features and patterns in the natural environment such as those relating to climate, oceans, soils, landforms, and vegetation
- Each graduate will demonstrate an understanding of the major processes, such as evolution, atmospheric circulation, weathering and erosion, ocean currents, plate tectonics, and volcanism that shape patterns in the natural environment.
- Each graduate will demonstrate an understanding of the major spatial features and patterns in the cultural environment such as language, religion, and agriculture and economic, political, and demographic regions
- Each graduate will demonstrate an understanding of the major processes such as settlement, migration, trade, technological development, diffusion, and landscape transformation that shape cultural patterns


## Geology, Geology, and the Environment, Overall

- Outcome 1: Each graduate will develop strong written and oral communication skills, demonstrate the ability to work in a collaborative environment, and exhibit professional attitudes and behavior.
- Each graduate will deliver oral presentations, demonstrating the ability to effectively communicate discipline-specific concepts
- Each graduate will write scholarly papers using acceptable format and organization with proper citations to appropriate literature.
- Each graduate will actively participate in collaborative projects and in academic field trips
- Each graduate will demonstrate professionalism and integrity in his/her academic conduct
- Each graduate shall develop the ability to respect and integrate diverse worldviews in problem-solving frameworks
- Outcome 2: Each graduate shall possess and apply critical thinking and problem solving skills.
- Each graduate will demonstrate the ability to develop valid research questions and hypotheses
- Each graduate will demonstrate the ability to apply proper techniques for data acquisition and interpretation in a problemsolving context
- Each graduate will demonstrate the ability to solve open-ended problems using scientific methodology
- Each graduate will develop the ability to make informed, scientifically-based decisions regarding environmental issues
- Outcome 3: Each graduate shall develop skills in quantitative, qualitative, technological, laboratory, and field procedures.
- Each graduate will learn and employ accepted laboratory and field techniques, protocols, and safety procedures
- Each graduate will learn to read, construct, and comprehend thematic maps and derive perspective output from a map
- Each graduate will demonstrate the ability to apply knowledge, concepts and techniques from complementary disciplines to solve problems


## Related Links

Geography - Environmental Studies and Sustainability, BS Program Page (https://www.sru.edu/academics/majors-and-minors/geography-environmental-studies-and-sustainability/)

Geography, Geology, and the Environment Department Page (https:// www.sru.edu/academics/colleges-and-departments/ches/departments/ geography-geology-and-the-environment/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Title | Hours |
| :--- | ---: |
| Code | $42-44$ |
| Rock Studies Requirements | $0-3$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $56-58$ |
| Major Requirements | 22 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Ae | Inquiry |  |



## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |

## Total Hours

## Computer Competency

| Code | Title | Hours |
| :---: | :---: | :---: |
| Demonstrate "computer competency" by one of the following: |  | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major Requirements

- 28 major credits must be taken at SRU or PASSHE
- 28 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :--- | :--- | ---: |
| Core |  |  |
| GES 150 | The Natural Environment $^{1}$ | 3 |


| GES 205 | Cultural Geography ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| GES 315 | Cartography ${ }^{1}$ | 3 |
| GES 331 | Economic Geography ${ }^{1}$ | 3 |
| Subtotal |  | 12 |
| Techniques Core |  |  |
| GES 115 | Introduction to Geospatial Technologies ${ }^{1}$ | 3 |
| GES 220 | General Methods of Fieldwork ${ }^{1}$ | 3 |
| GES 325 | Introduction to Geographic Information Science ${ }^{1}$ | 3 |
| EGEO 272 | Introduction to Georeports/Lab ${ }^{1}$ | 1 |
| Subtotal |  | 10 |

Environmental Studies Core
Introductory Course
Select one of the following: 3
Any 100 level BIOL course ${ }^{2}$
Any 100 level EGEO course ${ }^{2}$

| GES 135 | Introduction to Environmental Problems |
| :--- | :--- | :--- |
|  |  |
| Subtotal | 3 |

Additional Environmental Studies Core Courses

| GES 235 | Conservation $^{1}$ | 3 |
| :--- | :--- | :--- |
| GES 324 | Environmental Law and Policy ${ }^{1}$ | 3 |
| GES 362 | Applications in Sustainability ${ }^{1}$ | 3 |
| GES 344 | Environmental Justice ${ }^{1}$ | 3 |
| or PHIL 324 | Environmental Ethics |  |

Subtotal ..... 12

## Capstone Experience

GES 444 World Environmental Cultures ${ }^{1} 3$
or GES 469 Field Investigations in the Geosciences
Subtotal 3

A critical understanding of Community through 40 hours of Service Learning
Service Learning
Electives
Select at least one course from each of the following blocks 16-18
below, at least five courses must be 300 level or above:
Environment (p. 509)
Planning (p. 510)
Community (p. 510)
Subtotal 16-18

Total Hours
1 Course counts for 50\% of Major requirements and Major GPA
2 Course counts for $50 \%$ of Major requirements but not for Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Environment

Code Title Hours
BIOL $104 \quad$ Principles of Biology with Lab ${ }^{1} 4$
BIOL 105 Environmental Biology ${ }^{1} 3$
BIOL 120 Plants and Society ${ }^{1} 3$
BIOL 305 Wetlands and Aquatic Plants/Lab ${ }^{1} 3$
BIOL 306 Freshwater Biomonitoring/Lab ${ }^{1} 3$


## Planning

| Code | Title | Hours |
| :---: | :---: | :---: |
| BUSA 315 | Economics of Sustainable Development ${ }^{1}$ | 3 |
| or ECON 315 | Economics of Sustainable Development |  |
| GES 215 | Planning for Sustainable Communities ${ }^{1}$ | 3 |
| GES 345 | Population Analysis ${ }^{1}$ | 3 |
| GES 363 | Energy and Society ${ }^{1}$ | 3 |
| GES 410 | Remote Sensing ${ }^{1}$ | 3 |
| GES 415 | Cartography II ${ }^{1}$ | 3 |
| GES 425 | Advanced Geographic Information Systems 1 | 3 |
| HEMT 210 | Contemporary Travel and Tourism ${ }^{1}$ | 3 |
| HEMT 314 | Sustainable Planning for Tourism ${ }^{1}$ | 3 |
| PCRM 377 | Cultural Resources Management ${ }^{1}$ | 3 |

1 Course counts for $50 \%$ of Major requirements and Major GPA

| Community |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| GES 344 | Environmental Justice ${ }^{1}$ | 3 |
| GES 361 | Gender and the Environment ${ }^{1}$ | 3 |
| GES 375 | Geography of Intolerance ${ }^{1}$ | 3 |
| EGEO 368 | Women in Science ${ }^{1}$ | 3 |
| HLTH 311 | International Health ${ }^{1}$ | 3 |
| NLPA 120 | Civic Engagement and Community Decision-Making ${ }^{1}$ | 3 |
| NLPA 220 | Introduction to Nonprofit Management ${ }^{1}$ | 3 |
| INDP 304 | Urban Sociology ${ }^{1}$ | 3 |
| INDP 309 | Health and Society ${ }^{1}$ | 3 |
| NLPA 320 | Community Change and Development ${ }^{1}$ | 3 |
| PHIL 324 | Environmental Ethics ${ }^{1}$ | 3 |

1 Course counts for $50 \%$ of Major requirements and Major GPA

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. Student-faculty research
3. Service-learning classes
4. Internships
5. Volunteering

GEOGRAPHY - BS (6142)
Concentration in Environmental Studies and Sustainability (ESSU)
This program is effective as of Fall 2019.
Revised 8-2019
UCC 5.19.2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall | The Natural Environment | 3 |
| GES 150 | Introduction to Geospatial Technologies | 3 |
| GES 115 | Oceanography | 3 |
| EGEO 131 | University Seminar |  |
| SUBJ 139 | Critical Writing | 3 |
| ENGL 102 | FYRST Seminar | 3 |
| INDS 101 | Hours | 1 |
|  | Critical Reading | $\mathbf{1 6}$ |
| Spring | Science of Life | 3 |
| ENGL 104 |  | 3 |
| SCI 101 |  | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) | 3 |  |
| Free elective/minor |  | 3 |
| Free elective/minor |  | $\mathbf{1 5}$ |
|  | Hours |  |

## Second Year

Fall
GES 220 General Methods of Fieldwork 3
STAT 152 Elementary Statistics I 3
Humanities Inquiry (p. 1378) 3
Social Science Inquiry (p. 1378) 3
Free elective/minor 3

Declare a Thematic Thread ${ }^{2}$

|  | Hours | $\mathbf{1 5}$ |
| :--- | :--- | :--- |
| Spring |  |  |
| GES 205 | Cultural Geography | 3 |
| GES 235 | Conservation | 3 |


| EGEO 272 | Introduction to Georeports/Lab | 1 |
| :---: | :---: | :---: |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 13 |
| Third Year |  |  |
| Fall |  |  |
| GES 315 | Cartography I | 3 |
| GES 355 | Earth's Changing Climate | 3 |
| GES 356 | Earth's Changing Climate Laboratory | 1 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Free elective/minor |  | 3 |
| Free elective/minor |  | 3 |
|  | Hours | 16 |
| Spring |  |  |
| GES 325 | Introduction to Geographic Information Science | 3 |
| GES 324 | Environmental Law and Policy | 3 |
| GES 444 | World Environmental Cultures | 3 |
| Major elective |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| Major Elective |  | 3 |
| Major Elective |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Free elective/minor |  | 3 |
| Free elective/minor |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| GES 331 | Economic Geography | 3 |
| GES 344 | Environmental Justice | 3 |
| GES 362 | Applications in Sustainability | 3 |
| Major elective |  | 3 |
| Free elective/minor |  | 3 |
|  | Hours | 15 |
|  | Total Hours** | 120 |

1 Course offered in multiple subjects; cannot take course in first major subject
2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/ ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UIdNTi4u)to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please
consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.


## Major Code: 6142 <br> Concentration Code: ESSU <br> Revised: 08.27.2021

## Geography, Bachelor of Science (BS) - Concentration in Global Studies

The global studies program offers students an interdisciplinary perspective on our globalized world. Students in this program gain an understanding of the basic physical, cultural, economic, and political forces that shape our world, as well as in-depth exploration of particular places and regions of importance. Global studies majors learn to think cross-culturally about the major problems facing our world, and prepare for careers with an international focus.

The global studies program provides students with a base in liberal arts skills (critical thinking, writing, and speaking) and in analytical skills such as data collection in the field, in the library, and on the computer; the use of global positioning systems; the use of mapping, spreadsheet, and database software. Many of our students have found work that allow them to address important environmental and social issues in the private or public sector. Representative employment areas for our graduates include environmental consulting, pollution remediation, environmental law or public policy, outdoor education, resource management, geographic information systems analysis, nonprofit environmental organizations, and planning.

## Program Learning Outcomes

## Geography, BS

- Outcome 1 (GES): Each graduate shall develop general knowledge and understanding of the concepts of location, place, human environment interactions, movement, and region.
- Each graduate will demonstrate an understanding of physical features and patterns of the physical environment
- Each graduate will demonstrate an understanding of features and patterns of the human environment
- Each graduate will demonstrate an understanding of concepts such as absolute and relative location, proximity, separation, direction, region, hierarchy, density, and dispersion, and methods that are used to describe and analyze spatial patterns
- Each graduate will demonstrate an understanding of absolute location systems such as latitude-longitude and alpha-numeric grids
- Each graduate will demonstrate an understanding of major spatial features and patterns in the natural environment such as those relating to climate, oceans, soils, landforms, and vegetation
- Each graduate will demonstrate an understanding of the major processes, such as evolution, atmospheric circulation, weathering and erosion, ocean currents, plate tectonics, and volcanism that shape patterns in the natural environment.
- Each graduate will demonstrate an understanding of the major spatial features and patterns in the cultural environment such as language, religion, and agriculture and economic, political, and demographic regions
- Each graduate will demonstrate an understanding of the major processes such as settlement, migration, trade, technological development, diffusion, and landscape transformation that shape cultural patterns


## Geology, Geology, and the Environment, Overall

- Outcome 1: Each graduate will develop strong written and oral communication skills, demonstrate the ability to work in a collaborative environment, and exhibit professional attitudes and behavior.
- Each graduate will deliver oral presentations, demonstrating the ability to effectively communicate discipline-specific concepts
- Each graduate will write scholarly papers using acceptable format and organization with proper citations to appropriate literature.
- Each graduate will actively participate in collaborative projects and in academic field trips
- Each graduate will demonstrate professionalism and integrity in his/her academic conduct
- Each graduate shall develop the ability to respect and integrate diverse worldviews in problem-solving frameworks
- Outcome 2: Each graduate shall possess and apply critical thinking and problem solving skills.
- Each graduate will demonstrate the ability to develop valid research questions and hypotheses
- Each graduate will demonstrate the ability to apply proper techniques for data acquisition and interpretation in a problemsolving context
- Each graduate will demonstrate the ability to solve open-ended problems using scientific methodology
- Each graduate will develop the ability to make informed, scientifically-based decisions regarding environmental issues
- Outcome 3: Each graduate shall develop skills in quantitative, qualitative, technological, laboratory, and field procedures.
- Each graduate will learn and employ accepted laboratory and field techniques, protocols, and safety procedures
- Each graduate will learn to read, construct, and comprehend thematic maps and derive perspective output from a map
- Each graduate will demonstrate the ability to apply knowledge, concepts and techniques from complementary disciplines to solve problems


## Related Links

Geography - Global Studies, BS Program Page (https://www.sru.edu/ academics/majors-and-minors/geography-global-studies/)

Geography, Geology, and the Environment Department Page (https:// www.sru.edu/academics/colleges-and-departments/ches/departments/ geography-geology-and-the-environment/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | $42-44$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | $25-55$ |
| Electives | 25 |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Sciences Inquiry |  |  |
| Select one of the following: |  | 3-4 |
| SCI 101 Science of Life |  |  |
| 100 Level Chemistry \& Lab (CHEM) |  |  |
| 100 Level Biology \& Lab (BIOL) |  |  |
| Physical Sciences Inquiry |  |  |
| Select one of the following: |  | 3-4 |
| SCI 102 | Understanding the Physical World |  |
| 100 Level Environmental Geoscience \& Lab (EGEO) |  |  |
| Subtotal |  | 15-17 |
| Thematic Thread |  |  |
| Select 12 Credits (p.1378) ${ }^{2}$ |  | 12 |
| Total Hours |  | 42-44 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.


| Asia |  |  |
| :--- | :--- | ---: |
| Code | Title | Hours |
| ENGL 248 | Asian Literature | 3 |
| ENGL 316 | Asian Film | 3 |
| GES 303 | Asia | 3 |
| HIST 376 | Modern Japan | 3 |
| HIST 381 | East Asian Military Traditions | 3 |
| HIST 382 | Modern Asian Pacific Rim | 3 |
| HIST 386 | Modern China | 3 |
| INDP 310 | Cultural Area Studies | 3 |
| INDP 360 | Issues in Asia; Women in Asian Societies | 3 |
| PHIL 343 | Asian Philosophy | 3 |


| Middle East, Africa, and Oceania |  |  |
| :--- | :--- | ---: |
| Code | Title | Hours |
| GES 307 | Australia | 3 |
| GES 309 | Africa | 3 |
| HIST 462 | The Contemporary Middle East | 3 |
| HIST 463 | Israel-History, State and Society | 3 |
| HIST 380 | Egyptology | 3 |
| INDP 310 | Cultural Area Studies | 3 |

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. Student-faculty research
3. Service-learning classes
4. Internships
5. Volunteering

GEOGRAPHY - BS (6142)
Concentration in Global Studies (GLST)
This program is effective as of Fall 2019.
Revised 8-2019
UCC 11/27/2018

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

Recommended Four-Year Plan


| Free elective/minor |  | 3 |
| :--- | :--- | ---: |
|  | Hours | $\mathbf{1 5}$ |
| Fourth Year |  |  |
| Fall |  |  |
| Major Elective |  | 3 |
| Major Elective |  | 3 |
| Thread course |  | 3 |
| Free elective/minor |  | 3 |
| Free elective/minor |  | $\mathbf{1 5}$ |
|  | Hours | 3 |
| Spring | Economic Geography | 3 |
| GES 331 | World Environmental Cultures | 3 |
| GES 444 |  | 3 |
| Free elective/minor |  | 3 |
| Free elective/minor |  | $\mathbf{1 5}$ |
| Free elective/minor |  | $\mathbf{1 2 0}$ |
|  | Hours |  |

1 Course offered in multiple subjects; cannot take course in first major subject
2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/ ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UIdNTi4u)to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.


## Major Code: 6142

Concentration Code: GLST
Revised: 08.27.2021

## Geology, Minor

The Geology minor provides students with a scientific understanding of the Earth and surrounding environment. The student in geology gains an understanding of the various terrestrial processes and features (mountains, oceans, volcanoes, glaciers); the immenseness of geologic time, the history of the earth and organisms that inhabit it (fossils); the role of water, fuel, and mineral resources in the development of civilization; and the close interaction between the geologic and organic environments. Demand for the professional geologist comes from the needs of engineering, hydrogeologic and environmental firms; geological surveys; oil, gas and mining companies; state and national parks; museums; conservation agencies; planning commissions; and teaching institutions.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Geology, Minor Program Page (https://www.sru.edu/academics/majors-and-minors/environmental-geosciences-geology/)

Geography, Geology, and the Environment Department Page (https:// www.sru.edu/academics/colleges-and-departments/ches/departments/ geography-geology-and-the-environment/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 9 credit hours must be upper division (an upper division course includes any 3-credit course that requires a prerequisite)
- A minor shall be no fewer than 15 credits.

| Code <br> Required Courses | Title | Hours |
| :--- | :--- | ---: |
| EGEO 1XX | Any 100-Level EGEO Course |  |
| EGEO 201 | Earth Materials and Processes/Lab | 4 |
| EGEO 202 | Earth History/Lab | 4 |
| Electives |  | 4 |
| Select at least three courses: | 9-12 |  |
| EGEO 303 | Paleontology/Lab |  |
| EGEO 323 | Planetary Geology |  |
| EGEO 327 | Structural Geology |  |
| EGEO 328 | Plate Tectonics |  |
| EGEO 341 | Geomorphology/Lab |  |
| EGEO 342 | Glacial Geology/Lab |  |
| EGEO 351 | Mineralogy/Lab |  |
| EGEO 352 | Petrology/Lab |  |
| EGEO 358 | Introduction to Geophysics/Lab |  |
| EGEO 362 | Stratigraphy/Lab | $\mathbf{2 0 - 2 3}$ |
| EGEO 458 | Geophysical Field Methods/Lab |  |
| EGEO 460 | Hydrogeology |  |
| Total Hours |  |  |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information
on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN GEOLOGY (34A)
This program is effective as of Fall 2017.
Revised 04.09.2020

## Geophysics, Minor

The Geophysics minor provides students with a grounding in the technical skills crucial to investigating the subsurface features of our earth. The minor emphasizes a variety of state-of-the-art techniques used by professionals in resource exploration and development in order to study what lies beneath our feet, including both ground-based approaches as well as aerial (drones) and satellite imaging.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Geophysics, Minor Program Page (https://www.sru.edu/academics/ majors-and-minors/geophysics-minor/)

Geography, Geology, and the Environment Department Page (https:// www.sru.edu/academics/colleges-and-departments/ches/departments/ geography-geology-and-the-environment/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Geophysics Core Courses |  |  |
| EGEO 358 | Introduction to Geophysics/Lab | 3 |
| EGEO 458 | Geophysical Field Methods/Lab | 3 |
| Foundation Sequence |  |  |
| Select one of | wing sequences: | 12-13 |
| Foundation - Environmental Geoscience Majors |  |  |
| MATH 231 | Calculus III |  |
| MATH 240 | Linear Algebra and Differential Equations |  |
| PHYS 212 | General Physics II with Lab |  |
| CPSC 146 | Programming Principles |  |
| Foundation - Other (Non-EGEO) Majors |  |  |
| EGEO 101 | Physical Geology |  |
| EGEO 201 | Earth Materials and Processes/Lab |  |
| MATH 240 | Linear Algebra and Differential Equations |  |

PHYS 212
General Physics II with Lab
Total Hours
18-19

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Minor in Geophysics (34E)
This program is effective as of Fall 2014.
Revised 8-2019

## Meteorology, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Meteorology, Minor Program Page (https://www.sru.edu/academics/ majors-and-minors/meteorology-minor/)

Geography, Geology, and the Environment Department Page (https:// www.sru.edu/academics/colleges-and-departments/ches/departments/ geography-geology-and-the-environment/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Minor Courses |  |  |
| EGEO 121 | Meteorology/Lab | 4 |
| EGEO 340 | Air Pollution Meteorology | 3 |
| GES 355 | Earth's Changing Climate | 3 |
| GES 356 | Earth's Changing Climate Laboratory | 1 |
| CPSC 140 | Introduction to Programming Principles | 3 |
| MATH 230 | Calculus II | 4 |

Required Elective Courses

Select two of the following:

| MATH 240 | Linear Algebra and Differential Equations |
| :---: | :--- |
| CHEM 340 | Air Quality Assessment |
| EGEO 360 | Introduction to Hydrology/Lab |
| PHYS 385 | Computational Physics |
| ENVS 490 | Independent Study |
| Total Hours |  |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN METEOROLOGY (34B)
This program is effective as of Fall 2008
Revised 8-2019

## Sustainability, Certificate

This interdisciplinary certificate should benefit a diverse population of students who might not be introduced to such concepts through completion of their degree program. Students who obtain a Certificate in Sustainability will be better prepared to critically evaluate society's interactions with the environment and to help find ethical and equitable solutions to environmental challenges.

Students will complete one course from at least two of the three categories, and complete the capstone course, Principles of Sustainability. Only two of the four courses can be from the same academic discipline. Students must also complete 12 hours of stewardship, which may include service learning, community volunteer hours, research, or a sustainability project. The capstone course includes the stewardship requirement.

To access Certificate Requirements, please view the Curriculum Guide tab.

## Related Links

Sustainability, Certificate Program Page (https://www.sru.edu/ academics/certificates/sustainability-certificate/)

Geography, Geology, and the Environment Department Page (https:// www.sru.edu/academics/colleges-and-departments/ches/departments/ geography-geology-and-the-environment/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)
6.7 Curriculum Guide

## GPA Requirement

Certificate GPA: 2.0 or higher

## Certificate Requirements

This interdisciplinary certificate should benefit a diverse population of students who might not be introduced to such concepts through completion of their degree program. Students who obtain a Certificate in Sustainability will be better prepared to critically evaluate society's interactions with the environment and to help find ethical and equitable solutions to environmental challenges.

Students will complete one course from at least two of the three categories, and complete the capstone course, Principles of Sustainability. Only two of the four courses can be from the same academic discipline. Students must also complete 12 hours of stewardship, which may include service learning, community volunteer hours, research, or a sustainability project. The capstone course includes the stewardship requirement.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Certificate Requirements |  |  |
| Select one course fr | m at least two of the three categories: ${ }^{1}$ | 9 |
| Environmental Stewardship |  |  |
| BIOL 105 | Environmental Biology |  |
| BIOL 322 | Conservation Biology/Lab |  |
| BIOL 401 | Ecology with Lab |  |
| EGEO 100 | Environmental Geology |  |
| EGEO 131 | Oceanography |  |
| ENVS 440 | Science, Technology and the Environment |  |
| GES 135 | Introduction to Environmental Problems |  |
| GES 235 | Conservation |  |
| GES 355 | Earth's Changing Climate |  |
| PCRM 104 | Foundations in Sustainability |  |
| Social Responsibility |  |  |
| ENGL 410 | Literature of the Environment |  |
| GES 215 | Planning for Sustainable Communities |  |
| GES 324 | Environmental Law and Policy |  |
| GES 344 | Environmental Justice |  |
| HIST 445 | Americans and the Environment |  |
| INDP 401 | Applied Anthropology |  |
| NLPA 120 | Civic Engagement and Community Decision-Making |  |
| NLPA 320 | Community Change and Development |  |
| NLPA 325 | Social and Ethical Issues in Philanthropy and Fundraising |  |
| PHIL 324 | Environmental Ethics |  |
| PHIL 331 | Social and Political Philosophy |  |
| Economic Prosperity |  |  |
| $\begin{aligned} & \text { ECON } 315 \\ & \text { or BUSA } 315 \end{aligned}$ | Economics of Sustainable Development Economics of Sustainable Development |  |
| GES 305 | Environmental Economic Geography |  |
| HEMT 114 | Sustainability in Food and Hospitality |  |
| HEMT 210 | Contemporary Travel and Tourism |  |
| HEMT 314 | Sustainable Planning for Tourism |  |

$\left.\left.\begin{array}{|cl|}\hline \text { BUSA 370 } & \begin{array}{l}\text { Sustainable Entrepreneurship and } \\ \text { Innovation }\end{array} \\ \hline \text { or MGMT 370 } & \text { Sustainable Entrepreneurship and Innovation }\end{array}\right] \begin{array}{|l|l|}\hline \text { BUSA 459 } & \text { Sustainable Business Consulting } \\ \text { or MGMT 459 } & \text { Sustainable Business Consulting }\end{array}\right]$

1 Only two of the four courses can be from the same academic discipline.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
CERTIFICATE IN SUSTAINABILITY (614C)
This program is effective as of Spring 2016.
Revised 11-2019
UCC 3.26.2019

## Mathematics \& Statistics

| Chair | Secretary | Location | Department <br> Phone |
| :--- | :--- | :--- | :--- |
| Dr. Richard | Liz Moyer | 200 Vincent <br> Marchand |  |

Department Web Site URL (https://www.sru.edu/academics/colleges-and-departments/ches/departments/mathematics-and-statistics/) Department Fact Sheet URL (https://www.sru.edu/documents/programs/ factsheets/undergraduate/math-fs.pdf)

## Faculty

James Anthony
Instructor
Mathematics \& Statistics
M.A., Penn State University
B.S., Lock Haven University

## Jana Asher

Assistant Professor
Mathematics \& Statistics
Ph.D., Carnegie Mellon University
M.S., Carnegie Mellon University
B.A., Wellesley College

## Assistant Professor

Mathematics \& Statistics
Ph.D., University of Maryland College Park
B.A., St. Mary's College of Maryland

## Boris Brimkov

Assistant Professor
Mathematics \& Statistics
Ph.D., Rice University
M.A., Rice University
B.S., State University of New York at Buffalo

## Walter Elder

Instructor
Mathematics \& Statistics
M.A., University of Pittsburgh
B.S., University of Pittsburgh

## Stephen Galloway

Instructor
Mathematics \& Statistics

## Amanda Goodrick

Instructor
Mathematics \& Statistics
M.S.M., Youngstown State University
B.S., Slippery Rock University

## Rachele Graham

Instructor
Mathematics \& Statistics

## Woosuk Kim

Associate Professor
Mathematics \& Statistics
Ph.D., University of Cincinnati
M.S., University of Cincinnati
M.S., Texas A \&M University
B.S., Pusan National University Institution Korea

## Richard Marchand

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## Kirk McDermott

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Ph.D., Oregon State University
M.S., Oregon State University
B.A., Earlman College

## J Lyn Miller

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## Jeffrey Musyt

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Ph.D., University of Oregon
M.S., University of Oregon

## B.S., University of Scranton

## Dilrukshika Singhabahu

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B.S., Slippery Rock University

## Shukhrat Usmanov

Instructor
Mathematics \& Statistics
Ph.D., N. Dakota State University
M.S., Natl University of Uzbekistan
B.S., Natl University of Uzbekistan

## Programs

All first-year students who enter SRU in the Summer and Fall terms of 2019 and after will follow Rock Studies. Students who entered SRU before Spring 2019 will follow Liberal Studies. All new transfer students beginning Summer 2019 and after will follow Liberal Studies. We anticipate that transfer students will begin to enter under Rock Studies during the Summer/Fall term of 2021.

## Majors

- Mathematics, Bachelor of Science (BS) (p. 529)
- Mathematics/Secondary School Mathematics Minor, Teacher Certification (p. 533)


## Minors

- Actuarial Science, Minor (p. 527)
- Elementary School Mathematics, Minor (p. 528)
- Mathematics, Minor (p. 532)
- Middle School Mathematics, Minor (p. 535)
- Secondary School Mathematics, Minor (p. 536)
- Statistics, Minor (p. 536)


## Courses

## MATH Courses

## MATH 113-Mathematics as a Liberal Art

A cultural enrichment course, which introduces topics and applications from different branches of mathematics.
Prerequisites: (ACSD $110^{\circ}$ or ESAP $110^{\circ}$ ) or minimum score of 470 in 'SAT MATH SECTION SCORE' or minimum score of 17 in 'ACT Math' or minimum score of Y in 'WAIVE ACSD1 10 W HIGHER MATH'
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Every Term

## MATH 115 - Financial Mathematics

Methods of solving problems arising from the growth of money through simple and compound interest. Savings accounts, loans, financing, mortgages, depreciation, bonds, pensions and life insurance are included.
Prerequisites: ACSD $110^{\circ}$ or minimum score of 470 in 'SAT MATH
SECTION SCORE' or minimum score of 17 in 'ACT Math'
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): Innovation, Entrepreneurship, and Positive Change, Transfer Thread Completion Course

MATH 117 - Quantitative Reasoning
Quantitative reasoning is the application of basic mathematical skills to the analysis and interpretation of real-world quantitative information to draw conclusions that are relevant to people in their daily lives. In this course, students will explore various quantitative models and their interpretations in a way that emphasizes mathematical and statistical reasoning skills. Conceptual understanding will be stressed over manipulative skills. Students will learn to create sophisticated arguments supported by quantitative evidence and clearly communicate them in a variety of formats (using words, tables, graphs, mathematical equations, etc.) as appropriate. Technology, such as spreadsheets, will also be used. This course satisfies the Quantitative Reasoning requirement in the Rock Studies Program. This course is graded A, B, C, NC.

Prerequisites: (ACSD $110^{\mathrm{C}}$ or ESAP $110^{\circ}$ ) or minimum score of 470 in 'SAT MATH SECTION SCORE' or minimum score of 17 in 'ACT Math' or minimum score of $Y$ in 'WAIVE ACSD1 10 W HIGHER MATH'
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
MATH 118 - Elementary Geometry
A survey of Euclidean geometry and related elementary geometrical concepts. This course is not appropriate for those planning to teach geometry at the secondary level, but would be an excellent choice for those who will be teaching mathematics in the elementary school.

Prerequisites: (ACSD $110^{C}$ or ESAP $110^{\circ}$ ) or minimum score of 470 in 'SAT MATH SECTION SCORE' or minimum score of 17 in 'ACT Math' or minimum score of $Y$ in 'WAIVE ACSD1 10 W HIGHER MATH'
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms Enrollment is limited to students with a program in Early Childhood Ed (PK-4), Early Childhood Educ-Int'I Ed, School Wellness Education, HealthPhysical Educ Teaching, Health and Physical Education, Early Child-Spec Ed-Intnl Ed, Early Child/Spec Ed(PK-4)PK-8), Sec Education-English(7-12), Sec Education-French ( $\mathrm{K}-12$ ), Mid Level-Engl\&Lang Arts (4-8), Mid Level-Mathematics (4-8), Mid Level-Social Studies (4-8), Middle LevelScience (4-8), Sec Ed-Social Stud-Hist (7-12), Secondary Educ-Spanish (K-12), Music Education (K-12), Music Educ-Voice (K-12), Music EducSaxophone ( $K-12$ ), Music Educ-Instrumental ( $K-12$ ), Music Educ-Piano (K-12), Elementary School Mathematics, Middle School Mathematics or Art With Certification (K-12).

## MATH 120 - Intermediate Algebra

Linear functions, equations, inequalities, polynomials, algebra of functions, rational exponents, quadratic equations and inequalities, systems of equations.
Prerequisites: (ACSD $110^{\circ}$ or ESAP $110^{\circ}$ ) or minimum score of 470 in 'SAT MATH SECTION SCORE' or minimum score of 17 in 'ACT Math' or minimum score of $Y$ in 'WAIVE ACSD1 10 W HIGHER MATH' or minimum score of 30 in 'ALEKS PPL Assessment'
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall, Spring, \& Summer

## MATH 122 - Finite Mathematics with Matrices

The algebra of matrices with applications in linear optimization, algebraic and graphical solutions.

Prerequisites: MATH $120^{\mathrm{D}}$ or MATH $199^{\mathrm{D}}$ or minimum score of 560 in 'SAT MATH SECTION SCORE' or minimum score of 23 in 'ACT Math' or minimum score of 60 in 'ALEKS PPL Assessment'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed

## MATH 123 - Introduction to Applied Calculus

The course is compatible with the background and interests of students not majoring in the physical sciences or mathematics. The theorem-proof approach of differential calculus is replaced with the explanation-example approach. The course includes an introduction to exponential and logarithmic functions, limits, derivatives, maxima/minima, and Lagrange multipliers, and applications from business, economics, and finance. Problem-solving with mathematical software will also be emphasized.
Prerequisites: MATH $120^{\mathrm{D}}$ or MATH $111^{\mathrm{D}}$ or MATH $199^{\mathrm{D}}$ or MATH $125^{\mathrm{D}}$ or minimum score of 560 in 'SAT MATH SECTION SCORE' or minimum score of 23 in 'ACT Math' or minimum score of 60 in 'ALEKS PPL Assessment'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed

## MATH 125 - Precalculus

A bridge between high school algebra and calculus involving polynomial, trigonometric, logarithmic, exponential functions, complex numbers, and the conic sections.

Prerequisites: MATH $120^{\mathrm{D}}$ or MATH $199^{\mathrm{D}}$ or minimum score of 560 in 'SAT MATH SECTION SCORE' or minimum score of 23 in 'ACT Math' or minimum score of 60 in 'ALEKS PPL Assessment'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 4
Term(s) Typically Offered: Offered Fall, Spring, \& Summer

## MATH 131 - Discrete Mathematics

This course begins the study of the language and concepts needed for higher-level mathematics. Students will learn principles of logic, focusing on logical forms, truth tables, and statement calculus. Students will analyze examples of and complete calculations involving sets, relations, and functions. Students will also receive an introduction to counting techniques and recursion. This course is not a proof-based course.
Prerequisites: MATH $125^{\mathrm{D}}$ or MATH $225^{\mathrm{D}}$ or MATH $230^{\mathrm{D}}$ or minimum score of 600 in 'SAT MATH SECTION SCORE' or minimum score of 25 in
'ACT Math' or minimum score of 75 in 'ALEKS PPL Assessment'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## MATH 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## MATH 180 - Introduction to Mathematical Software

An introduction to the appropriate use of mathematical software with emphasis on problem solving. Topics will include mathematical concepts from calculus, linear algebra, and differential equations.
Prerequisite: MATH 225 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 1
Term(s) Typically Offered: Offered as Needed

## MATH 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MATH 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## Credits: 1-6

Term(s) Typically Offered: Offered as Needed

## MATH 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MATH 210 - Elementary Mathematics I

This course is designed for future K-8 teachers to explore number systems (including definitions, operations, and properties of whole numbers and fractions), numeration systems, proportionality, algebraic thinking, and problem-solving. Emphasis is on conceptual understanding in addition to procedural skill.

Prerequisites: (ACSD $110^{\mathrm{D}}$ or ESAP $110^{\mathrm{D}}$ ) or minimum score of 470 in 'SAT MATH SECTION SCORE' or minimum score of 17 in 'ACT Math' or minimum score of Y in 'WAIVE ACSD1 10 W HIGHER MATH'
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1 may not enroll.
Enrollment is limited to students with a program in Early Childhood Ed
(PK-4), Early Childhood Educ-Int'I Ed, School Wellness Education, HealthPhysical Educ Teaching, Health and Physical Education, Early Child/ Spec Ed(PK-4)PK-8), Sec Education-English(7-12), Sec Education-French ( $\mathrm{K}-12$ ), Mid Level-Engl\&Lang Arts (4-8), Mid Level-Mathematics (4-8), Mid Level-Social Studies (4-8), Middle Level-Science (4-8), Sec Ed-Social Stud-Hist (7-12), Secondary Educ-Spanish ( $\mathrm{K}-12$ ), Special Education (PK-12), Music Education (K-12), Music Educ-Voice (K-12), Music EducSaxophone (K-12), Music Educ-Instrumental (K-12), Music Educ-Piano ( $\mathrm{K}-12$ ), Elementary School Mathematics, Middle School Mathematics or Art With Certification (K-12).

## MATH 225 - Calculus I

This course begins the study of calculus of functions of one variable. Students will study limits and continuity of real-valued functions. Students will explore the derivative as a rate of change and learn how to calculate derivatives of algebraic and transcendental functions. Applications of the derivative to various physical and other phenomena will be considered. This course also provides an introduction to Riemann integration.
Prerequisites: MATH $125^{\text {C }}$ or minimum score of 600 in 'SAT MATH SECTION SCORE' or minimum score of 25 in 'ACT Math' or minimum score of 75 in 'ALEKS PPL Assessment'
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 4
Term(s) Typically Offered: Offered Fall, Spring, \& Summer

## MATH 230 - Calculus II

This course continues the study of calculus of real-valued functions of one variable. Students will learn various techniques of evaluating antiderivatives and approximating definite integrals. These integrals will be used in various applications such as calculating areas and volumes, arc length, work, and solving simple first-order differential equations. Parametric and polar equations and their differential and integral calculus are also considered. Students will also investigate sequences and series, their convergence properties, and the use of power series to represent functions.

Prerequisite: MATH $225^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 4
Term(s) Typically Offered: Offered Fall, Spring, \& Summer

## MATH 231 - Calculus III

This course continues the study of calculus with the study of functions of several variables. Students will learn about the geometry of twoand three-dimensional space, vector-valued functions, and functions of several variables. Students will investigate these functions with partial derivatives and multiple integration. Vector calculus topics such as Green's, Stokes, and the Divergence Theorems will be covered. Computer software such as Mathematica will be used in problem solving in this course.

Prerequisite: MATH $230^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 4
Term(s) Typically Offered: Offered Fall \& Spring Terms

## MATH 235 - Foundations of Mathematical Proof

This course provides a foundation for writing mathematical proofs. Students will work with common proof techniques such as direct proof, proof by contrapositive, proof by contradiction, and proof by induction, along with the logical bases supporting them. In developing their proof-writing skills, students will work with foundational mathematical concepts such as basic set theory, relations between sets, and functions.

## Prerequisites: MATH $225^{\text {D }}$ and MATH $131^{\text {D }}$

${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## MATH 240 - Linear Algebra and Differential Equations

Computational aspects of matrices, determinants, systems of linear equations, vector spaces, linear dependence, Wronskian, characteristic values, elementary differential equations, separable and exact equations, linear differential equations with constant coefficients.
Prerequisite: MATH $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## MATH 280 - Theory of Interest

A rigorous, calculus based treatment of the Theory of Interest, including simple and compound interest, annuities, bonds, yield rates, amortization schedules and sinking funds, yield curves, and practical applications. This course is intended to prepare students for the Society of Actuaries examination on the theory of interest.

Prerequisite: MATH $230^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D . Credits: 3
Term(s) Typically Offered: Offered Spring Terms

## MATH 281 - Actuarial Exam Preparation I

The purpose of this course is to prepare students for The Society of Actuaries" (SOA) first professional examination. Topics will be selected from the SOA syllabus which currently includes general probability theory, univariate and multivariate probability distributions (discrete and continuous), applications involving insurance and risk analysis, and supporting topics from Calculus.

Credits: 1
Term(s) Typically Offered: Offered as Needed

## MATH 282 - Actuarial Exam Preparation II

The purpose of this course is to prepare students for The Society of Actuaries" (SOA) second professional examination. Topics will be selected from the SOA syllabus which currently includes time value of money, yield rates, methods of loan repayment, annuities, asset/liability management, immunization, duration, convexity, bonds, stocks, mutual funds, capital budgeting, short sales, spot and forward rates, options, derivatives, futures, and arbitrage.
Prerequisite: MATH $280^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered as Needed
MATH 290 - Experimental
A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MATH 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## MATH 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MATH 301 - Differential Equations I

First and second order differential equations, existence and uniqueness theorems, Laplace transforms, systems of linear ordinary differential equations.

Prerequisite: MATH $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 302 - Differential Equations II

A continuation of MATH 301. Series solutions of ordinary differential equations, non-linear systems and stability, partial differential equations.

Prerequisite: MATH $301{ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## MATH 304 - Geometric Structures

Finite and infinite axiomatic systems, including Euclidean and projective geometrics.

Prerequisite: MATH $235^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 309- Linear Algebra

Matrices and systems of linear equations, determinants, vector spaces, linear transformations, linear dependence, eigenvalues and eigenvectors.
Prerequisite: MATH $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 310 - Elementary Mathematics II

This course is designed for future K-8 teachers to continue to explore number systems (including definitions, operations, and properties of integers, rational and real numbers), descriptive statistics, basic probability, and measurement and related geometry. Emphasis is on conceptual understanding in addition to procedural skill.

Prerequisite: MATH $210^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Early Childhood Ed (PK-4), Early Childhood Educ-Int'I Ed, School Wellness Education, HealthPhysical Educ Teaching, Health and Physical Education, Early Child/ Spec Ed(PK-4)PK-8), Sec Education-English(7-12), Sec Education-French (K-12), Mid Level-Engl\&Lang Arts (4-8), Mid Level-Mathematics (4-8), Mid Level-Social Studies (4-8), Middle Level-Science (4-8), Sec Ed-Social Stud-Hist (7-12), Secondary Educ-Spanish (K-12), Special Education (PK-12), Music Education (K-12), Music Educ-Voice (K-12), Music EducSaxophone (K-12), Music Educ-Instrumental (K-12), Music Educ-Piano (K-12), Elementary School Mathematics, Middle School Mathematics or Art With Certification (K-12).
MATH 311 - Deterministic Models of Operations Research
Topics include deterministic methods in operations research. Linear programming, duality, integer programming, dynamic programming, nonlinear programming, inventory theory, transportation and assignment and network theory.

Prerequisites: MATH $231^{\text {C }}$ or MATH $240^{\text {C }}$ or (MATH $122^{\text {C }}$ and
MATH 230 ${ }^{\text {C }}$ )
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## MATH 312 - Stochastic Models of Operations Research

Decision making under uncertainty. Probability, Markov Chains, Poisson
processes, Survival Analysis, Queueing Systems, Random Walk,
Branching.
Prerequisites: MATH $231^{\text {C }}$ or MATH $240^{\text {C }}$ or (MATH $122^{\text {C }}$ and
MATH $230^{\circ}$ )
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 313 - Introductory Analysis I

This course begins the rigorous mathematical study of the real numbers. Topics include cardinality of sets; sequences of real numbers; completeness of the real numbers; topology of the real line including open sets, closed sets, and compact sets; and continuous, real-valued functions. Students will be expected to communicate using mathematical proofs throughout the course.

Prerequisites: MATH $231^{\text {C }}$ and MATH $235^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 314 - Introductory Analysis II

This course continues the rigorous mathematical treatment of the real numbers that begins in MATH 313. The concepts of differentiation and Riemann integration of real-valued functions on the real line from calculus are explored and made rigorous. Additionally, series of functions are explored, including convergence (pointwise and uniform) and Taylor series. Students will be expected to communicate using mathematical proofs throughout the course.

Prerequisite: MATH $313{ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 315 - Numerical Mathematics

The mathematics of computation and approximation, interpolation, calculating the roots of equations, curve fitting linear systems, numerical differentiation and integration and error analysis.

Prerequisites: MATH $240^{\text {D }}$ or MATH $230^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## MATH 316 - Advanced Methods of Operations Research

Topics include Brownian motion, stationary processes, weak convergence of stochastic processes, regenerative phenomena, random walks, simulations.

Prerequisite: MATH $312^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 317 - Complex Variables

Complex numbers, analytic functions, complex integration, convergence of sequences and series, and applications.

Prerequisite: MATH $231{ }^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 320- Theory of Numbers

A study of the properties of natural numbers and number theoretic functions.

Prerequisite: MATH $235^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 325 - Abstract Algebra I

An introduction to groups. Topics include integers mod $n$, cyclic groups, permutation groups, normal subgroups, isomorphisms, finite Abelian groups.

Prerequisite: MATH $235^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 326 - Abstract Algebra II

An introduction to rings. Topics include integral domains, fields, polynomial rings.
Prerequisite: MATH $325^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 331 - Mathematical Methods of Physics

Applications in physical science and engineering of the following: vector analysis, complex variables, Fourier and Laplace transforms, linear algebra, and some boundary value problems. Cross-linked as PHYS 331. This course may be counted as a physics course or as a mathematics course, but not both.

Prerequisites: PHYS $211^{\mathrm{D}}$ and MATH $240^{\mathrm{D}}$ and MATH $231^{* D}$ (may be taken concurrently).
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 335 - Mathematical Modeling

A general introduction to mathematical modeling involving optimization, dynamic and probabilistic models. Specific topics selected from dimensional analysis, optimization techniques, continuous and discrete modeling, stability analysis, linearization, eigenvalue methods, qualitative analysis, Markov chains, regression models, simulation techniques, and others as time permits.
Prerequisite: MATH $231^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 403 - Elementary Topology

Topological properties of the real line.
Prerequisites: MATH $309^{\mathrm{D}}$ and MATH $313^{\mathrm{D}}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## MATH 406 - Intermediate Analysis

Selected topics.
Prerequisite: MATH $314^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## MATH 411 - Partial Differential Equations

This course in partial differential equations has wide-ranging applications in a variety of fields such as engineering and physics. Topics include first order equations and the method of characteristics; an introduction to Fourier series; second order equations including the heat, wave, and Laplace equations; numerical methods for computing solutions; conservation laws.

Prerequisites: MATH $231^{\text {C }}$ and MATH $301^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 482 - Actuarial Mathematics

Interest rate models, including the Vasicek and Cox-Ingersoll-Ross bond price models, rational valuation of derivative securities, simulation and risk management techniques.
Prerequisites: MATH $231^{\mathrm{D}}$ and MATH $280^{\mathrm{D}}$ and (MATH $353^{\mathrm{D}}$ or STAT $353^{\text {D }}$ )
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 484 - Life Contingencies

An introduction to survival models, individual life insurance and life annuities including determining premiums and reserves using a stochastic approach. It will include multiple life theory, binomial models, geometric Brownian motion and simulation in option pricing. It will develop a theoretical basis of contingent payment models and the application of those models to insurance risk.

Prerequisites: MATH $231^{\mathrm{D}}$ and MATH $280^{\mathrm{D}}$ and MATH $353^{\mathrm{D}}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## MATH 490 - Independent Study

Supervised study in advanced area. Prerequisites: Two 300-level mathematics courses, a 3.000 QPA in major, permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 491 - Mathematics Seminar

Designed to broaden the students' backgrounds by investigating topics in mathematics not usually taught in the regular curriculum. Students may elect to take course up to three times.

Prerequisite: MATH $235^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## Credits: 1-6

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## STAT Courses

## STAT 124 - Introduction to Survey Methods

Introduction to Survey Methods: A 100 level course that introduces students to aspects of how surveys work. Students learn about he design, and interpretation of survey data. A range of survey strategies (e.g., telephone, face-to-face, mail and internet surveys) within the broader context of a research or evaluation project are introduced. topics include formulation of research goals, developing an appropriate questionnaire design, protection of human subjects and proper conduct of research, sample size calculation and sample design, survey administration, construction of a survey report including basic data analysis techniques, and presentation of the results of a survey. Class topics are designed to convey practical knowledge of survey design.

Prerequisite: ACSD $110^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed

## STAT 139-University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## STAT 152 - Elementary Statistics I

This is a course about how data inform every aspect of our lives. This course focuses on what data are collected, how they are collected, how they are summarized and interpreted, and how possible error in those data is quantified and understood. In this class, we will learn about ways in which statistics are used by businesses, governmental agencies, researchers, and practitioners to understand our world. Topics covered include descriptive statistics, bivariate and multivariate data, elementary probability, random variables, normal and binomial probability distributions, Central Limit Theorem, confidence intervals, hypothesis testing, and simple linear regression.

Prerequisites: (ACSD $110^{\circ}$ or ESAP $110^{\circ}$ ) or minimum score of 470 in 'SAT MATH SECTION SCORE' or minimum score of 17 in 'ACT Math' or minimum score of $Y$ in 'WAIVE ACSD1 10 W HIGHER MATH'
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): 21 st Century Healthcare, Transfer Thread Completion Course

## STAT 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## STAT 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## STAT 198-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## STAT 252 - Introduction to Statistical Modeling

What do we mean when we talk about "statistical modeling"? How can statistical models be used to provide evidence for scientific or social theories? In this course, we begin by reviewing hypothesis testing and learn how hypothesis testing is applied in a wide variety of statistical contexts. We then move on to the workhouse of statistical modeling, linear regression, and learn the complex methods used to determine the validity of regression models. We then touch on analysis of variance models, polynomial regression, and time series. R will be used for data analysis, but no prior knowledge of $R$ is assumed.

Prerequisites: STAT $152^{\mathrm{D}}$ and ENGL $102^{\mathrm{D}}$ and (MATH $123^{\mathrm{D}}$ or MATH $125^{\mathrm{D}}$ or MATH $225^{\text {D }}$ )
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Fall Terms

## STAT 254 - Nonparametric Statistics

Statistical models in nonparametric settings. Theory and practice using techniques requiring less restrictive assumptions about the distribution of the data. Nonparametric analogues of $t$ - and $F$-tests in one and two sample settings, ANOVA, regression and correlation will be discussed.
Prerequisites: MATH $125^{\text {D }}$ and (MATH $153^{\text {D }}$ or STAT $153^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed

## STAT 256 - Statistical Computing

Statistical computing considers how data are processed and analyzed, and how statistical models are simulated, in a computational setting. The current landscape of the statistical computing community will be explored, including common statistical software, proprietary versus opensource statistical languages, and how statistical software packages are tailored for specific uses. Computationally intense statistical techniques will be discussed and programmed. At least one proprietary and one open-source statistical computing environment will be learned. Students will learn how to combine the functionality of different statistical packages to create and present a data analysis optimally. Prior experience with computer programming highly recommended.

Prerequisite: STAT $252^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms

## STAT 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## STAT 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## STAT 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## STAT 325 - Advanced Statistical Methods

Statistics is used in computer algorithms (machine learning) to enhance computer discision-making and prediction capabilities. this course will cover a wide variety of topics in statistical learning methods. Major statistical methods used in machine learning such as linear regression, survival analysis and others will be discussed. Additional topics include unsupervised learning and supervised techniques such as principal component analysis, nearest neighbor, random forest, support vector machines and neural networks. simulation methods, such as the EM algorithm, Metropolis-Hasting algorithm and the Markov Chain Monte Carlo method will also be discussed.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Enrollment is limited to Graduate level students.

## STAT 350 - Applied Statistics

A calculus-based introduction to probability and statistical applications. Discrete and continuous probability and expected value. Confidence intervals and hypothesis testing for single populations. This course is not open to students who have credit for MATH 352. This course does not count as an upper division elective mathematics course for mathematics majors.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## STAT 352 - Mathematical Statistics I

An introduction to the mathematical foundations of probability theory including discrete and continuous probability distributions, random variables, mathematical expectation, momentuo, and moment generating functions.

Prerequisite: MATH $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## STAT 353 - Mathematical Statistics II

Functions of random variables, sampling distributions, introduction to mathematical theory of statistical inference, including methods of moments, estimators, maximum likelihood estimators, sufficient statistics, interval estimates, and hypothesis testing.

Prerequisites: MATH $352^{\mathrm{D}}$ or STAT $352^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## STAT 354 - Mathematical Statistics III

Stochastic processes and statistical inference including: Type I and Type II errors, MLE, Neyman-Pearson lemma, order statistics, Poisson processes, ANOVA, nonparametric tests, comparing models and Bayesian parameter estimation.

Prerequisites: MATH $231^{\mathrm{D}}$ and (MATH $353^{\mathrm{D}}$ or STAT $353^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## STAT 363 - Statistical Learning

The field of statistical learning encompasses the theory and data analytic techniques developed to process and make sense of evolving data challenges arising in the fields of data science and machine learning. This course will cover the theoretical underpinnings of supervised and unsupervised learning techniques, including generalized linear models, classification, dimension reduction, and cluster analysis. R and R -studio will be used for illustrative purposes. A working knowledge of linear algebra and multivariate calculus is assumed. Previous experience suing $R$ software package is also assumed.

Prerequisites: MATH $309^{\text {D }}$ and MATH $231^{\text {D }}$ and STAT $252^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## STAT 372 - Forecasting \& Time Series

An introduction to creating, solving, analyzing and interpreting realworld time-series and forecasting models. Topics include linear, autoregressive, moving average and other forecasting and time-series techniques, transfer functions, multivariate model building, stationary an d nonstationary techniques. Applications may include all areas where forecasting is required including transportation, finance, scheduling, networks and supply chains. Appropriate software tools for analyzing forecasting models including software such as SAS and spreadsheet software will be taught.

Prerequisites: MATH $252^{\text {C }}$ or STAT $252^{C}$ or MATH $350^{\circ}$ or STAT $350^{\circ}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## STAT 373-Statistical Quality Control

A comprehensive coverage of modern quality control techniques including the design of statistical process control systems, acceptance sampling and process improvement.

Prerequisites: MATH $230^{\circ}$ and (STAT $252^{\text {C }}$ or STAT $311^{\text {C }}$ )
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## STAT 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## STAT 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## STAT 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## STAT 490 - Independent Study

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## STAT 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## STAT 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Actuarial Science, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Actuarial Science, Minor Program Page (https://www.sru.edu/ academics/majors-and-minors/actuarial-studies-minor/)

Mathematics and Statistics Department Page (https://www.sru.edu/ academics/colleges-and-departments/ches/departments/mathematics-and-statistics/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 9 credit hours of MATH/STAT in their minor from SRU
- Students enrolled in both the Minor in Actuarial Science and Minor in Statistics must complete at least 9 credits in each of these minors that are NOT being counted in the other.
- Mathematics majors must choose at least 15 credit hours in this minor distinct from those being counted toward the major.
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.
- Note: VEE Credit - complete requirements for Society of Actuaries VEE credit in at least two areas. Students must earn a 'B' or better in each course in the VEE areas in order to earn the credit.
- VEE Areas:
- Mathematical Statistics: STAT 352 and STAT 353
- Accounting and Finance: FIN 320 and ACCT 209
- Economics: ECON 201/ECON 202 sequence or ECON 301/ECON 302 sequence

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses for Minor in Actuarial Studies |  |  |
| MATH 280 | Theory of Interest | 3 |
| STAT 352 | Mathematical Statistics I | 3 |
| STAT 353 | Mathematical Statistics II | 3 |

Required Courses for Non-Mathematics Majors
Math majors may not count these course in the Actuarial Studies
Minor

| MATH 225 | Calculus I | 4 |
| :--- | :--- | :--- |
| MATH 230 | Calculus II | 4 |

## Electives

Select courses from below to reach 24 credits total for this minor. 7-15 1

| ACCT 209 | Financial Accounting |
| :--- | :--- |
| ACCT 210 | Managerial Accounting |
| CPSC 323 | Fundamentals of Database Systems |
| CPSC 358 | Simulation |
| ECON 201 | Principles of Macroeconomics |
| ECON 202 | Principles of Microeconomics |
| ECON 301 | Macroeconomic Analysis |
| ECON 302 | Microeconomic Analysis |


| ECON 312 | Critical Choices in Health Care Policy |
| :--- | :--- |
| ECON 318 | Intermediate Statistical Analysis |
| ENGL 205 | Introduction to Professional Writing |
| FIN 320 | Managerial Finance |
| FIN 321 | Investments |
| FIN 323 | Financial Markets and Institutions |
| FIN 326 | Intermediate Corporate Finance |
| FIN 329 | Principles of Insurance |
| MATH 231 | Calculus III |
| MATH 311 | Deterministic Models of Operations |
| MATH 315 | Research |
| MATH 335 | Matherical Mathematics |
| MATH 482 | Actuarial Mathematics |
| MATH 484 | Life Contingencies |
| STAT 252 | Introduction to Statistical Modeling |
| STAT 254 | Nonparametric Statistics |
| STAT 256 | Statistical Computing |
| STAT 354 | Mathematical Statistics III |
| STAT 363 | Statistical Learning |

Total Hours
1 - ACCT 209, ACCT 210, ECON 201, ECON 202 may not be used by students from the School of Business

- MATH 231 may not be used by Math majors
* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Minor in Actuarial Science (52H)
This program is effective as of Fall 2021
Revised 07.27.2021
UCC 10.13.2020

## Elementary School Mathematics, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Elementary School Mathematics, Minor Program Page (https:// www.sru.edu/academics/majors-and-minors/elementary-school-mathminor/)

Mathematics and Statistics Department Page (https://www.sru.edu/ academics/colleges-and-departments/ches/departments/mathematics-and-statistics/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 9 credit hours of MATH/STAT in their minor from SRU
- Students enrolled in both the Minor in Middle School Mathematics and the Minor in Elementary School Mathematics must complete at least 9 credits in each of these minors that are NOT being counted in the other.
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.
- ELEC 340 has an off-campus field component and requires appropriate teacher clearances. Contact the instructor before enrolling in ELEC 340.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Mathematics Courses |  |  |
| MATH 118 | Elementary Geometry | 3 |
| MATH 210 | Elementary Mathematics I | 3 |
| MATH 310 | Elementary Mathematics II | 3 |
| ELEC 340 | Mathematics Methods and Strategies for PRE K-4 Teachers | 3 |
| Additional Courses |  |  |
| Select three courses of the following: |  | 9 |
| MATH 113 | Mathematics as a Liberal Art |  |
| MATH 117 | Quantitative Reasoning |  |
| MATH 122 | Finite Mathematics with Matrices |  |
| MATH 125 | Precalculus |  |
| MATH 131 | Discrete Mathematics |  |
| STAT 124 | Introduction to Survey Methods |  |
| STAT 152 | Elementary Statistics I |  |
| STAT 252 | Introduction to Statistical Modeling |  |

Total Hours

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

Minor in Elementary School Math (52B)
This program is effective as of Fall 2021
Revised 03.05.2021
UCC 10.13.2020

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum
categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## Mathematics, Bachelor of Science (BS)

Students seeking state certification in secondary education must also complete requirements for a Master of Education degree, a oneyear program at SRU. All of our programs are designed to steadily develop the quantitative, deductive and inductive reasoning skills that mathematicians must have.

## Program Learning Outcomes

- Students graduating with a degree in Mathematics will:
- Use mathematics knowledge to solve theoretical and applied problems.
- Apply rigorous deductive reasoning to prove mathematics results.
- Use technology to perform and interpret mathematics analyses.
- Communicate mathematics knowledge to both expert and nontechnical audiences.
- Demonstrate professional integrity and accountability in the use and communication of mathematics


## Related Links

Mathematics, BS Program Page (https://www.sru.edu/academics/ majors-and-minors/mathematics/)

Mathematics and Statistics Department Page (https://www.sru.edu/ academics/colleges-and-departments/ches/departments/mathematics-and-statistics/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

Code Title Hours

Rock Studies Requirements 45
Basic Math Requirement 0-3
$\begin{array}{ll}\text { Computer Competency } & 0-3\end{array}$
Major Requirements 60
Natural Science \& Math College-Wide Requirements (included in 12
Rock Studies)
Electives15

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 225 | Calculus I | 4 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 16 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Sciences Inquiry |  |  |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
| Physical Sciences Inquiry |  |  |
| PHYS 211 or PHYS 216 | General Physics I with Lab University Physics 1 with Lab | 4 |
| Subtotal |  | 17 |
| Thematic Thread |  |  |
| Select 12 Credits (p.1378) ${ }^{2}$ |  | 12 |
| Total Hours |  | 45 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning |  |

## Computer Competency

| Code | Title | Hours |
| :--- | :--- | ---: |
| Demonstrate "computer competency" by one of the following: | $0-3$ |  |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary <br> institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |


| CPSC 130 | Introduction to Computing and <br> Programming |
| :--- | :--- |
| PE 202 | Technology for Wellness |


| Code | Title | Hours |
| :---: | :---: | :---: |
| Mathematics Core Courses |  |  |
| MATH 131 | Discrete Mathematics ${ }^{1,2}$ | 3 |
| MATH 230 | Calculus II ${ }^{1,2}$ | 4 |
| MATH 235 | Foundations of Mathematical Proof 1,2 | 3 |
| MATH 231 | Calculus III ${ }^{1}$ | 4 |
| MATH 301 | Differential Equations ${ }^{1}$ | 3 |
| MATH 309 | Linear Algebra ${ }^{1}$ | 3 |
| MATH 313 | Introductory Analysis ${ }^{1}$ | 3 |
| MATH 325 | Abstract Algebra ${ }^{1}$ | 3 |
| STAT 352 | Mathematical Statistics I ${ }^{1}$ | 3 |
| MATH 491 | Mathematics Seminar ${ }^{1}$ | 1 |
| Subtotal |  | 30 |

## Required Electives

Choose five additional MATH/STAT courses ${ }^{3} 15$
Subtotal 15
Mathematics Sequences
Two sequences are required - credits earned from these courses will be applied to above requirements.
Select two of the following sequences:
One sequence must include MATH 313 \& MATH 314 or
MATH 325 \& MATH 326

| MATH 301 <br> \& MATH 302 | Differential Equations I and Differential Equations $\\|^{1}$ |
| :---: | :---: |
| MATH 301 \& MATH 411 | Differential Equations I and Partial Differential Equations ${ }^{1}$ |
| MATH 311 <br> \& MATH 312 | Deterministic Models of Operations Research and Stochastic Models of Operations Research ${ }^{1}$ |
| MATH 313 <br> \& MATH 314 | Introductory Analysis I and Introductory Analysis II ${ }^{1}$ |
| MATH 325 <br> \& MATH 326 | Abstract Algebra I and Abstract Algebra II ${ }^{1}$ |
| STAT 352 <br> \& STAT 353 | Mathematical Statistics I and Mathematical Statistics II ${ }^{1}$ |

## Approved Minors

Select at least one of the following minors: ${ }^{4} 15$
Actuarial Science (p. 527)
Biology (p. 358)
Chemistry (p. 401)
Computing (p. 425)
Environmental Science (p. 502)
Geology (p. 515)

| Geophysics (p. 516) |
| :--- |
| Meteorology (p. 516) |
| Philosophy (p. 1014) |
| Physics (p. 625) |
| Psychology (p. 673) |
| Public Health (p. 707) |
| Secondary School Mathematics (p. 536) |
| Statistics (p. 536) |

Total Hours 60
1 Course counts for $50 \%$ of Major requirements and Major GPA
2 Minimum grade of C required to register for 300-400 level math
3 At most one at 200 level, other 300 level or above (except MATH 210, MATH 225, MATH 310, STAT 350)
4 Must compete at least 15 credits distinct from courses selected above (MATH 225 will not count as a distinct course).

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

| Natural Science and Math College-Wide Requirements |  |  |
| :--- | :--- | ---: |
| Code | Title | Hours |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| MATH 225 | Calculus I | 4 |
| PHYS 211 | General Physics I with Lab | 4 |
| or PHYS 216 | University Physics 1 with Lab |  |
| Total Hours |  | $\mathbf{1 2}$ |

## Computer Programming Language

Code Title
Competency in an approved Computer Programming Language is Required - See Advisor Approval
CPSC

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MATHEMATICS - BS (6152)
This program is effective as of Fall 2019.
Revised 09.14.2021
UCC 09.07.2021

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| MATH 225 | Calculus I | 4 |
| STAT 152 | Elementary Statistics I | 3 |
| PHIL 113 | Formal Logic | 3 |
| General Education Elective |  | 3 |
| INDS 101 | FYRST Seminar | 1 |
|  | Hours | 14 |
| Spring |  |  |
| MATH 230 | Calculus II | 4 |
| MATH 131 | Discrete Mathematics | 3 |
| PHYS 211 | General Physics I with Lab | 4 |
| CPSC 146 | Programming Principles | 3 |
|  | Hours | 14 |
| Second Year |  |  |
| Fall |  |  |
| MATH 231 | Calculus III | 4 |
| STAT 352 | Mathematical Statistics I | 3 |
| CHEM 107 <br> \& CHEM 11 | General Chemistry I and General Chemistry I Lab | 4 |
| General Education Elective |  | 3 |
| General Education Elective |  | 3 |
|  | Hours | 17 |
| Spring |  |  |
| MATH 235 | Foundations of Mathematical Proof | 3 |
| MATH 301 | Differential Equations I | 3 |
| 200/300 level MATH/STAT elective |  | 3 |
| General Education Elective |  | 3 |
| General Education Elective |  | 3 |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| MATH 313 | Introductory Analysis I | 3 |
| MATH 309 | Linear Algebra | 3 |
| General Education Elective |  | 3 |
| General Education Elective |  | 3 |
| Elective |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| MATH 325 | Abstract Algebra I | 3 |
| 300 level MATH elective |  | 3 |
| General Education Elective |  | 3 |
| General Education Elective |  | 3 |
| Elective |  | 3 |
|  | Hours | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| 300 level MATH elective |  | 3 |
| 300 level MATH elective |  | 3 |
| General Education Elective |  | 3 |


| General Education Elective | 3 |  |
| :--- | ---: | ---: |
| Elective |  | 3 |
|  | Hours | $\mathbf{1 5}$ |
| Spring |  |  |
| 300 level MATH elective | 3 |  |
| MATH 491 | Mathematics Seminar | $\mathbf{1}$ |
| Elective |  | 3 |
| Elective |  | 3 |
| Elective |  | $\mathbf{3}$ |
|  | Hours | $\mathbf{1 3}$ |
|  | Total Hours** | $\mathbf{1 1 8}$ |

* Students are encouraged to take INDS 101 as a Free Elective.

Major Code: 6152
Revised date: 9-2019
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Mathematics, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Mathematics, Minor Program Page (https://www.sru.edu/academics/ majors-and-minors/mathematics/)

Mathematics and Statistics Department Page (https://www.sru.edu/ academics/colleges-and-departments/ches/departments/mathematics-and-statistics/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 9 credit hours of MATH/STAT in their minor from SRU
- Students enrolled in both the Minor in Mathematics and the Minor in Statistics must complete at least 9 credits in each of these minors that are NOT being counted in the other.
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

| Additional Courses <br> Select three of the following: <br> MATH 131 | Discrete Mathematics |
| :--- | :--- |
| MATH 235 | Foundations of Mathematical Proof |
| MATH 240 | Linear Algebra and Differential Equations ${ }^{1}$ |
| MATH 301 | Differential Equations I |
| MATH 302 | Differential Equations II |
| MATH 304 | Geometric Structures |
| MATH 309 | Linear Algebra 1 |
| MATH 311 | Deterministic Models of Operations |
| MATH 312 | Research |
| MATH 313 | Introchastic Models of Operations Research Analysis I |
| MATH 314 | Introductory Analysis II |
| MATH 315 | Numerical Mathematics |
| MATH 317 | Complex Variables |
| MATH 320 | Theory of Numbers |
| MATH 325 | Abstract Algebra I |
| MATH 326 | Abstract Algebra II |
| MATH 331 | Mathematical Methods of Physics ${ }^{2}$ |
| MATH 335 | Mathematical Modeling |
| MATH 411 | Partial Differential Equations |
| STAT 350 | Applied Statistics |
| STAT 352 | Mathematical Statistics I |
| STAT 353 | Mathematical Statistics II |

Total Hours
1 Indicates that students may count at most one of MATH 240 or MATH 309 in this minor.
2 In all students' programs, MATH 331 may be counted as a mathematics course or as a physics course, but not both.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Minor in Mathematics (52A)
This program is effective as of Fall 2020
Revised 10.23.20

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Mathematics Courses |  |  |
| MATH 225 | Calculus I | 4 |
| MATH 230 | Calculus II | 4 |
| MATH 231 | Calculus III | 4 |

# Mathematics/Secondary School Mathematics Minor, Teacher Certification 

## Requirements for the Certification

Secondary teacher certification in some fields is earned through the master of education degree at Slippery Rock University. Students seeking secondary school teaching certification in mathematics must earn a bachelor of arts or a bachelor of science degree in mathematics and contact the Department of Secondary Education/Foundations of Education concerning its graduate program in education. Information about this program, including prerequisites for admission, may be obtained from the secondary education/foundations of education office in 114 McKay Education Building.

## Program Learning Outcomes

- Students graduating with a degree in Mathematics will:
- Use mathematics knowledge to solve theoretical and applied problems.
- Apply rigorous deductive reasoning to prove mathematics results.
- Use technology to perform and interpret mathematics analyses.
- Communicate mathematics knowledge to both expert and nontechnical audiences.
- Demonstrate professional integrity and accountability in the use and communication of mathematics


## Related Links

Middle Level Education - Mathematics Program Page (https:// www.sru.edu/academics/majors-and-minors/middle-level-educationmathematics/)

Mathematics and Statistics Department Page (https://www.sru.edu/ academics/colleges-and-departments/ches/departments/mathematics-and-statistics/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

| Major GPA: 2.0 or higher |  |
| :--- | ---: |
| Overall GPA: 2.0 or higher |  |
| Summary* $\quad$ Title | Hours |
| Code | 45 |
| Rock Studies Requirements | $0-3$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | 60 |
| Major Requirements | 12 |
| Natural Science \& Math College-Wide Requirements | 14 |

## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 225 | Calculus I | 4 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 16 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p.1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Sciences Inquiry |  |  |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
| Physical Sciences Inquiry |  |  |
| PHYS 211 | General Physics I with Lab | 4 |
| Subtotal |  | 17 |
| Thematic Thread |  |  |
| Select 12 Credits (p.1378) ${ }^{2}$ |  | 12 |
| Total Hours |  | 45 |
| 1 Course offered in multiple subjects; cannot take course in first major subject. |  |  |
| ${ }^{2}$ From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above. |  |  |
| Basic Math Requirement |  |  |
| Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree. |  |  |
| Code | Title | Hours |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP $110 \quad$ Beginning Algebra |  |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate "computer competency" by one of the following: |  | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |


| CPSC 130 | Introduction to Computing and <br> Programming |
| :--- | :--- |
| PE 202 | Technology for Wellness |

## Total Hours

## Major Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above
- 12 math credits must be taken at the 300-400 level at SRU

| Code | Title | Hours |
| :---: | :---: | :---: |
| Mathematics Core Courses |  |  |
| MATH 131 | Discrete Mathematics ${ }^{1,2}$ | 3 |
| MATH 230 | Calculus II ${ }^{\text {1,2 }}$ | 4 |
| MATH 235 | Foundations of Mathematical Proof 1,2 | 3 |
| MATH 231 | Calculus III ${ }^{1}$ | 4 |
| MATH 301 | Differential Equations ${ }^{1}$ | 3 |
| MATH 309 | Linear Algebra ${ }^{1}$ | 3 |
| MATH 313 | Introductory Analysis I ${ }^{1}$ | 3 |
| MATH 325 | Abstract Algebra ${ }^{1}$ | 3 |
| STAT 352 | Mathematical Statistics I ${ }^{1}$ | 3 |
| MATH 491 | Mathematics Seminar ${ }^{1}$ | 1 |
| Subtotal |  | 30 |

Required Electives
Choose five additional courses required $^{3} \quad 15$
Subtotal 15

## Mathematics Sequences

Two sequences are required - credits earned from these courses will be applied to above requirements.

## Select one of the following:

| MATH 301 <br> \& MATH 302 | Differential Equations I and Differential Equations II ${ }^{1}$ |  |
| :---: | :---: | :---: |
| MATH 301 \& MATH 411 | Differential Equations I and Partial Differential Equations ${ }^{1}$ |  |
| MATH 311 <br> \& MATH 312 | Deterministic Models of Operations Research and Stochastic Models of Operations Research ${ }^{1}$ |  |
| MATH 325 \& MATH 326 | Abstract Algebra I and Abstract Algebra II ${ }^{1}$ |  |
| elect one of the following: |  | 0 |

Select one of the following:

| MATH 313 <br> \& MATH 314 | Introductory Analysis I and Introductory Analysis II ${ }^{1}$ |
| :---: | :---: |
| STAT 352 <br> \& STAT 353 | Mathematical Statistics I and Mathematical Statistics II ${ }^{1}$ |
| ubtotal |  |

## Approved Minors

Select at least one of the following minors: ${ }^{4} 15$
Actuarial Science (p. 527)
Biology (p. 358)
Chemistry (p. 401)
Computing (p. 425)
Environmental Science (p. 502)
Geology (p. 515)

Geophysics (p. 516)
Meteorology (p. 516)
Philosophy (p. 1014)
Physics (p. 625)
Psychology (p. 673)
Public Health (p. 707)
Secondary School Mathematics (p. 536)
Statistics (p. 536)
Total Hours
60
1 Course counts for 50\% of Major requirements and Major GPA
2 Minimum grade of C required to register for 300-400 level math
3 At most one at 200 level, other 300 level or above (except MATH 210, MATH 225, MATH 310)
4 Must compete at least 15 credits distinct from courses selected above (MATH 225 will not count as a distinct course).

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Secondary School Mathematics Minor Requirements

- At least six credits must be 300-level or higher. At least nine credit hours of mathematics courses used for the minor must be taken at Slippery Rock University.
- BS-Mathematics majors must choose at least 15 credits distinct from those being counted toward major.

Code Title Hours

## Required Mathematics Courses

| MATH 235 | Foundations of Mathematical Proof | 3 |
| :--- | :--- | :--- |
| MATH 304 | Geometric Structures | 3 |
| MATH 320 | Theory of Numbers | 3 |
| SPED 121 | Overview of Special Education | 3 |
| SEFE 338 | Standards-Based Instruction \& Assessment <br> in the Inclusionary Classroom | 3 |

## Additional Courses

Select three of the following: 9

| MATH 230 | Calculus II |
| :--- | :--- |
| MATH 231 | Calculus III |
| STAT 252 | Introduction to Statistical Modeling |
| SEFE 230 | Production and Utilization of Instructional <br> Technology |
| SEFE 245 | Middle Level Learning Theory |
| SEFE 250 | Pre, Early, \& Adolescent Development |
| SEFE 300 | Middle Level Cognitive Development |
| SEFE 311 | Teaching of Mathematics in the Middle <br> School |
| SEFE 326 | ELL Strategies and Practice |
| SEFE 370 | Educational Measurements, Assessment <br> and Evaluation |
| SEFE 380 | History and Philosophy of Education |
| PHIL 313 | Symbolic Logic |
| PHIL 351 | Philosophy of Natural Science |

Total Hours

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

| Natural Science and Math College-Wide Requirements |  |  |
| :--- | :--- | ---: |
| Code | Title | Hours |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | $\mathbf{1}$ |
| MATH 225 | Calculus I | 4 |
| PHYS 211 | General Physics I with Lab | 4 |
| Total Hours |  | $\mathbf{1 2}$ |

## Computer Programming Language

Code Title Hours

Competency in an approved Computer Programming Language is Required - See Advisor Approval
CPSC

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MATHEMATICS w/ SECONDARY SCHOOL MATHEMATICS MINOR - BS (6152 AND 52G)
This program is effective as of Fall 2019.
Revised 08.03.2021
UCC 10.15.2019

## Middle School Mathematics, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Middle School Mathematics, Minor Program Page (https://www.sru.edu/ academics/majors-and-minors/middle-school-math-minor/)

Mathematics and Statistics Department Page (https://www.sru.edu/ academics/colleges-and-departments/ches/departments/mathematics-and-statistics/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide <br> GPA Requirement <br> 2.0 or higher Minor GPA

## Minor Requirements

- Students must complete at least 9 credit hours of MATH/STAT in their minor from SRU
- A minimum of 6 credit hours must be upper division (coursed numbered 300 and above)
- A minor shall be no fewer than 18 credits.
- Middle Level Education: Mathematics majors (in the Department of Secondary Education/Foundations of Education) may NOT declare this minor.
- Students enrolled in both the Minor in Middle School Mathematics and the Minor in Elementary School Mathematics must complete at least 9 credits in each of these minors that are NOT being counted in the other.


Total Hours
21-24
1 May not be used by Mathematics majors as courses that count toward the Middle School Mathematics minor.

2
ELEC 340 has an off-campus field component and requires appropriate teacher clearances. Contact the instructor before enrolling in ELEC 340

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

Minor in Middle School Math (52C)
This program is effective as of Fall 2021
Revised 03.05.2021
UCC 10.13.2020

## Important Curriculum Guide Notes

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categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## Secondary School Mathematics, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Middle Level Education: Mathematics Program Page (https:// www.sru.edu/academics/majors-and-minors/middle-level-educationmathematics/)

Mathematics and Statistics Department Page (https://www.sru.edu/ academics/colleges-and-departments/ches/departments/mathematics-and-statistics/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
2.0 or higher Minor GPA

## Minor Requirements

- A minimum of 6 credit hours must be upper division (courses numbered 300 and above).
- At least 9 credit hours of MATH/STAT courses used for the minor must be taken at Slippery Rock University.
- A minor shall be no fewer than 18 credits.
- BS-Mathematics majors must choose at least 15 credits distinct from those being counted toward major.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Mathematics Courses |  |  |
| MATH 235 | Foundations of Mathematical Proof | 3 |
| MATH 304 | Geometric Structures | 3 |
| MATH 320 | Theory of Numbers | 3 |
| SPED 121 | Overview of Special Education | 3 |
| SEFE 338 | Standards-Based Instruction \& Assessment <br> in the Inclusionary Classroom | 3 |

## Additional Courses

Select three of the following:

| MATH 230 | Calculus II $^{1}$ |
| :--- | :--- |
| MATH 231 | Calculus III $^{1}$ |
| STAT 124 | Introduction to Survey Methods $^{\text {STAT 252 }}$ |
| SEFE 230 | Production and Utilization of Instructional <br>  <br> Technology |
| SEFE 245 250 | Middle Level Learning Theory |
| SEFE 300 | Pre, Early, \& Adolescent Development |


| SEFE 311 | Teaching of Mathematics in the Middle <br> School |
| :--- | :--- |
| SEFE 326 | ELL Strategies and Practice |
| SEFE 342 | Educational Psychology for Diverse <br> Learners |
| SEFE 370 | Educational Measurements, Assessment <br> and Evaluation |
| SEFE 380 | History and Philosophy of Education |
| PHIL 313 | Symbolic Logic |
| PHIL 351 | Philosophy of Natural Science |

Total Hours
1 Course may not be used by Mathematics majors

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

Minor in Secondary Mathematics (52G)
This program is effective as of Fall 2021
Revised 03.05.2021
UCC 10.13.2020

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## Statistics, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Statistics, Minor Program Page (https://www.sru.edu/academics/majors-and-minors/statistics-(minor)/)

Mathematics and Statistics Department Page (https://www.sru.edu/ academics/colleges-and-departments/ches/departments/mathematics-and-statistics/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 9 credit hours of MATH/STAT in their minor from SRU.

Students enrolled in both the Minor in Mathematics and the Minor in Statistics must complete at least 9 credits in each of these minors that are NOT being counted in the other

- Students enrolled in both the Minor in Actuarial Science and the Minor in Statistics must complete at least 9 credits in each these minors that are NOT being counted in the other
- Mathematics majors must choose at least 15 credit hours in this minor distinct from those being counted toward the major.
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  |  |
| STAT 152 | Elementary Statistics I | 3 |
| STAT 252 | Introduction to Statistical Modeling | 3 |
| STAT 256 | Statistical Computing | 3 |
| STAT 352 | Mathematical Statistics I | 3 |
| STAT 353 | Mathematical Statistics II | 3 |

## Required Courses for Non-Mathematics Majors

Mathematics majors may not count these courses in the Minor in Statistics:

| MATH 225 | Calculus I |  |
| :---: | :---: | :---: |
| MATH 230 | Calculus II |  |
| Electives |  |  |
| Select courses of the minor. ${ }^{1}$ | followng to reach 24 credits total for this | 3-9 |
| BIOL 325 | Biometry with Lab |  |
| CPSC 323 | Fundamentals of Database Systems |  |
| CPSC 405 | Data Mining \& Analysis |  |
| CPSC 480 | Topics in Computer Science: Machine Learning |  |
| ECON 318 | Intermediate Statistical Analysis |  |
| HLTH 312 | Data Management for Health Science |  |
| HLTH 313 | Biostatistics |  |
| MATH 231 | Calculus III |  |
| STAT 354 | Mathematical Statistics III |  |
| STAT 363 | Statistical Learning |  |
| STAT 372 | Forecasting \& Time Series |  |
| STAT 373 | Statistical Quality Control |  |
| PSYC 421 | Advanced Behavioral Statistics |  |
| Total Hours |  | 24 |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

Minor in Statistics (52D)
This program is effective as of Fall 2021
Revised 03.05.2021
UCC 10.13.2020

## Important Curriculum Guide Notes

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earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## Nursing

| Chair | Secretary | Location | Department <br> Phone |
| :--- | :--- | :--- | :--- |
| Dr. Michele | Tanya Turner | Harrisville <br> Crytzer | Building, Room <br> 201 |

Department Web Site URL (https://www.sru.edu/academics/colleges-and-departments/ches/departments/nursing/)
Department Fact Sheet URL (https://www.sru.edu/documents/programs/ factsheets/undergraduate/nursing-fs.pdf)

## The Rock Difference

The Department of Nursing offers two totally online programs: RN to BSN Completion Program and School Nursing Certificate Program. The RN to BSN Completion Program at Slippery Rock University is designed to meet the needs of Registered Nurses who are graduates of hospital diploma nursing programs or Associate Degree programs in nursing.

The purpose of the RN-BSN program is to prepare baccalaureate educated practitioners of nursing to provide clinical leadership in the provision of health care to persons, families, and groups in a variety of settings. The program provides a strong educational foundation upon which to build graduate study. The purpose of the School Nurse Certificate program is to prepare students for Level I certification with the Pennsylvania Department of Education.

This program is designed to meet the needs of registered nurses who are graduates of hospital diploma nursing programs or associate degree programs in nursing. The nursing curriculum includes theoretical content and a practice experience. The flexibility of the program enables the registered nurse to attend school on a part-time or full-time basis. The purpose of the program is to prepare practitioners of nursing to provide clinical leadership in the provision of health care to persons, families, and groups in a variety of settings, using the nursing process. The program provides a strong educational foundation upon which to build graduate study. The program is accredited by the Commission on Collegiate Nursing Education (CCNE).

Admission requirements include:

- transfer in of 63 or more non-remedial completed college credits
- active unrestricted Registered Nurse license
- a 2.5 GPA in previous academic work

The curriculum for the program includes:

| Code Title | Hours |
| :--- | ---: |
| Program Requirements | 21 |
| Seven core Nursing courses | 3 |
| One Nursing elective course | 21 |


| Two required supportive courses | 6 |
| :--- | ---: |
| Total Hours | 30 |

All program courses are available online. Students in the RN-BSN nursing program are required to maintain good academic standing per university standards from entry to exit. The students must achieve a grade of C or above in all nursing courses. Other minors can also be pursued while enrolled in the BSN program.

## Faculty

Michele Crytzer
Associate Professor
Nursing
Ed.D., Indiana University of PA
M.S., Indiana University of PA
B.S., Slippery Rock University

## Sandra Leh

Associate Professor
Nursing
Ph.D., Widener University
M.S., West Chester University
B.S., Penn State University

Sharon Melincavage
Associate Professor
Nursing
Ed.D., Penn State University
M.S., Bloomsburg University
B.S., Kutztown University

Christina Silva
Associate Professor
Nursing
Ph.D., Indiana University of Pennsylvania
M.S., University of Phoenix
B.S., Penn State University

## Programs

All first-year students who enter SRU in the Summer and Fall terms of 2019 and after will follow Rock Studies. Students who entered SRU before Spring 2019 will follow Liberal Studies. All new transfer students beginning Summer 2019 and after will follow Liberal Studies. We anticipate that transfer students will begin to enter under Rock Studies during the Summer/Fall term of 2021

## Majors

- Nursing, Bachelor of Science in Nursing (BSN) (RN-BSN) (p. 542)


## Courses

NURS 139 - University Seminar
University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2

Enrollment limited to students with the ROCK STUDIES STUDENT attribute

## NURS 190 - Experimenta

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

## NURS 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

## NURS 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

NURS 290 - Experimental
A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif

## NURS 295-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

## NURS 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

## NURS 311 - Introduction to Health Care Informatics

This course is designed to provide students with an opportunity to apply knowledge and skills from information science and computer science to the health care field. Emphasis will be on developing a basic understanding of how automation is used to manage information in healthcare. Topics covered include types of information systems used in healthcare, how to select and implement information systems, current developments in healthcare information systems, issues surrounding computers in health care. In this course the focus is on the computer as a tool for helping healthcare providers do their work.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Nursing

## NURS 312 - Nursing in Transition

Nursing 312 examines professional role socialization from a historic, contemporary, and futuristic view. It enables the student to develop communication and technology skills necessary for success in a collegiate nursing program.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Nursing.

## NURS 322 - The Teaching-Learning Process in Nursing

This course is designed for the registered nurse who desires greater knowledge and skill in assisting individuals, families, and groups to acquire health-related knowledge, skills, and values. The course provides opportunities from a conceptual and practical perspective to explore the dynamics that contribute to effective health education. Emphasis will be placed upon developing the nurses' abilities, confidence, and self-image as teachers.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Nursing.

## NURS 327 - Group Process for Nursing

Provides opportunities to develop leadership skills with groups for the purposes of maintaining, regaining or improving their levels of wellness. The focus is on the group as a system. Combined conceptual knowledge and practical skills needed to work effectively with health-related groups will be taught (3 credits theory)

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Nursing.
NURS 331 - Evidence Based Health Assessment and Promotion
This course emphasizes the complete health assessment, the nursing process, and its relationship to the prevention and early detection of disease in clients across the life span. This course reinforces the processes of health assessment: interviewing, history-taking, and physical assessment. Dominant models, theories and perspectives are used to explain health behaviors in relation to evidence-based health promotion and health education strategies. Students are expected to correlate health assessment and promotion with current evidence. This course includes assignments with computer simulated standardized patients. Incorporated throughout the course is the importance of communication and collaboration across culturally diverse populations.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Nursing.

## NURS 390 - Experimenta

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

## NURS 395 - Workshop

All academic departments list this workshop course. Please contact the individual department for more information. A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

## NURS 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

## NURS 406 - Politics and Policy Nursing

This course is designed to enhance the student's understanding of health policy as it relates to professional nursing practice. Students will explore health care policy and the policy-making process at various levels of government, research the impact of special interest groups on policy, and learn effective strategies to interact with legislators as citizen lobbyists and/or members of professional nursing organizations.

## Credits: 3

Term(s) Typically Offered: Offered Spring \& Summer Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Nursing.

## NURS 408 - Delivery of Nursing Care in a Managed Care Environment/ Clinical

This course prepares students to understand managed health care delivery systems and their impact of delivery and practice patterns with emphasis on the delivery of nursing care.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Nursing.

## NURS 422 - Nursing Research \& Evidence-Based Practice

This course examines the fundamental concepts of nursing research and evidence-based practice (EBP). Students are prepared to become critical consumers of nursing research. Through the application of research evidence, students are provided the tools necessary to advance nursing practice and improve patient outcomes.

Prerequisites: NURS $311^{D}$ and NURS $312^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Nursing.

NURS 426 - Community and Public Health Nursing
In this course the focus is on the community as the client. Theories, models, and concepts from community and public health nursing are examined. A course project, the Community Assessment, provides students the opportunity to complete and analyze a community assessment.

Prerequisites: NURS $311^{\text {D }}$ and NURS $312^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Nursing.
NURS 429 - Financial Management for Nursing Case Managers
This course provides students with content related to current issues, tools (i.e. Excel spreadsheet), and regulation necessary to function as a nursing case manager.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Nursing.
NURS 430 - Leadership in Nursing and Healthcare Systems
This course is designed to provide students with a working knowledge of concepts and processes of leadership theory and practice in nursing and healthcare systems. Students successfully completing this course will be able to identify the personal and situational factors affecting leadership performance and adapt their behavior to become more effective leaders.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

## NURS 432 - Practice Experience for Leadership and Management in

 NursingAs a practice experience, the student will apply concepts gleaned from previous courses and NURS 431 to enhance professional nursing practice. Nursing leadership and management theories will be applied within the practice environment by emphasizing planning, delivering, managing, and evaluating cost-effective quality care. This is a practice experience that requires completion of all 300 core nursing courses (NURS $311,312,327,331$ ) as prerequisites and NURS 431 as a corequisite course.

Prerequisites: NURS $311^{\text {C }}$ and NURS $312^{\text {C }}$ and NURS $327^{\text {C }}$ and NURS $331^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Corequisite(s): NURS 431
Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Nursing.

## NURS 433 - Innovative Technology for Healthy Communities

This course focuses on consumer health informatics and technology which explores how innovative technology can be used to improve individuals' health within various community settings. Topics include the mode of delivery of consumer health information such as Internet-based technology; shared access to individuals' private health information; quality of consumer health information via social media; and health and information literacy seeking behavior. Finally, various types of innovative technology used within the home environment or within a healthcare setting to support consumers within a home environment will be explored.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Nursing.

## NURS 434 - Leadership and Management in Nursing with Practice Experience

This course focuses on the theory for leadership and management roles, leadership theories, and the ethical decision-making process in the delivery of health care to diverse populations. The student will apply concepts from this course and gleaned from previous courses to enhance professional nursing practice in both the theoretical realm and the practice environment. Nursing leadership and management practices will be analyzed with an emphasis on planning, delivering, and evaluating cost-effective quality care. This is a course that requires completion of all 300 level core nursing courses (NURS 311, 312, 327, 331) as prerequisites

Prerequisites: NURS $311^{C}$ and NURS $312^{C}$ and NURS $327^{C}$ and NURS $331{ }^{\text {c }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Nursing.

## NURS 440 - Nursing Case Management in Today's Healthcare

## Environment

This course is designed to prepare students to understand the case management responsibilities which include planning, coordinating, and managing care of consumers within a health care system. Students will learn to use evidence-based pathways in making decisions, planning care and finding the best ways to deliver safe, quality and culturally appropriate care and controlling increasing health care costs. Identify innovative technologies to measure case management effectiveness and outcomes.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Nursing.

## NURS 450 - Health Care Informatics Internship

Provides opportunity to apply theory and develop competencies in health care informatics through a work-related experience in an appropriate health related enterprise.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

NURS 451 - Internship in Correctional Nursing
Provides opportunity to apply theory and develop competencies in correctional nursing through a work-related experience in an appropriate correctional institution

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

## NURS 490 - Independent Study

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings.Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

## NURS 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

## NURS 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

# Nursing, Bachelor of Science in Nursing (BSN) (RN-BSN) 

The Bachelor of Science in Nursing program is a fully CCNE accredited Online Degree Completion Program for nurses, who already hold RN licensure. In the program, students develop critical thinking skills for clinical decision-making, prepare to collaborate in multidisciplinary work, shift focus from care of individuals within a community to the health of a community, refine professional communication, and develop leadership skills. The curriculum provides a strong foundation for professional development in a nursing career and the opportunity to gain the knowledge and skills needed for advancement in clinical ladder programs. Students also develop the team skills and technological ability to provide leadership in managed care environments.

This program meets the requirements for certification in Pennsylvania. As regulations vary by state, please check the licensing board in your state.

## Admission Requirements

- The applicant must hold an RN associate or diploma degree in Nursing
- The applicant must hold an unencumbered current RN licensure
- The applicant must have completed 63 or more transferable credits
- The applicant must have a 2.5 or higher RN program GPA (GPA less than 2.5 may be eligible for conditional admission)
- The applicant must be in good academic standing at the most recent institution attended


## Program Learning Outcomes

- Uses effective communication in formal and informal interactions with individuals and group including clients, families, and communities.
- Applies critical thinking process to professional nursing practice.
- Synthesizes knowledge from nursing, scientific, and humanistic disciplines to guide nursing practice.
- Uses the nursing process to promote, maintain, and restore health for individuals, families, and groups within communities.
- Participates with others in providing high quality, cost-effective care and in promoting the health and well-being of individuals, families, and groups within communities.
- Applies research findings to improve and refine nursing practice.
- Evaluates nursing practice in relation to professional/legal standards, ethical principles, and sensitivity to the cultural differences of clients.
- Exercises leadership for the evaluation and enhancement of the quality and effectiveness of nursing practice.
- Values continuing personal and professional development.


## Related Links

Nursing, BSN, RN-BSN Program Page (https://www.sru.edu/academics/ majors-and-minors/nursing-rn-bsn/)

Nursing Department Page (https://www.sru.edu/academics/colleges-and-departments/ches/departments/nursing/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

Code Title Hours
Rock Studies Requirements 45
Major Requirements 30
RN Licensure 30
$\begin{array}{ll}\text { Electives } & 15\end{array}$

* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies Requirements

BSN Students must complete a sum total of 45 SRU Rock Studies-based credits. There are no specific requirements.


Required Nursing Courses ${ }^{1}$

| NURS 311 | Introduction to Health Care Informatics | 3 |
| :--- | :--- | ---: |
| NURS 312 | Nursing in Transition | 3 |
| NURS 327 | Group Process for Nursing | 3 |
| NURS 331 | Evidence Based Health Assessment and <br> Promotion | 3 |
| NURS 422 | Nursing Research \& Evidence-Based <br> Practice | 3 |
| NURS 426 | Community and Public Health Nursing | 3 |
| NURS 434 | Leadership and Management in Nursing <br> with Practice Experience | 3 |

Subtotal 21

Nursing Electives ${ }^{1}$
Select 3 credits from the following: 3

| NURS 322 | The Teaching-Learning Process in Nursing |
| :--- | :--- |
| NURS 395 | Workshop |
| NURS 406 | Politics and Policy Nursing <br> NURS 408 <br> Environment/Clinical |
| NURS 429 | Financial Management for Nursing Case <br> Managers |
| NURS 430 | Leadership in Nursing and Healthcare <br> SUstems |
| NURS 433 440 | Innovative Technology for Healthy <br> Communities |
| NURS 498 | Nursing Case Management in Today's <br> Healthcare Environment |


| NURS 500 | Developing Transcultural Awareness <br> Among Health Professionals |
| :--- | :--- |
| NURS 510 | Cardiovascular Function: Assessment and <br> Treatment |
| NURS 511 | Advanced Healthcare Informatics |
| NURS 514 | Bioterrorism and Disaster Management: <br> The Nurse's Role |
| NURS 516 | Nursing for Palliative and End-of-Life Issues |
| NURS 517 | Social Media and Healthcare |
| NURS 595 | Workshop |

Total Hours
1 Must earn a "C" or better

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## RN and Elective Requirements

Diploma Nurse RNs are awarded a block of 30 credits for their nursing coursework. Associate Degree RNs will find their Nursing coursework delineated as a total number of Electives.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required | RN Completion (Current Licensure as an |  |
| NURS 199 | RN) | $0-30$ |
|  |  |  |

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Job Shadowing
5. Career Education Services

RN to BSN PROGRAM - BS (6 58)
This program is effective as of Fall 2020.
Revised 07.27.2021
UCC 09.01.2020

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

# Parks, Conservation and Recreational Therapy 

$\left.\begin{array}{lll}\text { Chair } & \text { Secretary } & \text { Location }\end{array} \begin{array}{l}\text { Department } \\ \text { Phone }\end{array}\right\}$

Parks and Conservation Department Web Site URL (https://www.sru.edu/ academics/colleges-and-departments/ches/departments/parks-andconservation/)
Parks and Conservation Fact Sheet URL (https://www.sru.edu/ documents/programs/factsheets/undergraduate/parksrec-fs.pdf)

Recreational Therapy Department Web Site URL (https://www.sru.edu/ academics/colleges-and-departments/ches/departments/recreationaltherapy/)
Recreational Therapy Fact Sheet URL (https://www.sru.edu/documents/ programs/factsheets/undergraduate/rt-fs.pdf)

## Faculty

## Whitney Angelini

Instructor
Parks,Conserv\&RecreationTherpy
D.P.T., Slippery Rock University
B.S., Slippery Rock University

## Jennifer Carben

Assistant Professor
Parks,Conserv\&RecreationTherpy
M.S., Slippery Rock University
B.A., Slippery Rock University

## Colleen Cooke

Professor
Parks,Conserv\&RecreationTherpy
Ed.D., Nova Southeastern University
M.Ed., University of Pittsburgh
B.S., Slippery Rock University

## Shawn Davis

Assistant Professor
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Ph.D., Colorado State University
M.S., Colorado State University
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## Heather Gleghorn

Instructor
Parks,Conserv\&RecreationTherpy
M.S., East Carolina University
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Martha Kemeny
Associate Professor
Parks,Conserv\&RecreationTherpy
Ph.D., Indiana University of Pennsylvania
M.S., University of North Carolina at Chapel Hill
B.A., Wake Forest University

Christopher Leininger
Instructor

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B.A., Iowa State University

## John Lisco

Associate Professor
Parks,Conserv\&RecreationTherpy
Ed.D., University of Memphis
M.S., University of Memphis
B.S., Mesa State College

## Rebecca Thomas

Associate Professor
Parks,Conserv\&RecreationTherpy
M.S., Colorado State University
B.S., Pennsylvania State University

## Jeffrey Witman

Instructor
Parks,Conserv\&RecreationTherpy

## Programs

All first-year students who enter SRU in the Summer and Fall terms of 2019 and after will follow Rock Studies. Students who entered SRU before Spring 2019 will follow Liberal Studies. All new transfer students beginning Summer 2019 and after will follow Liberal Studies. We anticipate that transfer students will begin to enter under Rock Studies during the Summer/Fall term of 2021.

## Majors

- Park \& Resource Management, Bachelor of Science (BS) (p. 552)
- Recreational Therapy, Bachelor of Science (BS) (p. 555)
- Recreational Therapy, Bachelor of Science (BS) / Pre-Occupational Therapy (SRU) (3+3) (p. 558)
- Recreational Therapy, Bachelor of Science (BS) / Pre-Occupational Therapy (SRU) (Traditional) (p. 561)
- Recreational Therapy, Bachelor of Science (BS) / Pre-Physical Therapy (SRU) (3+3) (p. 564)
- Recreational Therapy, Bachelor of Science (BS) / Pre-Physical Therapy (SRU) (Traditional) (p. 567)


## Minors

- Animal Assisted Interventions, Minor (p. 551)
- Environmental Communication and Heritage Interpretation, Minor (p. 551)
- Recreational Therapy, Minor (p. 570)


## Courses

## PCRM Courses

## PCRM 104 - Foundations in Sustainability

This course will provide a foundation of basic concepts associated with environmental and its associated cultural sustainability. Emphasis will be placed on the interdependence of our natural resources to achieve sustainability in a cultural context. Course development will move from individual environmental ethics and personal actions to civic responsibility and global perceptions.

## Credits: 3

Thematic Thread(s): Building a Healthy Society, Environmental Problems Toolkit, Fighting Social Problems, Food, Wellness \& Environment Across Cultures, Healthy Body, Mind \& Environment, Sustainable International Development, Sustainability, Transfer Thread Completion Course

## PCRM 105 - Leisure-Centered Living

The constructive use of leisure and education for leisure are essential tools for a person's successful growth and development. Leisurecentered living is designed to help students investigate, evaluate, and plan leisure/play as a basic human need and necessity for well-being.

## Credits: 3

## PCRM 110-Foundations of Parks and Outdoor Recreation

This course is designed to provide the student with the conceptual foundations of outdoor recreation as it relates to park resources management, environmental education/interpretation, and outdoor leadership. The course examines the history and philosophy of outdoor recreation and where it fits in the broad field of leisure. Students will be introduced to the roles of government and the private sector in parks and outdoor recreation. In addition, an overview of national resources as well as the interaction of humans with our natural resources will be reviewed. Students will also explore career opportunities and identify needed skills of outdoor recreation professionals.

## Credits: 3

## PCRM 111 - Introduction to Park and Resource Management

This course is a sequel to Foundations of Parks and Recreation I and will continue to examine the historical and philosophical background of the leisure movement with regard to recreation organizations and services. Professional preparation in relation to perceived and actual needs concerning risk management, research and evaluation, information technology, ecological considerations and sustainable planning and management practices in the parks and recreation field will also be explored.

Credits: 3

## PCRM 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## PCRM 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

## PCRM 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

## PCRM 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

## PCRM 204-Environmental Communication

In this course, students will learn about the theoretical and applied concepts that guide the discipline of environmental communication including rhetoric \& discourse, media, public participation, social marketing, collaboration \& conflict resolution, risk communication, and popculture. Students will demonstrate understanding and show application of materials for successful environmental communication in a variety of protected areas and conservation settings.

Credits: 3

## PCRM 210-Resources for Outdoor Programming

The outdoors was the first classroom and many lessons are still taught in and for the outdoors. This course is designed to provide anyone working in a recreational or park setting with methods and materials to use to achieve a variety of educational and recreational goals. Emphasis will be placed on identifying and using existing instructional materials, in addition to developing personal materials and lessons for outdoor programming.

## Credits: 3

## PCRM 211 - Outdoor Leadership

This course is a study of the principles and practices essential for outdoor leaders with emphasis on the development of KSAs to lead groups into the wild outdoors.

Credits: 3
Thematic Thread(s): Leadership Development, Transfer Thread Completion Course

## PCRM 214 - Parks and Recreation Planning

This course provides a comprehensive introduction to the field of recreation planning. Class sessions will focus on a variety of planning approaches and tools, which are utilized throughout the field of recreation. Students will gain familiarity with these planning tools as they engage in an abbreviated campus-wide study focused on the availability of recreational resources to SRU students.

Prerequisites: PREE $110^{\mathrm{D}}$ or PCRM $110^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

## PCRM 251 - Field Experience

Opportunities for basic practical experience in a variety of park and recreation/environmental education settings. May be repeated up to 3 times.

## Credits: 1

## PCRM 271 - Law Enforcement Firearms

This course provides basic orientation to and qualification with the approved handgun and familiarization with the 12 gauge shotgun including safety and "shoot-no shoot situations.

## Credits: 3

## PCRM 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

## PCRM 295-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

## PCRM 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## Credits: 1-3

## PCRM 304-Search and Rescue/Wilderness Medicine

This course will provide basic and intermediate instruction in search and rescue techniques and emergency medical procedures in wilderness settings. Students will be introduced to the various evacuation and stabilization procedures that are commonly implemented in emergency situations.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 315 - Recreation Resource Planning and Analysis

This course is designed specifically for student in the Park and Resource Management track. It is designed to provide the student with appilcation of the planning process, from site and program analysis into planning recreational facilities. students will use a variety of planning tools and on-line analysis resources, as well as a variety of professional recreation planning frameworks.

Prerequisites: PREE $214^{\text {D }}$ or PCRM $214^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
PCRM 318 - Administrative Strategies for Resource Managers
The organization and administration of parks and recreation services, including organizational management, personnel practices and labor relations, financial and business procedures and legal aspects.

Credits: 3
Enrollment limited to students with a semester level of Freshman 1, Freshman 2 or Sophomore 1.

PCRM 342-Group Facilitation and Leadership
This course will cover the concepts related to working with groups as a facilitator. Hands-on approaches to program design, sequencing activities and processing experiences will be examined. Students will facilitate their classmates through a group development experience making use of SRU's low and high challenge courses and the Leadership Reaction Center.

Credits: 3
Thematic Thread(s): Leadership Development, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 347 - Interpretive Methods and Programming

A study of the principles and methods to interpret natural and cultural history in parks and other outdoor settings.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 348-Natural History of Ecosystems I

This course provides basic ecology and natural history information and skills for the purpose of environmental and resource management as well as interpretation and environmental education. Local animal identification, interactions of species with their environment, and species interactions are among the topics covered.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 349- Natural History of Ecosystems II

This field-oriented course is designed to integrate basic scientific inquiry and ecological field techniques to develop skills of analysis, synthesis and evaluation of scientific information for the purpose of environmental and resource management. Results of field investigations are applied to relevant ecological problems and management objectives for the purpose of environmental decision making. Topics include local plant and fungi identification, community ecology, ecosystem ecology, and ecological biogeography.

Prerequisites: PREE $260^{\text {D }}$ or PREE $348^{\text {D }}$ or PCRM $348^{D}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 351 - Parks \& Conservation Practicum

Observation and participation in parks and recreation or environmental education activities. Cross listed as RCTH352.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 371 - Fundamentals of National Park Service Law Enforcement

This course covers the legal and administrative fundamentals of National Park Service law enforcement including federal law and NPS policies and guidelines.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 372 - Visitor Services Management

A study of visitor services including information, safety, rescue and law enforcement services.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 374 - Federal Law \& Park Policy

This course is designed to provide students with advanced knowledge of federal law, policies, and procedures. Students will develop an in-depth understanding of Federal policy for various land management agencies with emphasis on National Park Service policy. The course will also cover legal updates in park law enforcement.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 377-Cultural Resources Management

This course provides a comprehensive introduction to the management of cultural and historic resources. The course examines the goals,
legislation, and methodologies related to cultural resources management, research and programming.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 395-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 405- Social Ecological Systems

This course uses a social-ecological systems framework in order to advance an interdisciplinary approach to conservation of biological diversity and natural resources. Students will be exposed to contemporary conservation and natural resource management challenges and will learn how those issues can be addressed through an integrated understanding of social and natural systems. Case studies will be presented and discussed in class in order to connect theoretical frameworks to on the ground conservation problems and to consider opposing and controversial viewpoints. Students will develop practical skills in understanding and discussing cross-cultural and interdisciplinary natural resource management issues.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
PCRM 415 - Challenges and Trends in Parks and Conservation
An integrative course for detailed study of current issues in parks and recreation with emphasis on unique and imaginative solutions to the challenges facing the recreation/parks profession. Must be a senior to enroll.

## Credits: 3

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

## PCRM 450 - Internship

A supervised off-campus work experience in an appropriate aspect of parks and recreation or environmental education work. Open only to PCRT majors with advanced standing.

Credits: 1-12
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 471 - NPS Law Enforcement

This course provides an overview of NPS law enforcement policies and procedures, relevant federal laws, Titles 36 and 50, CFR, and courtroom procedures.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 472 - Park Law Enforcement

This course provides basic law enforcement skills essential for the park law enforcement ranger.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 475 - Park and Resource Management

The principles and practices of recreational land and water management. Field trips required.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
PCRM 477 - Wildlife \& Wildlands Field Methods and Management
Course will cover the application of natural history and ecological concepts as it related to parks, other public lands and environmental education. Emphasis is placed on project development, problem solving and critical thinking skills as tghey relate to resource management.
Prerequisites: (PREE $348^{\mathrm{D}}$ or PCRM $348^{\mathrm{D}}$ ) and (PREE $349^{\mathrm{D}}$ or PCRM 349 ${ }^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 490 - Independent Study

A special study opportunity for students to investigate in-depth, approved topics in recreation or environmental studies. Topic and credit established by student and supervising instructor. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 491 - Professional Seminar

This course is designed to assist students in preparing for entry into the environmental education profession. Topics will include career planning, employment opportunities, employment seeking skills, and discussions centering on areas of interest to the student.

Credits: 1
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 495-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

## PCRM 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PREE Courses

PREE 411 - Tourism Planning and Operations
This course studies the different components of travel, as well as the planning and operation of group/package tours and tourist attractions.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PREE 414 - Concepts and Trends in Travel and Tourism

The course will focus on current concepts and trends of the travel and tourism industries both domestically and internationally.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RCTH Courses

RCTH 120 - Disability, Community Inclusion, and Diversity
This course is designed to introduce the student to inclusive leisure services. The course reviews attitudes regarding people with disabilities, barriers to inclusion, enabling terminology, and legislative initiatives, which promote inclusion. The ADA will be highlighted along with information on various disabling conditions. The goal of this course is to facilitate an increased awareness of people with disabilities and considerations for providing inclusive services.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Building a Healthy Society, Civil Rights \& Social Movements, Gender and Diversity, Healthy Body, Mind \& Environment, Transfer Thread Completion Course

## RCTH 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## RCTH 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
RCTH 195 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## Credits: 1-6

Term(s) Typically Offered: Offered as Needed

## RCTH 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## RCTH 220 - Recreational Therapy Services

Introduces students to the general field of recreational therapy and provides an introduction to various disabilities and how the RT process applies.

Prerequisites: PREE $120^{\mathrm{D}}$ or RCTH $120^{\mathrm{D}}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
RCTH 232 - Recreational Therapy for People with Physical Disabilities
This course will provide information on various physical disabilities and the potential application of Recreational Therapy services with individuals with physical disabilities. The incidence, prevalence, etiology and treatment for each disability will be presented along with implications for RT practice.

Prerequisites: PREE $120^{\mathrm{D}}$ or RCTH $120^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms

## RCTH 233 - Recreational Therapy for People with Psychosocial and

 Mental DisordersThis course will provide information on various mental health impairments and addictive and social disorders. The incidence, prevalence, etiology and treatment for each condition will be presented along with implications for Recreational Therapy practice.

Prerequisites: PREE $120^{\mathrm{D}}$ or RCTH $120^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## RCTH 252 - Equine Assisted Activities and Therapies

An introduction to equine assisted activities including basic safety skills, lesson preparation, benefits for individuals with disabilities, tack/equine selection, and certification procedures. Students will gain practical experience through riding horses and assisting individuals with disabilities during lessons.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## RCTH 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## RCTH 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## RCTH 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## RCTH 305 - Animal-Assisted Therapy for Diverse Populations \& Settings

This course is designed to provide students with an overview of the various populations that can potentially benefit from Animal-Assisted Interventions (AAI) and Animal-Assisted Therapy (AAT). The focus will be on how these potential benefits of AAT can be incorporated into various settings of service. Students will learn the different approaches to using animals as a partner in facilitating therapeutic outcomes. Students will be exposed to research evidence that supports AAT with populations generally served by health and human services areas. The design of program/treatment plans to facilitate outcomes will be incorporated into the course as well as practical application of AAT.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Animal-Assisted Interventions.

## RCTH 314 - Clinical Aspects of Recreational Therapy

This course provides a more in-depth look at Recreational Therapy including professional standards of practice, health care accreditation, documentation methods and application of activity analysis in treatment planning. Lab experiences are incorporated into the course.
Prerequisites: PREE $220^{\text {D }}$ or RCTH $220^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RCTH 317 - Organization and Management of Recreational Therapy

 PracticeThis course is designed to provide recreational therapy (RT) majors with the knowledge and skills requied to effectively supervise and manage resources within various health and human service settings. Emphasis is placed on accreditation standards, legislative and regulatory requirements, public relations and marketing, strategic planning and decision making, quality improvement and risk management practices, fiscal planning and budgeting and human resource management.

Prerequisites: PREE $220^{\circ}$ or RCTH $220^{C}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Therapeutic
Recreation Serv, Recreational Therapy or Therapeutic Recreation.

## RCTH 319 - Client Assessment in Recreational Therapy

This course designed to facilitate the development of student knowledge and skills related to the RT assessment process. The course will expose students to information and activities to enhance understanding of the importance of assessment,the various domains of assessment and the various techniques used in the assessment process. Skills will be developed in the areas of selecting and designing assessments, interviewing clients, observing behaviors and documenting assessment results.

Prerequisites: (PREE $220^{\mathrm{D}}$ or RCTH $220^{\mathrm{D}}$ ) and (PREE $229^{\mathrm{D}}$ or PREE $314^{\mathrm{D}}$ or RCTH 314 ${ }^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RCTH 320 - Recreational Therapy Program Design

This course focuses on techniques of recreational therapy program planning including assessment, treatment planning, implementation and evaluation. Students will implementate interventions using various leadership strategies to meet the needs of persons with disabilities and disorders and the document results. A lab experience is included in this course.

Prerequisites: (PREE $220^{\mathrm{D}}$ or RCTH $220^{\mathrm{D}}$ ) and (PREE $229^{\mathrm{D}}$ or PREE $314^{\mathrm{D}}$ or RCTH $314^{\mathrm{D}}$ ) and (PREE $319^{\mathrm{D}}$ or RCTH $319^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RCTH 351 - Recreational Therapy Practicum

Observation and participation in an agency or program serving individuals with disabling conditions.Cross listed as RCTH352.

## Credits: 3

Term(s) Typically Offered: Offered Summer \& Winter Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RCTH 352 - Practicum in Therapeutic Recreation

Observation and participation in an agency or program serving individuals with disabling condition. Cross listed as RCTH351.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## RCTH 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RCTH 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## RCTH 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RCTH 415 - Challenges and Trends in Recreational Therapy

An integrative course for detailed study of current issues in health care and human services with emphasis on unique and imaginative solutions to the challenges facing the recreational therapy profession. Must be a senior to enroll.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

## RCTH 420 - Recreational Therapy for Older Adults

An overview of the aging process as it relates to recreational therapy service provision and leisure participation. Focus is on the developmental issues, including psychosocial, biological and economic issues in later life. The course reviews the various settings of service and care continuums available to serve the older adult populations. Legilative and regulatory influences regarding the provision of services to older adults will be discussed.

Prerequisites: (PREE $220^{\mathrm{D}}$ or RCTH $220^{\mathrm{D}}$ ) and (PREE $120^{\mathrm{D}}$ or RCTH $120^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RCTH 422 - Recreational Therapy Interventions I

An investigation of the historical, philosophical, psychological and educational foundations of leisure education and stress management at RT treatment modalities. The functions of leisure education, including a variety of instruments and techniques appropriate for a veriety of publics, are examined. The functions of stress management treatments, as well as a variety of techniques appropriate for a variety of publics, is also examined.

Prerequisites: (PREE $220^{\mathrm{D}}$ or RCTH $220^{\mathrm{D}}$ ) and (PREE $229^{\mathrm{D}}$ or PREE $314^{\mathrm{D}}$ or RCTH $314^{\mathrm{D}}$ ) and (PREE $319^{\mathrm{D}}$ or RCTH $319^{\mathrm{D}}$ ) and (PREE $320^{\mathrm{D}}$ or RCTH $320^{\mathrm{D}}$ )
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RCTH 423-Recreational Therapy Interventions II

This course will offer an overview of several different Recreational Therapy interventions and techniques, with emphasis on evidence-based practice specific to the areas of community reintegration and its many components, including areas such as social skills, mobility training, and money management (as examples).

Prerequisites: (PREE $220^{\mathrm{D}}$ or RCTH $220^{\mathrm{D}}$ ) and (PREE $229^{\mathrm{D}}$ or PREE $314^{\mathrm{D}}$ or RCTH $314^{\mathrm{D}}$ ) and (PREE $232^{\mathrm{D}}$ or RCTH $232^{\mathrm{D}}$ ) and (PREE $233^{\mathrm{D}}$ or RCTH $233^{\mathrm{D}}$ ) and (PREE $319^{\mathrm{D}}$ or RCTH $319^{\mathrm{D}}$ ) and (PREE $320^{\mathrm{D}}$ or RCTH $320^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RCTH 450 - Internship

A supervised off-campus work experience in an appropriate aspect of recreational therapy work. Open only to RCTH majors with advanced standing.

Credits: 1-12
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RCTH 490 - Independent Study

A special study opportunity for students to investigate in-depth, approved topics in recreation or environmental studies. Topic and credit established by student and supervising instructor. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RCTH 491 - Professional Seminar

This course is designed to assist students in preparing for entry into the environmental education profession. Topics will include career planning, employment opportunities, employment seeking skills, and discussions centering on areas of interest to the student.

Credits: 1
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RCTH 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RCTH 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Animal Assisted Interventions, Minor

Animals play an important role in promoting human health and wellbeing. The human-animal bond (HAB) is known to promote a variety of physiological, emotional and social benefits. In addition, intervention utilizing animals have produced recognized benefits for individuals with a variety of disabling conditions. The minor in Animal-Assisted Interventions uses an interdisciplinary approach for students to develop the competencies for using Animal-Assisted Interventions in their professional practice. This minor would be especially appropriate for students enrolled in a health-related, human service, or educational major.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Animal Assisted Interventions, Minor Program Page (https:// www.sru.edu/academics/majors-and-minors/animal-assisted-interventions-(minor)/)

Recreational Therapy Department Page (https://www.sru.edu/ academics/colleges-and-departments/ches/departments/recreationaltherapy/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.00 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Core Courses |  |  |
| SOWK 310 | Animal Assisted Interventions | 3 |
| SOWK 300 | Crisis Intervention | 3 |
| RCTH 252 or PE 250 | Equine Assisted Activities and Therapies Equine Assisted Activities | 3 |
| RCTH 305 | Animal-Assisted Therapy for Diverse Populations \& Settings | 3 |
| Professional Electives |  |  |
| Select two of the following: |  | 6 |
| SOWK 328 | Human Behavior and the Social Environment |  |
| SOWK 334 | Clinical Perspectives on DSM Diagnoses |  |
| RCTH 232 | Recreational Therapy for People with Physical Disabilities |  |
| RCTH 233 | Recreational Therapy for People with Psychosocial and Mental Disorders |  |
| RCTH 420 | Recreational Therapy for Older Adults |  |
| GERO 265 | Aging and the Older Person |  |
| GERO 414 | Death and Dying |  |
| PSYC 244 | Developmental Psychology |  |
| PSYC 276 | Introduction to Abnormal Psychology |  |
| PSYC 303 | Learning |  |
| or PSYC 475 | Behavior Modification |  |

Total Hours

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Minor in Animal-Assisted Interventions (71C)
This program is effective as of Fall 2016.
Revised 11-2019

## Environmental Communication and Heritage Interpretation, Minor

This minor will provide students with an interdisciplinary understanding of cultural and natural resource communication and interpretation. Students will apply concepts from the fields of history, ecology, human dimensions of natural resources (including psychological, sociological,
political, cultural and economic aspects), environmental education, environmental communication, adventure-based outdoor pursuits, interpretation and land management. Completing the minor will also enable students to achieve a nationally recognized certification as a Certified Interpretive Guide.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Environmental Communication and Heritage Interpretation, Minor Program Page (https://www.sru.edu/academics/majors-and-minors/ environmental-communication-and-heritage-interpretation-(minor)/)

Parks and Conservation Department Page (https://www.sru.edu/ academics/colleges-and-departments/ches/departments/parks-andconservation/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Core Courses |  |  |
| COMM 231 | Introduction to Public Relations and IMC | 3 |
| COMM 204 | Environmental Communication | 3 |
| or PCRM 204 | Environmental Communication |  |
| PCRM 347 | Interpretive Methods and Programming | 3 |
| Strategies Electives |  |  |
| Select two of the | wing, one must be COMM: | 6 |
| COMM 248 | Interactive Multimedia 1 |  |
| COMM 254 | Video Production |  |
| COMM 307 | Social Media |  |
| PCRM 210 | Resources for Outdoor Programming |  |
| HIST 343 | Public History |  |
| HIST 411 | Digital History |  |
| Content Electives |  |  |
| Select two of the following: |  | 6 |
| PCRM 377 | Cultural Resources Management |  |
| PCRM 348 | Natural History of Ecosystems I |  |
| BIOL 105 | Environmental Biology |  |
| EGEO 100 | Environmental Geology |  |
| EGEO 121 | Meteorology/Lab |  |
| EGEO 131 | Oceanography |  |
| GES 135 | Introduction to Environmental Problems |  |
| GES 150 | The Natural Environment |  |
| GES 355 | Earth's Changing Climate |  |


| HIST 323 | African American History to 1876 |
| :--- | :--- |
| HIST 324 | African American History Since 1876 |
| HIST 326 | The Long Civil Rights Movement |
| HIST 347 | Twentieth Century British Culture |
| HIST 350 | The American Civil War |
| HIST 371 | History of Jews |
| HIST 445 | Americans and the Environment |
| HIST 337 | Native American History |

Total Hours

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Minor in Environmental Communication and Heritage Interpretation (71D) This program is effective as of Fall 2018.
Revised 10.28.2021

## Park \& Resource Management,

 Bachelor of Science (BS) Program Learning Outcomes- Communication:
- Students will engage in oral communication
- Students will produce professional written communication
- Students will develop graphical and technological communication materials
- Students will respond to feedback
- Foundations in Natural Resource Management:
- Students will identify flora, fauna, and habitat
- Students will assess cultural resources
- Students will practice interpretation
- Critical Thinking and Problem Solving:
- Students will apply an understanding of cultural resource management
- Students will develop sustainable solutions to global problems
- Students will evaluate a strategic management plan
- Professional Leadership and Administration:
- Students will provide visitor services to the public
- Students will identify administrative tasks relevant to PRM
- Students will lead group projects
- Students will exhibit professional behavior
- Career Development and Field Experiences:
- Students will create a professional resume
- Students will demonstrate awareness of job opportunities in the field
- Students will participate in research
- Students will participate in experiential learning
- Students will develop an awareness of the spectrum of job opportunities in the field


## Related Links

Park and Resource Management, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/park-and-resourcemanagement/)

Parks and Conservation Department Page (https://www.sru.edu/ academics/colleges-and-departments/ches/departments/parks-andconservation/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher Overall GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 57 |
| Electives | 21 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |
| :---: | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |
| Subtotal |  |


| Integrated Inquiry |  |
| :--- | ---: |
| Creative and Aesthetic Inquiry | 3 |
| Select 3 Credits (p. 1378) | 3 |
| Humanities Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Social Science Inquiry |  |
| Select 3 Credits (p. 1378) |  |



## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one | following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | uter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Ar |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |

PE 202 Technology for Wellness
Total Hours

## Major Requirements

- 29 major credits must be taken at SRU or PASSHE
- 29 major credits must be taken at the 300 level or above
Code Title Hours

Park \& Recreation Core

| PCRM 110 | Foundations of Parks and Outdoor Recreation ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| PCRM 111 | Introduction to Park and Resource Management ${ }^{1}$ | 3 |
| PCRM 214 | Parks and Recreation Planning ${ }^{1}$ | 3 |
| PCRM 304 | Search and Rescue/Wilderness Medicine ${ }^{1}$ | 3 |
| PCRM 315 | Recreation Resource Planning and Analysis 1 | 3 |
| PCRM 347 | Interpretive Methods and Programming | 3 |
| PCRM 348 | Natural History of Ecosystems ${ }^{1}$ | 3 |
| PCRM 349 | Natural History of Ecosystems II ${ }^{1}$ | 3 |


| PCRM 351 | Parks \& Conservation Practicum ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| PCRM 377 | Cultural Resources Management ${ }^{1}$ | 3 |
| PCRM 415 | Challenges and Trends in Parks and Conservation ${ }^{1}$ | 3 |
| PCRM 475 | Park and Resource Management ${ }^{1}$ | 3 |
| PCRM 477 | Wildlife \& Wildlands Field Methods and Management ${ }^{1}$ | 3 |
| Subtotal |  | 39 |
| Leadership Course |  |  |
| Select one of | wing: | 3 |



1 Course counts for $50 \%$ of Major requirements and Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term)
2. Student-faculty research
3. Service-learning classes
4. Internships
5. Volunteering
6. Job Shadowing

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
PARK \& RESOURCE MANAGEMENT - BS (6374)
This program is effective as of Fall 2020.
Revised 10.06.20
UCC 09.15.20

Recommended Four-Year Plan


## Second Year

Fall

| PCRM 210 | Resources for Outdoor Programming | 3 |
| :---: | :---: | :---: |
| PCRM 342 | Group Facilitation and Leadership | 3 |
| GES 115 | Introduction to Geospatial Technologies | 3 |
| SCI 101 | Science of Life | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Declare a Thematic Thread ${ }^{2}$ |  |  |


| Spring |  |  |
| :--- | :--- | :--- |
| PCRM 214 | Parks and Recreation Planning | 3 |
| PCRM 348 | Natural History of Ecosystems I | 3 |
| PCRM Leadership Class: | 3 |  |


| PCRM 318 | Administrative Strategies for Resource <br> Managers |
| :--- | :--- |
| PCRM 211 | Outdoor Leadership |
| PCRM 342 | Group Facilitation and Leadership |

Social Science Inquiry (p. 1378) 3

| Thematic Thread Requirement (p. 1378) | 3 |
| :---: | ---: |
| Hours | 15 |


| Third Year |  |
| :--- | :--- | :--- |
| Fall   <br> PCRM 315 Recreation Resource Planning and Analysis 3 <br> Professional Elective: 3  |  |


| PCRM 318 | Administrative Strategies for Resource <br> Managers |
| :---: | :--- | :--- |
| PCRM 211 | Outdoor Leadership | | PCRM 342 | Group Facilitation and Leadership |
| :---: | :--- |
| PCRM 349 | Natural History of Ecosystems II |
| PCRM 377 | Cultural Resources Management |


| Thematic Thread Requirement (p. 1378) |  | 3 |
| :---: | :---: | :---: |
|  | Hours | 15 |
| Spring |  |  |
| PCRM 415 | Challenges and Trends in Parks and Conservation | 3 |
| PCRM 304 | Search and Rescue/Wilderness Medicine | 3 |
| PCRM 477 | Wildlife \& Wildlands Field Methods and Management | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| PCRM Elective/Minor/Certificate |  | 3 |
|  | Hours | 18 |
| Summer |  |  |
| PCRM 351 | Parks \& Conservation Practicum | 3 |
|  | Hours | 3 |
| Fourth Year |  |  |
| Fall |  |  |
| PCRM 475 | Park and Resource Management | 3 |
| PCRM 347 | Interpretive Methods and Programming | 3 |
| PCRM Elective/Minor/Certificate |  | 3 |
| PCRM Elective/Minor/Certificate |  | 3 |
| PCRM Elective/Minor/Certificate |  | 3 |
|  | Hours | 15 |

Summer

| PCRM 450 | Internship | 12 |
| :--- | :--- | ---: |
|  | Hours | $\mathbf{1 2}$ |
|  | Total Hours** | $\mathbf{1 2 1}$ |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.

PARK \& RESOURCE MANAGEMENT - BS (6374)
Revised: 02.03.2021
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Recreational Therapy, Bachelor of Science (BS)

## Program Learning Outcomes

- Degree Program Writing Competency: Upon completion of the degree program RT students will write professionally and effectively, according to expectations of the Recreational Therapy profession.
- Life-Long Learning: Recognize the importance of lifelong learning and demonstrates responsibly for self-assessment and growth. This ability is evident through the demonstration of self initiating
behaviors, anticipating and responding to changes in a productive manner, assuming responsibility for continuous self reflection assessment of strengths and limitations and in seeking out information from a variety of resources in an independent manner.
- Methodological Proficiency: Upon completion of the degree program RT students will use an analytical framework to facilitate the Recreational Therapy process to meet the needs of individuals. The abilities developed include a solid knowledge of the RT process, assessment methods, planning skills, intervention, techniques and strategies, and evaluation skills.
- Professional Decision Making: Analyze and synthesize complex information to make sound clinical decisions. This ability is inclusive of areas such as problem solving, critical thinking, evaluation and organization with application to clinical and non clinical areas.
- Professional Interactions: Effectively communicates with people in a variety of professional contexts including assisting clients in confronting and coping with life challenges, collaborating on teams and presenting information in oral and written formats. The abilities developed include striving to maintain objectivity, tolerating ambiguity, appreciating diversity and adhering to conventional standards of expression.
- Valuing Ethical Responsibilities: Act with professional values in all situations. These skills include maintaining appropriate humane and ethical treatment of individuals as well as upholding the professional code of ethics. This expertise includes formulating value judgments reflecting a respect for dignity and individuality of every person.


## Related Links

Recreational Therapy, BS Program Page (https://www.sru.edu/ academics/majors-and-minors/recreational-therapy/)

Recreational Therapy Department Page (https://www.sru.edu/ academics/colleges-and-departments/ches/departments/recreationaltherapy/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher Overall GPA: 2.0 or higher

## Summary*

Code Title Hours
Rock Studies Requirements ..... 42
Other Basic Requirements ..... 0-3
Computer Competency ..... 0-3
Major Requirements ..... 60
Professional Electives ..... 12
NCTRC Certification Requirements ..... 18
Electives ..... 18

* All undergraduate degree programs require a minimum of 120 credits.Some courses meet multiple requirements, but are only counted oncetoward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |
| Subtotal |  |


| Subtotal | 15 |
| :---: | :---: |
| Integrated Inquiry |  |
| Creative and Aesthetic Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Humanities Inquiry |  |
| PHIL 325 Medical/Health Care Ethics | 3 |
| Social Science Inquiry |  |
| PSYC 105 Introduction to Psychology | 3 |
| Natural Sciences Inquiry |  |
| SCI 101 Science of Life | 3 |
| Physical Sciences Inquiry |  |
| SCI 102 Understanding the Physical World | 3 |
| Subtotal | 15 |
| Thematic Thread |  |
| Select 12 credits: ${ }^{2}$ | 12 |
| PSYC 244 Developmental Psychology (required) |  |
| At least two 300 level or above courses |  |
| Additional course |  |

## Total Hours

1 Course offered in multiple subjects; cannot take course in first major subject.
2 At least 3 categories; no more than 6 credits from one department.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Ar |  |
| CPSC 110 | Computer Concepts |  |

\(\left.$$
\begin{array}{lll}\hline \text { CPSC } 130 & \begin{array}{l}\text { Introduction to Computing and } \\
\text { Programming }\end{array}
$$ <br>

\hline PE 202 \& Technology for Wellness\end{array}\right]\)| $\mathbf{0 - 3}$ |
| :--- |
| Total Hours |
| Major Requirements |
| - 30 major credits must be taken at SRU or PASSHE |
| - 30 major credits must be taken at the 300 level or above |
| - Students must become certified in First Aid and CPR. This can |
| be accomplished by taking a course (example: American Heart |
| Association or by completing SAFE 205-First Aid \& Safety). |

Code Title Hours

## Recreational Therapy Courses

| Must earn a "C" or better in all of the following RCTH courses: |  |  |
| :--- | :--- | ---: |
| RCTH 120 | Disability, Community Inclusion, and <br> Diversity ${ }^{1}$ | 3 |
| RCTH 220 | Recreational Therapy Services ${ }^{1}$ | 3 |
| RCTH 232 | Recreational Therapy for People with <br> Physical Disabilities ${ }^{1}$ | 3 |
| RCTH 233 | Recreational Therapy for People with <br> Psychosocial and Mental Disorders ${ }^{1}$ | 3 |
| RCTH 314 | Clinical Aspects of Recreational Therapy ${ }^{1}$ | 3 |
| RCTH 317 | Organization and Management of <br> Recreational Therapy Practice ${ }^{1}$ | 3 |
| RCTH 319 | Client Assessment in Recreational Therapy | 3 |


| RCTH 320 | Recreational Therapy Program Design ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| RCTH 351 | Recreational Therapy Practicum ${ }^{1}$ | 3 |
| RCTH 415 | Challenges and Trends in Recreational Therapy ${ }^{1}$ | 3 |
| RCTH 420 | Recreational Therapy for Older Adults ${ }^{1}$ | 3 |
| RCTH 422 | Recreational Therapy Interventions I ${ }^{1}$ | 3 |
| RCTH 423 | Recreational Therapy Interventions II ${ }^{1}$ | 3 |
| RCTH 450 | Internship ${ }^{\text {1, }}$ | 12 |
| Subtotal |  | 51 |


| Required Recreational Therapy Courses from Other Departments |  |  |
| :--- | :--- | ---: |
| PE 360 | Anatomical and Physiological Basis of <br> Physical Activity/Lab | 3 |
| PE 364 | Biomechanics of Individuals with |  |
| Disabilities $^{1}$ | 3 |  |
| PSYC 244 | Developmental Psychology $^{1,3}$ | 3 |
| Subtotal |  | 9 |
| Total Hours |  | $\mathbf{6 0}$ |

Course counts for $50 \%$ of Major requirements and Major GPA
2 Evidence of current First Aid \& CPR certification must be provided prior to enrollment
3 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Professional Electives

| Code | Title | Hours |
| :--- | :--- | ---: |
| PSYC 105 | Introduction to Psychology ${ }^{1}$ | 3 |
| PHIL 325 | Medical/Health Care Ethics ${ }^{1}$ | 3 |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |
| Approved Professional Elective | 3 |  |

Total Hours 12
1 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total

## NCTRC Certification Requirements

These courses must be completed by the student in order to be eligible to take NCTRC Certification Exam

| Code | Title | Hours |
| :---: | :---: | :---: |
| PSYC 105 | Introduction to Psychology ${ }^{1}$ | 3 |
| PSYC 244 | Developmental Psychology ${ }^{1}$ | 3 |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |
| PE 360 | Anatomical and Physiological Basis of Physical Activity/Lab | 3 |
| PE 364 | Biomechanics of Individuals with Disabilities | 3 |
| PHIL 325 | Medical/Health Care Ethics ${ }^{1}$ | 3 |
| Total Hours |  | 18 |

1 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total

## Co-curricular and Experimental Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes
2. Student-faculty research
3. Student leadership development
4. Service-learning classes
5. Internships
6. Volunteering

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
RECREATIONAL THERAPY - BS (6393)
This program is effective as of Fall 2020.
Revised 10.06.20

UCC 09.15.20

## Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall |  |  |
| RCTH 120 | Disability, Community Inclusion, and <br>  <br> ENGL 102 | Critical Writing |
| INDS 101 | FYRST Seminar | 3 |
| PSYC 105 | Introduction to Psychology | 3 |
| SUBJ 139 | University Seminar |  |


| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :---: | :--- | ---: |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy | 3 |
| Elective/Minor |  | 3 |
| Declare a Thematic Thread $^{2}$ |  |  |

Spring
RCTH 232

or RCTH 233 $\quad$| Recreational Therapy for People with |
| :--- |
| Physical Disabilities |
| or Recreational Therapy for People with |
| Psychosocial and Mental Disorders |$\quad 3$

Thematic Thread Requirement (p. 1378) 3

Thematic Thread Requirement (p. 1378) 3

| Elective/Minor | 3 |
| :--- | ---: |
|  | $\mathbf{H o u r s}$ |

Third Year
Fall

| RCTH 319 | Client Assessment in Recreational Therapy | 3 |
| :--- | :--- | :--- |
| RCTH 351 | Recreational Therapy Practicum | 3 |
| PE 360 | Anatomical and Physiological Basis of <br> Physical Activity/Lab | 3 |
| Elective/Minor |  | 3 |
| Thematic Thread Requirement (p. 1378) | 3 |  |


| Thematic Thread Requirement (p. 1378) |  | 3 |
| :---: | :---: | :---: |
|  | Hours | 18 |
| Spring |  |  |
| RCTH 314 | Clinical Aspects of Recreational Therapy | 3 |
| RCTH 317 | Organization and Management of Recreational Therapy Practice | 3 |
| RCTH 415 | Challenges and Trends in Recreational Therapy | 3 |
| RCTH 423 | Recreational Therapy Interventions II | 3 |
| Elective/Minor |  | 3 |
|  | Hours | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| RCTH 320 | Recreational Therapy Program Design | 3 |
| RCTH 420 | Recreational Therapy for Older Adults | 3 |
| RCTH 422 | Recreational Therapy Interventions I | 3 |
| PE 364 | Biomechanics of Individuals with Disabilities | 3 |
| Elective/Minor |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| RCTH 450 | Internship | 12 |
| PHIL 325 | Medical/Health Care Ethics | 3 |
|  | Hours | 15 |
|  | Total Hours** | 121 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.

Major Code: 6393
Revised: 12.10.2020
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Recreational Therapy, Bachelor of Science (BS) / Pre-Occupational Therapy (SRU) (3+3)

## Recreational Therapy Program Learning Outcomes

- Degree Program Writing Competency: Upon completion of the degree program RT students will write professionally and effectively, according to expectations of the Recreational Therapy profession.
- Life-Long Learning: Recognize the importance of lifelong learning and demonstrates responsibly for self-assessment and growth. This ability is evident through the demonstration of self initiating
behaviors, anticipating and responding to changes in a productive manner, assuming responsibility for continuous self reflection assessment of strengths and limitations and in seeking out information from a variety of resources in an independent manner.
- Methodological Proficiency: Upon completion of the degree program RT students will use an analytical framework to facilitate the Recreational Therapy process to meet the needs of individuals. The abilities developed include a solid knowledge of the RT process, assessment methods, planning skills, intervention, techniques and strategies, and evaluation skills.
- Professional Decision Making: Analyze and synthesize complex information to make sound clinical decisions. This ability is inclusive of areas such as problem solving, critical thinking, evaluation and organization with application to clinical and non clinical areas.
- Professional Interactions: Effectively communicates with people in a variety of professional contexts including assisting clients in confronting and coping with life challenges, collaborating on teams and presenting information in oral and written formats. The abilities developed include striving to maintain objectivity, tolerating ambiguity, appreciating diversity and adhering to conventional standards of expression.
- Valuing Ethical Responsibilities: Act with professional values in all situations. These skills include maintaining appropriate humane and ethical treatment of individuals as well as upholding the professional code of ethics. This expertise includes formulating value judgments reflecting a respect for dignity and individuality of every person.


## What are your options?

Pre-Occupational Therapy SRU 3+3: Earn a Doctor of Occupational Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU OTD program. At the end of your second year, you apply for admission into the SRU OTD program. If accepted, your first year in the SRU OTD program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

Pre-Occupational Therapy (SRU Traditional): Complete the requirements for your major and the pre-requisites for the SRU OTD program and apply to the SRU OTD program in your senior year.

## Related Links

Recreational Therapy - Pre-Occupational Therapy, BS Program Page (https://www.sru.edu/academics/majors-and-minors/recreational-therapy-pre-occupational-therapy/)

Recreational Therapy Department Page (https://www.sru.edu/ academics/colleges-and-departments/ches/departments/recreationaltherapy/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
$1^{\text {st }}$ Major. Recreational Therapy

- Overall GPA: 2.0 or higher
- Major GPA (Includes Major Requirements): 2.0 or higher
$2^{\text {nd }}$ Major: Pre-OT SRU 3+3 Recreational Therapy
- Overall GPA: 3.00 or higher


## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 51 |
| NCTRC Certification Requirements | 18 |
| Electives | 26 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the $1^{\text {st }}$ year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.
Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Select one of the following: | 3 |  |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |

$\begin{array}{ll}\text { Subtotal } & 15\end{array}$
Integrated Inquiry

| Creative and Aesthetic Inquiry |
| :--- |
| Select 3 Credits (p. 1378) |


| Humanities Inquiry |  | 3 |
| :--- | :--- | :--- |
| PHIL 325 | Medical/Health Care Ethics |  |


| Social Science Inquiry |  |
| :--- | :--- | :--- |
| PSYC 105 | Introduction to Psychology |

Natural and Physical Sciences Inquiry

| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| :--- | :--- | :--- |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |


| Subtotal | 15 |
| :--- | :--- |

## Thematic Thread

Credits must be from at least 3 Categories; no more than 6 credits from one department; 6 credits must be 300 -level or above Select one of the following:

| INDP 106 | Race and Ethnic Diversity in the USA |  |
| :---: | :--- | :---: |
| INDP 310 | Cultural Area Studies |  |
| INDP 321 | Minority Groups |  |
| PSYC 244 | Developmental Psychology (required) | 3 |
| Additional Course |  | 3 |


| Additional Course | 3 |
| :--- | ---: |
| Total Hours | 42 |
| 1 | Course offered in multiple subjects; cannot take course in first major <br>  <br>  <br> subject. |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra | $\mathbf{0 - 3}$ |
| Total Hours |  |  |

## Computer Competency

| Code | Title | Hours |
| :---: | :---: | :---: |
| Demonstrate "computer competency" by one of the following: |  | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one institution: | ollowing at SRU or another post-secondary |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major Requirements

- If you choose to pursue the Pre-OT SRU 3+3 RT program and not accepted into the OTD program, then you are required to complete RCTH 415, RCTH 423, PE 360 and additional approved RT electives. (See RT BS degree curriculum guide).

| Code | Title | Hours |
| :---: | :---: | :---: |
| Recreational Therapy Courses |  |  |
| Must earn a "C" or better in all of the following RCTH courses: |  |  |
| RCTH 120 | Disability, Community Inclusion, and Diversity ${ }^{1}$ | 3 |
| RCTH 220 | Recreational Therapy Services ${ }^{1}$ | 3 |
| RCTH 232 | Recreational Therapy for People with Physical Disabilities ${ }^{1}$ | 3 |
| RCTH 233 | Recreational Therapy for People with Psychosocial and Mental Disorders ${ }^{1}$ | 3 |
| RCTH 314 | Clinical Aspects of Recreational Therapy ${ }^{1}$ | 3 |
| RCTH 317 | Organization and Management of Recreational Therapy Practice ${ }^{1}$ | 3 |
| RCTH 319 | Client Assessment in Recreational Therapy 1 | 3 |
| RCTH 320 | Recreational Therapy Program Design ${ }^{1}$ | 3 |
| RCTH 351 | Recreational Therapy Practicum ${ }^{1}$ | 3 |
| RCTH 420 | Recreational Therapy for Older Adults ${ }^{1}$ | 3 |
| RCTH 422 | Recreational Therapy Interventions ${ }^{1}$ | 3 |
| RCTH 450 | Internship 1,2 | 12 |


| Required Recreational Therapy Courses from other departments <br> and Occupational Therapy Prerequisite courses |  |
| :--- | :--- | ---: |
| PE 364 Biomechanics of Individuals with <br> Disabilities 1 3 <br> PSYC 276 Introduction to Abnormal Psychology 3 <br> Subtotal 51  <br> Total Hours 51  <br> 1 Course counts for 50\% of Major requirements and Major GPA  |  |
| 2 | Students must become certified in First Aid and CPR. This can be <br> accomplished by taking a course (example: American Heart Assoc.) |
| *Some courses may require pre-requisites. Please see course <br> descriptions to determine if there are any pre-requisites for that |  |

## Additional Occupational Therapy Prerequisite Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| SOWK 318 | Research Methods | 3 |
| $\quad$ or INDP 318 | Research Methods in Interdisciplinary Studies |  |
| ERS 250 | Medical Terminology | 3 |
| or HCAM 250 | Medical Terminology for Healthcare |  |
|  | Administrators |  |

Total Hours

## NCTRC Certification Requirements

These courses must be completed by the student in order to be eligible to take NCTRC Certification Exam

| Code | Title | Hours |
| :--- | :--- | ---: |
| PSYC 105 | Introduction to Psychology ${ }^{1}$ | 3 |
| PSYC 244 | Developmental Psychology ${ }^{1}$ | 3 |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |
| PE 360 | Anatomical and Physiological Basis of <br> Physical Activity/Lab | 3 |
| PE 364 | Biomechanics of Individuals with <br> Disabilities | 3 |
| PHIL 325 | Medical/Health Care Ethics ${ }^{1}$ | 3 |
| Total Hours |  | $\mathbf{1 8}$ |

1 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.

## Co-curricular and Experimental Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes
2. Student-faculty research
3. Student leadership development
4. Service-learning classes
5. Internships
6. Volunteering

Doctor of Occupational Therapy (OTD)
Prerequisite Admission Requirements - Prerequirements: http://www.sru.edu/OT (http://www.sru.edu/OT/)

## Rock Studies

| Code | Title | Hours |
| :---: | :---: | :---: |
| Prerequisite Courses - SRU Occupational Therapy |  |  |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| $\begin{aligned} & \text { ERS } 250 \\ & \text { or HCAM } 250 \end{aligned}$ | Medical Terminology <br> Medical Terminology for Healthcare Administrators | 3 |
| $\begin{aligned} & \text { PHYS } 201 \\ & \text { or PE } 364 \end{aligned}$ | Elements of Physics I with Lab <br> Biomechanics of Individuals with Disabilities | 4 |
| STAT 152 | Elementary Statistics I | 3 |
| Research Methods ${ }^{1}$ |  | 3 |
| PSYC 105 | Introduction to Psychology | 3 |
| PSYC 244 | Developmental Psychology | 3 |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |
| Anthropology or Sociology ${ }^{1}$ |  | 3 |
| Total Hours |  | 31 |

1 Select one course. See My Rock Audit for specific courses.

## Pre-Occupational Therapy SRU 3+3

If any of these requirements are not met, the $3+3$ designation will be removed from the student's record:

1. A 3.0 or higher overall GPA must be maintained by the student.
2. The student can only be enrolled in the Pre-Occupational Therapy SRU $3+3$ program for a maximum of three (3) years, full-time continuous enrollment (fall/spring).

## Provision

Should a Pre-Occupational Therapy SRU 3+3 student be unsuccessful in completing the $1^{\text {st }}$ two semesters (summer or fall) of the Occupational Therapy Program and wants to complete the original undergraduate degree, it is solely up to the discretion of the undergraduate program Department Chair to determine which, if any, Occupational Therapy courses will count toward the completion of his/her undergraduate degree. In addition, students must complete any unfulfilled requirements of their undergraduate major. Students may still apply to the Doctor of Occupational Therapy Program with an earned Bachelor's degree.

RECREATIONAL THERAPY - BS (6393)
PRE-OT SRU 3+3 (6RTO)
This program is effective as of Fall 2019.
Revised 7-2019
UCC 3.26.2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum
categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Three-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| RCTH 120 | Disability, Community Inclusion, and Diversity | 3 |
| RCTH 220 | Recreational Therapy Services | 3 |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar ${ }^{1}$ | 1 |
| PSYC 105 | Introduction to Psychology | 3 |
| SUBJ 139 | University Seminar ${ }^{\text {* }}$ | 3 |
|  | Hours | 16 |
| Spring |  |  |
| RCTH 233 <br> or RCTH 232 | Recreational Therapy for People with Psychosocial and Mental Disorders or Recreational Therapy for People with Physical Disabilities | 3 |
| ERS 250 | Medical Terminology (Fulfills 21st Century Healthcare Thematic Thread requirement) | 3 |
| ENGL 104 | Critical Reading | 3 |
| PSYC 244 | Developmental Psychology | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
|  | Hours | 18 |
| Second Year |  |  |
| Fall |  |  |
| RCTH 233 <br> or RCTH 232 | Recreational Therapy for People with Psychosocial and Mental Disorders or Recreational Therapy for People with Physical Disabilities | 3 |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| INDP 201 or INDP 202 | Principles of Sociology or Introduction to Anthropology | 3 |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 18 |
| Spring |  |  |
| RCTH 314 | Clinical Aspects of Recreational Therapy | 3 |
| RCTH 317 | Organization and Management of Recreational Therapy Practice | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |


| INDP 318 or SOWK 318 | Research Methods in Interdisciplinary Studies or Research Methods | 3 |
| :---: | :---: | :---: |
| PE 364 | Biomechanics of Individuals with Disabilities | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
|  | Hours | 18 |
| Third Year |  |  |
| Fall |  |  |
| RCTH 319 | Client Assessment in Recreational Therapy | 3 |
| RCTH 320 | Recreational Therapy Program Design | 3 |
| RCTH 420 | Recreational Therapy for Older Adults | 3 |
| RCTH 422 | Recreational Therapy Interventions I | 3 |
| RCTH 351 | Recreational Therapy Practicum | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 18 |
| Spring |  |  |
| RCTH 450 | Internship | 12 |
| PHIL 325 | Medical/Health Care Ethics | 3 |
|  | Hours | 15 |
|  | Total Hours** | 103 |

* Course offered in multiple subjects; cannot take course in first major subject.
Students are encouraged to take INDS 101 as a Free Elective.
2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread.

Major Code: 6RTO
Revised: 12.10.2020
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Recreational Therapy, Bachelor of Science (BS) / Pre-Occupational Therapy (SRU) (Traditional) <br> Recreational Therapy Program Learning Outcomes

- Degree Program Writing Competency: Upon completion of the degree program RT students will write professionally and effectively, according to expectations of the Recreational Therapy profession.
- Life-Long Learning: Recognize the importance of lifelong learning and demonstrates responsibly for self-assessment and growth. This ability is evident through the demonstration of self initiating behaviors, anticipating and responding to changes in a productive manner, assuming responsibility for continuous self reflection assessment of strengths and limitations and in seeking out information from a variety of resources in an independent manner.
- Methodological Proficiency: Upon completion of the degree program RT students will use an analytical framework to facilitate the Recreational Therapy process to meet the needs of individuals. The abilities developed include a solid knowledge of the RT process, assessment methods, planning skills, intervention, techniques and strategies, and evaluation skills.
- Professional Decision Making: Analyze and synthesize complex information to make sound clinical decisions. This ability is inclusive of areas such as problem solving, critical thinking, evaluation and organization with application to clinical and non clinical areas.
- Professional Interactions: Effectively communicates with people in a variety of professional contexts including assisting clients in confronting and coping with life challenges, collaborating on teams and presenting information in oral and written formats. The abilities developed include striving to maintain objectivity, tolerating ambiguity, appreciating diversity and adhering to conventional standards of expression.
- Valuing Ethical Responsibilities: Act with professional values in all situations. These skills include maintaining appropriate humane and ethical treatment of individuals as well as upholding the professional code of ethics. This expertise includes formulating value judgments reflecting a respect for dignity and individuality of every person.


## What are your options?

Pre-Occupational Therapy SRU 3+3: Earn a Doctor of Occupational Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU OTD program. At the end of your second year, you apply for admission into the SRU OTD program. If accepted, your first year in the SRU OTD program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

Pre-Occupational Therapy (SRU Traditional): Complete the requirements for your major and the pre-requisites for the SRU OTD program and apply to the SRU OTD program in your senior year.

## Related Links

Recreational Therapy - Pre-Occupational Therapy, BS Program Page (https://www.sru.edu/academics/majors-and-minors/recreational-therapy-pre-occupational-therapy/)

Recreational Therapy Department Page (https://www.sru.edu/ academics/colleges-and-departments/ches/departments/recreationaltherapy/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirements | $0-3$ |


| Computer Competency | $0-3$ |
| :--- | ---: |
| Major Requirements | 60 |
| Professional Eectives | 12 |
| NCTRC Certification Requirements | 18 |
| Electives | 18 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning ${ }^{2}$ | 3 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |

Subtotal
Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378) 3

| Humanities Inquiry |  |  |
| :--- | :--- | :--- |
| PHIL 325 | Medical/Health Care Ethics |  |


| Social Science Inquiry |  |  |
| :--- | :--- | :--- |
| PSYC 105 | Introduction to Psychology |  |

Natural and Physical Sciences Inquiry
SCI 101 Science of Life ${ }^{2} \quad 3$
SCI 102 Understanding the Physical World ${ }^{2} 3$
Subtotal 15

Thematic Thread
Select 12 credits: ${ }^{2,3} 12$
PSYC 244 Developmental Psychology
Additional Course
Additional Course
Additional Course
Total Hours
42
1 Course offered in multiple subjects; cannot take course in first major subject.
2 Consult with your academic adviser as course options are available to assist in meeting DOT prerequisite admission requirements.
At least 3 categories; no more than 6 credits from one department.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code Title | Hours |
| :--- | ---: |
| Complete one of the following: | $0-3$ |
| Meet required minimum SAT or ACT math score OR |  |


| ESAP 110 | Beginning Algebra |  |
| :---: | :---: | :---: |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate "computer competency" by one of the following: |  | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Ar |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :---: | :---: | :---: |
| Recreational Therapy Courses |  |  |
| Must earn a "C" or better in all of the following RCTH courses: |  |  |
| RCTH 120 | Disability, Community Inclusion, and Diversity ${ }^{1}$ | 3 |
| RCTH 220 | Recreational Therapy Services ${ }^{1}$ | 3 |
| RCTH 232 | Recreational Therapy for People with Physical Disabilities ${ }^{1}$ | 3 |
| RCTH 233 | Recreational Therapy for People with Psychosocial and Mental Disorders ${ }^{1}$ | 3 |
| RCTH 314 | Clinical Aspects of Recreational Therapy ${ }^{1}$ | 3 |
| RCTH 317 | Organization and Management of Recreational Therapy Practice ${ }^{1}$ | 3 |
| RCTH 319 | Client Assessment in Recreational Therapy 1 | 3 |
| RCTH 320 | Recreational Therapy Program Design ${ }^{1}$ | 3 |
| RCTH 351 | Recreational Therapy Practicum ${ }^{1}$ | 3 |
| RCTH 415 | Challenges and Trends in Recreational Therapy | 3 |
| RCTH 420 | Recreational Therapy for Older Adults ${ }^{1}$ | 3 |
| RCTH 422 | Recreational Therapy Interventions I ${ }^{1}$ | 3 |
| RCTH 423 | Recreational Therapy Interventions II ${ }^{1}$ | 3 |
| RCTH 450 | Internship ${ }^{1,2}$ | 12 |
| Subtotal |  | 51 |


| Required R | Therapy Courses from Other Departm |  |
| :---: | :---: | :---: |
| PE 360 | Anatomical and Physiological Basis of Physical Activity/Lab ${ }^{1}$ | 3 |
| PE 364 | Biomechanics of Individuals with Disabilities ${ }^{1}$ | 3 |
| PSYC 244 | Developmental Psychology ${ }^{1}$ | 3 |
| Subtotal |  | 9 |
| Total Hours |  | 60 |

1 Course counts for $50 \%$ of Major requirements and Major GPA
2 Students must become certified in First Aid and CPR prior to the internship

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Professional Electives

| Code | Title | Hours |
| :--- | :--- | ---: |
| PSYC 105 | Introduction to Psychology | 3 |
| PHIL 325 | Medical/Health Care Ethics | 3 |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |
| Approved Professional Elective | 3 |  |
| Total Hours | $\mathbf{1 2}$ |  |

## NCTRC Certification Requirements

These courses must be completed by the student in order to be eligible to take NCTRC Certification Exam

| Code | Title | Hours |
| :---: | :---: | :---: |
| PSYC 105 | Introduction to Psychology | 3 |
| PSYC 244 | Developmental Psychology | 3 |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |
| PE 360 | Anatomical and Physiological Basis of Physical Activity/Lab | 3 |
| PE 364 | Biomechanics of Individuals with Disabilities | 3 |
| PHIL 325 | Medical/Health Care Ethics | 3 |
| Total Hours |  | 18 |
| Additional Occupational Therapy Prerequisite Courses |  |  |
| Code | Title | Hours |
| Select from courses listed below (1 or other): |  |  |
| INDP 318 | Research Methods in Interdisciplinary Studies | 3 |
| SOWK 318 | Research Methods | 3 |
| $\begin{aligned} & \text { ERS } 250 \\ & \text { or HCAM } 250 \end{aligned}$ | Medical Terminology <br> Medical Terminology for Healthcare <br> Administrators | 3 |

## Co-Curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes
2. Student-faculty research
3. Student leadership development
4. Service-learning classes
5. Internships
6. Volunteering

## Doctor of Occupational Therapy (OTD) Prerequisite Admission Requirements <br> For Application Requirements <br> Please refer to Slippery Rock University's Occupational Therapy Studies (Master of Science in Occupational Therapy Studies) website for requirements: http://www.sru.edu/OT (http://www.sru.edu/OT/)

## Rock Studies

| Code | Title | Hours |
| :--- | :--- | ---: |
| Prerequisite Courses | - SRU Occupational Therapy |  |
| BIOL 216 | Anatomy and Physiology I with Lab |  |
| BIOL 217 | Anatomy and Physiology II with Lab |  |
| ERS 250 | Medical Terminology |  |
| or HCAM 250 | Medical Terminology for Healthcare <br> Administrators | 3 |
| PHYS 201 | Elements of Physics I with Lab <br> or PE 364 | Biomechanics of Individuals with Disabilities |
| STAT 152 | Elementary Statistics I | 3 |
| Research Methods |  | 4 |
| PSYC 105 | Introduction to Psychology | 3 |
| PSYC 244 | Developmental Psychology | 3 |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |
| Anthropology or Sociology ${ }^{1}$ | 3 |  |
| Total Hours |  | 3 |

1 Select one course. See My Rock Audit for specific courses.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
RECREATIONAL THERAPY - BS (6393)
PRE-PT (SRU Traditional)
Effective Fall 2019
Revised 10.30.20
UCC 3.26.2019

## Recreational Therapy, Bachelor of Science (BS) / Pre-Physical Therapy (SRU) (3+3)

## Recreational Therapy Program Learning Outcomes

[^16]- Life-Long Learning: Recognize the importance of lifelong learning and demonstrates responsibly for self-assessment and growth. This ability is evident through the demonstration of self initiating behaviors, anticipating and responding to changes in a productive manner, assuming responsibility for continuous self reflection assessment of strengths and limitations and in seeking out information from a variety of resources in an independent manner.
- Methodological Proficiency: Upon completion of the degree program RT students will use an analytical framework to facilitate the Recreational Therapy process to meet the needs of individuals. The abilities developed include a solid knowledge of the RT process, assessment methods, planning skills, intervention, techniques and strategies, and evaluation skills.
- Professional Decision Making: Analyze and synthesize complex information to make sound clinical decisions. This ability is inclusive of areas such as problem solving, critical thinking, evaluation and organization with application to clinical and non clinical areas.
- Professional Interactions: Effectively communicates with people in a variety of professional contexts including assisting clients in confronting and coping with life challenges, collaborating on teams and presenting information in oral and written formats. The abilities developed include striving to maintain objectivity, tolerating ambiguity, appreciating diversity and adhering to conventional standards of expression.
- Valuing Ethical Responsibilities: Act with professional values in all situations. These skills include maintaining appropriate humane and ethical treatment of individuals as well as upholding the professional code of ethics. This expertise includes formulating value judgments reflecting a respect for dignity and individuality of every person.


## What are your options?

Pre-Physical Therapy SRU 3+3: Earn a Doctor of Physical Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU DPT program. During your third undergraduate year, you apply for admission into the SRU DPT program. If accepted, your first year in the SRU DPT program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

Pre-Physical Therapy (SRU Traditional): Complete the requirements for your major and the pre-requisites for the SRU DPT program and apply to the SRU DPT program in your senior year.

## Related Links

Recreational Therapy - Pre-Physical Therapy, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/recreational-therapy-pre-physical-therapy/)

Recreational Therapy Department Page (https://www.sru.edu/ academics/colleges-and-departments/ches/departments/recreationaltherapy/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
$1^{\text {st }}$ Major. Recreational Therapy

- Overall GPA: 2.0 or higher
- Major GPA includes Major Requirements: 2.0 or higher
$2^{\text {nd }}$ Major: Pre-PT SRU 3+3 Recreational Therapy
- Overall GPA: 3.00 or higher


## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 43 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 42 |
| NCTRC Certification Requirements | 6 |
| Electives | 29 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the $1^{\text {st }}$ year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.


## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |

Subtotal 15
Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378)

| Humanities Inquiry |  |
| :--- | :--- |
| Select 3 Credits (p. 1378) | 3 |


| Social Science Inquiry |  |
| :--- | :--- | :--- |
| PSYC 105 | Introduction to Psychology |


| Natural and Physical Sciences Inquiry | 3 |  |
| :--- | :--- | :--- |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| PHYS 201 | Elements of Physics I with Lab | 4 |

Subtotal 16

## Thematic Thread

Select 12 credits: ${ }^{2}$
PSYC 244 Developmental Psychology (required)
At least two 300 level or above courses
Additional Course
Total Hours

1 Course offered in multiple subjects; cannot take course in first major subject.
2 At least 3 categories; no more than 6 credits from one department.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal A |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major Requirements

- If you choose to pursue Pre-Physical Therapy SRU 3+3 Recreational Therapy and are not accepted into the DPT program, then additional coursework is required to complete a first major of Recreational Therapy. Please refer to the Recreational Therapy Curriculum Guide.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Recreational Therapy Courses |  |  |
| Must earn a "C" or better in all of the following RCTH courses: |  |  |
| RCTH 120 | Disability, Community Inclusion, and Diversity ${ }^{1}$ | 3 |
| RCTH 220 | Recreational Therapy Services ${ }^{1}$ | 3 |
| RCTH 232 | Recreational Therapy for People with Physical Disabilities ${ }^{1}$ | 3 |
| RCTH 233 | Recreational Therapy for People with Psychosocial and Mental Disorders | 3 |
| RCTH 314 | Clinical Aspects of Recreational Therapy ${ }^{1}$ | 3 |
| RCTH 317 | Organization and Management of Recreational Therapy Practice ${ }^{1}$ | 3 |
| RCTH 319 | Client Assessment in Recreational Therapy 1 | 3 |
| RCTH 320 | Recreational Therapy Program Design ${ }^{1}$ | 3 |
| RCTH 420 | Recreational Therapy for Older Adults ${ }^{1}$ | 3 |
| RCTH 422 | Recreational Therapy Interventions I ${ }^{1}$ | 3 |
| RCTH 450 | Internship ${ }^{1}$ | 12 |
| Total Hours |  | 42 |

1 Course counts for $50 \%$ of Major requirements and Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## NCTRC Certification Requirements

These courses must be completed by the student in order to be eligible to take NCTRC Certification Exam

| Code | Title | Hours |
| :--- | :--- | ---: |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |
| PHIL 325 | Medical/Health Care Ethics 1 | 3 |
| Total Hours |  | $\mathbf{6}$ |

1 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.

## Additional Physical Therapy Prerequisite Courses

| Code | Title | Hours |
| :---: | :---: | :---: |
| BIOL 216 | Anatomy and Physiology I with Lab ${ }^{1}$ | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab ${ }^{1}$ | 3 |
| CHEM 107 | General Chemistry I ${ }^{1}$ | 3 |
| CHEM 108 | General Chemistry II | 3 |
| CHEM 111 | General Chemistry I Lab ${ }^{1}$ | 1 |
| CHEM 112 | General Chemistry II Lab | 1 |
| STAT 152 | Elementary Statistics I | 3 |
| PHYS 201 | Elements of Physics I with Lab ${ }^{1}$ | 4 |
| PHYS 202 | Elements of Physics II/ Lab | 4 |
| PSYC 244 | Developmental Psychology ${ }^{1}$ | 3 |
| Total Hours |  | 28 |

1 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.

## Co-curricular and Experimental Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes
2. Student-faculty research
3. Student leadership development
4. Service-learning classes
5. Internships
6. Volunteering

## Doctor of Physical Therapy (DPT) Prerequisite Admission Requirements - Pre-Physical Therapy SRU 3+3

## For Application Requirements

Please refer to Slippery Rock University's Physical Therapy (Doctor of Physical Therapy) website for requirements: www.sru.edu/PT (http:// www.sru.edu/PT/)


## Provision

Should a Pre-Physical Therapy SRU 3+3 student be unsuccessful in completing the 1 st two semesters (fall or spring) of the Doctor of Physical Therapy Program and wants to complete the original undergraduate degree, it is solely up to the discretion of the undergraduate program Department Chair to determine which, if any, Physical Therapy courses will count toward the completion of his/ her undergraduate degree. In addition, students must complete any unfulfilled requirements of their undergraduate major. Students may still apply to the Doctor of Physical Therapy Program with an earned Bachelor's degree.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

PRE-PT SRU 3+3 (63P2)
This program is effective as of Summer 2021.
Revised 07.01.21
UCC 03.02.21

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| RCTH 120 | Disability, Community Inclusion, and Diversity | 3 |
| INDS 101 | FYRST Seminar * | 1 |
| ENGL 102 | Critical Writing | 3 |
| PSYC 105 | Introduction to Psychology | 3 |
| PHYS 201 | Elements of Physics I with Lab | 4 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
|  | Hours | 17 |
| Spring |  |  |
| RCTH 220 | Recreational Therapy Services | 3 |
| ENGL 104 | Critical Reading | 3 |
| PSYC 244 | Developmental Psychology | 3 |
| PHYS 202 | Elements of Physics II/ Lab | 4 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
| $\begin{aligned} & \text { RCTH } 232 \\ & \quad \text { or RCTH } 233 \end{aligned}$ | Recreational Therapy for People with Physical Disabilities or Recreational Therapy for People with Psychosocial and Mental Disorders | 3 |


|  | Hours | 19 |
| :---: | :---: | :---: |
| Second Year |  |  |
| Fall |  |  |
| $\begin{aligned} & \text { RCTH } 232 \\ & \quad \text { or RCTH } 233 \end{aligned}$ | Recreational Therapy for People with Physical Disabilities or Recreational Therapy for People with Psychosocial and Mental Disorders | 3 |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Humanities Inqu | 1378) | 3 |
| Select one of th | wing: | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 19 |
| Spring |  |  |
| RCTH 314 | Clinical Aspects of Recreational Therapy | 3 |
| RCTH 317 | Organization and Management of Recreational Therapy Practice | 3 |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| CHEM 108 \& CHEM 112 | General Chemistry II and General Chemistry II Lab | 4 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 16 |


| Third Year |  |  |
| :---: | :---: | :---: |
| Fall |  |  |
| RCTH 319 | Client Assessment in Recreational Therapy | 3 |
| RCTH 320 | Recreational Therapy Program Design | 3 |
| RCTH 420 | Recreational Therapy for Older Adults | 3 |
| RCTH 422 | Recreational Therapy Interventions I | 3 |
| Thematic Thread Requirement (p. 1378) 3 |  |  |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
|  | Hours | 18 |
| Spring |  |  |
| RCTH 450 | Internship | 12 |
| PHIL 325 | Medical/Health Care Ethics | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 18 |
|  | Total Hours** | 107 |
| 2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread. |  |  |
| * Students are encouraged to take INDS 101 as a Free Elective. |  |  |
| Major code Revised: 1 |  |  |

## Recreational Therapy, Bachelor of Science (BS) / Pre-Physical Therapy (SRU) (Traditional)

## Recreational Therapy Program Learning Outcomes

- Degree Program Writing Competency: Upon completion of the degree program RT students will write professionally and effectively, according to expectations of the Recreational Therapy profession.
- Life-Long Learning: Recognize the importance of lifelong learning and demonstrates responsibly for self-assessment and growth. This ability is evident through the demonstration of self initiating behaviors, anticipating and responding to changes in a productive manner, assuming responsibility for continuous self reflection assessment of strengths and limitations and in seeking out information from a variety of resources in an independent manner.
- Methodological Proficiency: Upon completion of the degree program RT students will use an analytical framework to facilitate the Recreational Therapy process to meet the needs of individuals. The abilities developed include a solid knowledge of the RT process, assessment methods, planning skills, intervention, techniques and strategies, and evaluation skills.
- Professional Decision Making: Analyze and synthesize complex information to make sound clinical decisions. This ability is inclusive of areas such as problem solving, critical thinking, evaluation and organization with application to clinical and non clinical areas.
- Professional Interactions: Effectively communicates with people in a variety of professional contexts including assisting clients in confronting and coping with life challenges, collaborating on
teams and presenting information in oral and written formats. The abilities developed include striving to maintain objectivity, tolerating ambiguity, appreciating diversity and adhering to conventional standards of expression.
- Valuing Ethical Responsibilities: Act with professional values in all situations. These skills include maintaining appropriate humane and ethical treatment of individuals as well as upholding the professional code of ethics. This expertise includes formulating value judgments reflecting a respect for dignity and individuality of every person.


## What are your options?

Pre-Physical Therapy SRU 3+3: Earn a Doctor of Physical Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU DPT program. During your third undergraduate year, you apply for admission into the SRU DPT program. If accepted, your first year in the SRU DPT program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

Pre-Physical Therapy (SRU Traditional): Complete the requirements for your major and the pre-requisites for the SRU DPT program and apply to the SRU DPT program in your senior year.

## Related Links

Recreational Therapy - Pre-Physical Therapy, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/recreational-therapy-pre-physical-therapy/)

Recreational Therapy Department Page (https://www.sru.edu/ academics/colleges-and-departments/ches/departments/recreationaltherapy/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Code Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 51 |
| Professional Electives | 12 |
| NCTRC Certification Requirements | 18 |
| Electives | 26 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |


| ENGL 102 | Critical Writing | 3 |
| :---: | :---: | :---: |
| ENGL 104 | Critical Reading | 3 |
| Select one of the following: ${ }^{2}$ |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| MATH 117 | Quantitative Reasoning | 3 |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| PHIL 325 | Medical/Health Care Ethics | 3 |
| Social Science Inquiry |  |  |
| PSYC 105 | Introduction to Psychology | 3 |
| Natural Sciences Inquiry ${ }^{2}$ |  |  |
| SCI 101 | Science of Life ${ }^{2}$ | 3 |
| Physical Sciences Inquiry |  |  |
| SCI 102 | Understanding the Physical World ${ }^{2}$ | 3 |
| Subtotal |  | 15 |
| Thematic Thread |  |  |
| Select 12 credits: ${ }^{2,3}$ |  | 12 |
| PSYC 244 | Developmental Psychology |  |
| Additional course |  |  |
| Additional Course |  |  |
| Additional Course |  |  |
| Total Hours |  | 42 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 Consult with your academic adviser as course options are available to assist in meeting DPT prerequisite coursework.
3 At least 3 categories; no more than 6 credits from one department.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one | following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 Beginning Algebra |  |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Ar |  |
| CPSC 110 | Computer Concepts |  |


| CPSC 130 | Introduction to Computing and <br> Programming |
| :--- | :--- |
| PE 202 | Technology for Wellness |

Total Hours
0-3

## Major Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :---: | :---: | :---: |
| Recreational Therapy Courses |  |  |
| Must earn a "C" or better in all of the following RCTH courses: |  |  |
| RCTH 120 | Disability, Community Inclusion, and Diversity ${ }^{1}$ | 3 |
| RCTH 220 | Recreational Therapy Services ${ }^{1}$ | 3 |
| RCTH 232 | Recreational Therapy for People with Physical Disabilities ${ }^{1}$ | 3 |
| RCTH 233 | Recreational Therapy for People with Psychosocial and Mental Disorders ${ }^{1}$ | 3 |
| RCTH 314 | Clinical Aspects of Recreational Therapy ${ }^{1}$ | 3 |
| RCTH 317 | Organization and Management of Recreational Therapy Practice ${ }^{1}$ | 3 |
| RCTH 319 | Client Assessment in Recreational Therapy 1 | 3 |
| RCTH 320 | Recreational Therapy Program Design ${ }^{1}$ | 3 |
| RCTH 351 | Recreational Therapy Practicum ${ }^{1}$ | 3 |
| RCTH 415 | Challenges and Trends in Recreational Therapy ${ }^{1}$ | 3 |
| RCTH 420 | Recreational Therapy for Older Adults ${ }^{1}$ | 3 |
| RCTH 422 | Recreational Therapy Interventions I ${ }^{1}$ | 3 |
| RCTH 423 | Recreational Therapy Interventions II ${ }^{1}$ | 3 |
| RCTH 450 | Internship ${ }^{1,2}$ | 12 |
| Subtotal |  | 51 |
| Total Hours |  | 51 |

1 Course counts for $50 \%$ of Major requirements and Major GPA
2 Students must become certified in First Aid and CPR prior to the internship

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## NCTRC Certification Requirements

These courses must be completed by the student in order to be eligible to take NCTRC Certification Exam

| Code | Title | Hours |
| :--- | :--- | ---: |
| PSYC 105 | Introduction to Psychology | 3 |
| PSYC 244 | Developmental Psychology | 3 |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |
| PE 360 | Anatomical and Physiological Basis of | 3 |
| PE 364 | Physical Activity/Lab | 3 |


| PHIL 325 | Medical/Health Care Ethics | 3 |
| :--- | ---: | ---: |
| Total Hours | 18 |  |

## Additional Physical Therapy Prerequisite Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 108 | General Chemistry II | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| CHEM 112 | General Chemistry II Lab | 1 |
| STAT 152 | Elementary Statistics I | 3 |
| PHYS 201 | Elements of Physics I with Lab | 4 |
| PHYS 202 | Elements of Physics II/ Lab | 4 |
| PSYC 244 | Developmental Psychology | 3 |

## Co-Curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes
2. Student-faculty research
3. Student leadership development
4. Service-learning classes
5. Internships
6. Volunteering

## Doctor of Physical Therapy (DPT) Prerequisite Admission Requirements

## For Application Requirements

Please refer to Slippery Rock University's Physical Therapy (Doctor of Physical Therapy) website for requirements: www.sru.edu/PT (http:// www.sru.edu/PT/)

## Liberal Studies and Rock Studies

Code Title Hours

Prerequisite Courses - SRU Physical Therapy
Select one of the following: 6

| BIOL 216 <br> \& BIOL 217 | Anatomy and Physiology I with Lab and Anatomy and Physiology II with Lab |  |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { BIOL } 340 \\ & \& \text { BIOL } 410 \end{aligned}$ | Vertebrate Anatomy with Lab and Animal Physiology with Lab |  |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
| CHEM 108 <br> \& CHEM 112 | General Chemistry II and General Chemistry II Lab | 4 |
| Select one of the following: |  | 8 |
| PHYS 201 <br> \& PHYS 202 | Elements of Physics I with Lab and Elements of Physics II/ Lab |  |
| PHYS 211 <br> \& PHYS 213 | General Physics I with Lab and General Physics III/ Lab |  |
| STAT 152 | Elementary Statistics I | 3 |
| or BIOL 325 | Biometry with Lab |  |
| PSYC 105 | Introduction to Psychology | 3 |


| Additional Psychology Course $^{1}$ | 3 |
| :--- | ---: |
| Total Hours | 31 |

1 See My Rock Audit for specific courses.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
RECREATIONAL THERAPY - BS
PRE-PT (SRU Traditional)
Effective Fall 2019
Revised 10.30.20
UCC 3.26.2019

## Recreational Therapy, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Recreational Therapy, Minor Program Page (https://www.sru.edu/ academics/majors-and-minors/recreational-therapy/)

Recreational Therapy Department Page (https://www.sru.edu/ academics/colleges-and-departments/ches/departments/recreationaltherapy/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide <br> GPA Requirement <br> Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Recreational Therapy Courses |  |  |
| RCTH 120 | Disability, Community Inclusion, and <br> Diversity | 3 |
| RCTH 220 | Recreational Therapy Services | 3 |
| RCTH 314 | Clinical Aspects of Recreational Therapy | 3 |
| RCTH 319 | Client Assessment in Recreational Therapy | 3 |
| RCTH 320 | Recreational Therapy Program Design | 3 |
| RCTH 351 | Recreational Therapy Practicum | 3 |


| RCTH 423 | Recreational Therapy Interventions II | 3 |
| :--- | :--- | :--- |
| Select one of the following courses: | 3 |  |
| RCTH 232 | Recreational Therapy for People with <br> Physical Disabilities |  |
| RCTH 233 | Recreational Therapy for People with <br> Psychosocial and Mental Disorders |  |
| RCTH 420 | Recreational Therapy for Older Adults |  |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Minor in Recreational Therapy (71B)
This program is effective as of 2015
Revised: 10.28.2021

## Physics and Engineering

| Chair | Secretary | Location | Department <br> Phone |
| :--- | :--- | :--- | :--- |
| Dr. Athula Herat | Mary Caylor | 208 Vincent <br> Science Center |  |

Department Web Site URL (https://www.sru.edu/academics/colleges-and-departments/ches/departments/physics-and-engineering/)

Civil Engineering Fact Sheet URL (https://www.sru.edu/documents/ programs/factsheets/undergraduate/CivilEngineering-fs.pdf) Industrial and Systems Engineering Fact Sheet URL (https:// www.sru.edu/documents/programs/factsheets/undergraduate/ industeng-fs.pdf)
Mechanical Engineering Fact Sheet URL (https://www.sru.edu/ documents/programs/factsheets/undergraduate/
MechanicalEngineering-fs.pdf)
Petroleum and Natural Gas Engineering Fact Sheet URL (https:// www.sru.edu/documents/programs/factsheets/undergraduate/PNGEfs.pdf)
Physics Fact Sheet URL (https://www.sru.edu/documents/programs/ factsheets/undergraduate/physics-fs.pdf)

## Faculty

Sagar Bhandari
Assistant Professor
Physics and Engineering
Ph.D., Harvard University
M.S., Harvard University

| B.S., Trinity College |
| :---: |
| Louis Christensen |
| Assistant Professor |
| Physics and Engineering |
| Christopher Gioia |
| Assistant Professor |
| Physics and Engineering |
| Ph.D., West Virginia University |
| M.S., West Virginia University |
| B.S., Penn State University |
| Sajad Hamidi |
| Associate Professor |
| Physics and Engineering |
| Ph.D., Tarbiat Modares University |
| M.S.E., Sharif University of Technology |
| B.S.E., Sharif University of Technologu |
| Athula Herat |
| Associate Professor |
| Physics and Engineering |
| Ph.D., University of Cincinnati |
| M.S., University of Cincinnati |
| B.S., University of Colombo (Sri Lanka) |
| Robabeh Jazaei |
| Assistant Professor |
| Physics and Engineering |
| Ph.D., University of Nevada |
| M.S., Azad University |
| B.S., Shahrood University of Technology |
| Mohammad Kazemi |
| Assistant Professor |
| Physics and Engineering |
| Ph.D., West Virginia University |
| M.S., University of Louisiana |
| B.S., Petroleum University of Technology |
| Viacheslau Kudrashou |
| Assistant Professor |
| Physics and Engineering |
| Ph.D., Texas A\&M University |
| M.S., Texas A\&M University |
| B.S., Gubkin Russian State University of Oil and Gas |
| Shah Limon |
| Assistant Professor |
| Physics and Engineering |
| Ph.D., North Dakota State University |
| M.S., North Dakota State University |
| B.S., Bangladesh University of Engineering \& Technology |
| Krishna Mukherjee |
| Assistant Professor |
| Physics and Engineering |
| Ph.D., University of Pittsburgh |
| M.S., University of Kansas |
| M.Sc., University of Calcutta (India) |
| B.Sc., University of Calcutta (India) |
| Ben Shaevitz |

## Louis Christensen

Professo

Christopher Gioia
Assistant Professor
Physics and Engineering
M.S., West Virginia University
B.S., Penn State University

Sajad Hamidi
Associate Professor
Phics and Engineering
M.S.E., Sharif University of Technology
B.S.E., Sharif University of Technologu

## Athula Herat

Associate Professor

Physics and Engineering
M.S. University of Cincinnati
B.S., University of Colombo (Sri Lanka)

Robabeh Jazaei
Assistant Professor

Ph.D., University of Nevada
M.S., Azad University

Mohammad Kazemi
Assistant Professor
Physics and Engineering
Ph.D., West Virginia University

Viacheslau Kudrashou
Assistant Professor
Physics and Engineering
Ph.D., Texas A\&M University
M.S., Texas A\&M University

Shah Limon
Assistant Professor
Physics and Engineering
h.D., North Dakota State University
M.S., North Dakota State University

Krishna Mukherjee
Assistant Professor
Physics and Engineering
P.D., University of Pittsburgh
M.Sc., University of Calcutta (India)

Ben Shaevitz

Professor
Physics and Engineering
Ph.D., Pennsylvania State University
B.S., Purdue University

## Jheng-Wun Su

Assistant Professor
Physics and Engineering
Ph.D., University of Missouri-Columbia
M.S., National Taipei University of Technology
B.S., Ching Yun University

## Xindi Sun

Assistant Professor
Physics and Engineering
Ph.D., Missouri University
B.S., Missouri University

Manuel Valera
Associate Professor
Physics and Engineering
Ph.D., University of Cincinnati
M.S., University of Cincinnati
B.S., Universidad Simon Boliver (Venezuela)

## Xinchao Wei

Professor
Physics and Engineering
Ph.D., West Virginia University
M.S., West Virginia University
M.S., Northeastern University
B.S., Northeastern University

## Jun Zhang

Associate Professor
Physics and Engineering
Ph.D., Old Dominion University
M.S., Nanchang University
B.S., Nanchang University

## Programs

All first-year students who enter SRU in the Summer and Fall terms of 2019 and after will follow Rock Studies. Students who entered SRU before Spring 2019 will follow Liberal Studies. All new transfer students beginning Summer 2019 and after will follow Liberal Studies We anticipate that transfer students will begin to enter under Rock Studies during the Summer/Fall term of 2021.

## Majors

- Civil Engineering, Bachelor of Science (BS) (p. 591)
- Industrial and Systems Engineering, Bachelor of Science (BS) (p. 594)
- Mechanical Engineering, Bachelor of Science (BS) (p. 596)
- Petroleum and Natural Gas Engineering, Bachelor of Science (BS) (p. 599)
- Physics, Bachelor of Arts (BA) (p. 602)
- Physics, Bachelor of Arts (BA) - Pre Master of Education (7-12) (p. 604)
- Physics, Bachelor of Arts (BA) / Dual Degree Pre-Engineering (PSU) (p. 606)
- Physics, Bachelor of Arts (BA) / Pre-Engineering (Pitt) (3+2) (p. 608)
- Physics, Bachelor of Arts (BA) / Pre-Engineering (WVU) (3+2) (p. 610)
- Physics, Bachelor of Arts (BA) / Pre-Engineering (YSU) (3+2) (p. 612)
- Physics, Bachelor of Arts (BA) / Pre-Engineering Technology (YSU) $(3+2)($ p. 614)
- Physics, Bachelor of Science (BS) (p. 616)
- Physics, Bachelor of Science (BS) - Concentration in Computational Biophysics (p. 618)
- Physics, Bachelor of Science (BS) - Concentration in Computational Physics (p. 621)
- Physics, Bachelor of Science (BS) - Pre Master of Education (7-12) (p. 623)


## Minors

- Physics, Minor (p. 625)


## Courses

## CIVL Courses

CIVL 139 - University Seminar
University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## CIVL 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CIVL 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## Credits: 1-6

Term(s) Typically Offered: Offered as Needed

## CIVL 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CIVL 210 - Elementary Survey

Introductory course in surveying methods and theory. Topics will include surveying, and route surveying.
Prerequisite: MATH $225^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms

## CIVL 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## CIVL 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## CIVL 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CIVL 310 - Structural Engineering

Introduction to the elastic behavior of structural components. Analysis of statically determinate systems. Deflection calculations by virtual work and elastic load methods. Analysis of simple statically indeterminate structures. Influence lines. Interaction of structural components. Typical structural engineering loads.

Prerequisite: ENGR $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 4

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 320 - Transportation Engineering

Introduction to basic concepts in transportation engineering including: planning, design, and operations. Introduces the challenges and issues in modeling transportation problems. Studies of various concepts related to the design of highway facilities, level of service, and demand for transportation services. Concepts related to signal optimization, policy implications and the basics of transportation planning.

Prerequisite: MATH $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 330 - Environmental Engineering

A course in environmental engineering fundamentals that applies biological, chemical, and mathematical principles to solve environmental engineering problems using the mass balance approach.
Prerequisites: MATH $230^{\mathrm{D}}$ and BIOL $101^{\mathrm{D}}$ and CHEM $107^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 4
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 340-Geotechnical Engineering

Soil properties, identification and classification of earth material; subsurface exploration; soil strength, stresses, settlement, substructure design; computer applications.

Prerequisite: ENGR $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 350 - Water Resources Engineering

This course is designed to review the fundamentals and practices of water resources engineering with a focus on engineering applications of hydraulics and hydrology. The concepts of fluid mechanics (hydrostatics, conservation laws) will be applied to analyze flow phenomena in demonstrations and field trips.

Prerequisite: ENGR $301^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 390-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 410 - Structural Steel Design

This course covers the analysis and design of structural steel members for tensile, compressive, flexural and combined loading.

Prerequisite: CIVL $310^{D}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 411 - Reinforced Concrete Design

This course covers strength design concepts, beams, columns, slabs, retaining walls, single and combined footings with computer applications.
Prerequisite: CIVL $310^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 412 - Finite Element Analysis

Modern analysis techniques used to investigate a variety of systems in engineering and science. Computational models of problems are developed using energy concepts, structural mechanics, and matrix operations. The methods used are implemented using a general finite element program and the accuracy of the results is evaluated. The learned theoretical approach is applied to common structural elements such as trusses, beams, frames, and plates.

Prerequisite: CIVL $310^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 420 - Traffic Engineering

This course covers the fundamentals of traffic engineering and traffic flow theory: traffic signal design, intersection design, and traffic impact studies. Students will be taught using Highway Capacity Software, SYNCHRO, and other traffic software packages.

Prerequisite: CIVL $320^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 421 - Highway Engineering

Principles of geometric design of highways, intersections, interchanges, and terminals. Practical issues of vertical and horizontal curvature, highway evaluation, driver and vehicle dynamics, and traffic safety are also addressed. Computer-aided design and modeling.
Prerequisite: CIVL $320^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 422 - Transportation Terminal Design

The course covers the transportation design of airports, rail stations and truck terminals to facilitate the transport of passengers and freight in the transportation systems. Terminals are designed to provide security, storage, and access to different modes of transportation.

Prerequisite: CIVL $320^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 430 - Storm Water Management

Quality and quantity of urban storm water. Receiving water problems and sources of pollutants. Runoff quality and quantity characteristics. Selection and design of controls; regulations.

Prerequisite: CIVL $350^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 431 - Environmental Engineering Design

Process design of treatment/remediation systems to solve specific environmental problems, including evaluation alternatives and computer simulation.

Prerequisite: CIVL $330^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 432 - Groundwater Hydrology

The course covers the fundamental science and engineering behind groundwater systems, including but not limited to: the hydrologic cycle, groundwater flow, and wellhead protection and management.

Prerequisite: CIVL 350 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 440 - Construction Management

Provides students with an overview of the responsibilities and risk associated with management within the construction industry.
Emphasis is given to responsibilities and relationships between owners, contractors, labor and suppliers, construction estimates and schedules, cohstruction contracts and safety.

Prerequisite: CIVL $340^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 441 - Sustainable Development

Provides an overview of sustainable development with emphasis on the role of the engineer. Study the role of LEED and other sustainable development programs in changing development design.
Prerequisite: CIVL $330^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 460 - Capstone Design I

This course will provide students with the opportunity to work as part of a multi-disciplinary Civil Engineering design team. The course will consist of developing the preliminary design plans with presentations and reports. Students will learn about the regulatory process, LEED design, and site planning. Lectures in professional practice and teaming will augment the design project.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Civil Engineering.

## CIVL 461 - Capstone Design II

This course will provide students with the opportunity to work as part of a multi-disciplinary Civil Engineering design team. The course will consist of a design project with presentations and reports. Lectures in professional practice and teaming will augment the design project.

Prerequisite: CIVL $460^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Civil Engineering.
CIVL 490 - Independent Study
Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGR Courses

## ENGR 110 - Introduction to Engineering

The first in a two semester course sequence aiming to provide students with an introduction to engineering, design process, and tools needed in the engineering professions. This course introduces students to the different disciplines of engineering, professional and ethical aspects of engineering, teamwork, engineering design process and problem solving, and various computer applications.

Credits: 2
Term(s) Typically Offered: Offered Fall Terms

## ENGR 120-Engineering Design Tools

This is the second in a two-semester course sequence aiming to provide students with an introduction to engineering, design process, and tools needed in the engineering professions. This course focuses on the design process, introduction to engineering computing tools, engineering graphics using a Computer Aided Design (CAD) software platform, and 3D printing. Students will learn the basic tools and techniques used in engineering design and problem solving.

Credits: 2
Term(s) Typically Offered: Offered Spring Terms
ENGR 130-Engineering Computing Tools
This course provides students with computing skills required in engineering. Course content includes structured programming, engineering problems and open-ended design projects, which are solved in teams with results professionally presented.

Credits: 2
Term(s) Typically Offered: Offered Fall \& Spring Terms

## ENGR 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## ENGR 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
ENGR 195 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## Credits: 1-6

Term(s) Typically Offered: Offered as Needed

## ENGR 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ENGR 210-Statics

Includes the application of equilibrium conditions to structures, trusses, frames and machines, and beams with concentrated and distributed loads.

Prerequisites: PHYS $216^{\text {D }}$ and MATH 230 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms

## ENGR 220 - Engineering Materials

This course covers the properties and uses of typical materials used in various engineering professions, their manufacturing processes, and an introduction to mechanical testing methods.

Prerequisite: CHEM $107^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms

## ENGR 230-Mechanics of Materials

This course provides a review of the basic mechanical properties of the solids with lab. Topics covered will include deformation and failure of solid bodies under the action of forces, stress- strain, Mohr's circle, generalized Hooke's Law, axial bending and buckling.

Prerequisites: ENGR $210^{\mathrm{D}}$ or PHYS $314^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
ENGR 231 - Mechanics of Materials Lab
A laboratory course to accompany ENGR 230 Mechanics of Materials. Laboratory experiments are designed to introduce experimental techniques common to structural engineering, interpretation of experimental data, comparison of measurements to numerical/analytical predictions, and formal, engineering report writing.

Prerequisite: ENGR 230 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Spring Terms

## ENGR 240 - Dynamics

Integrates the subject content of kinematics and kinetics that deal respectively with the description of motion of bodies and the causes for their motion.
Prerequisites: PHYS $314^{\text {D }}$ or ENGR $210^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
ENGR 290 - Experimental
A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
ENGR 295-Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## Credits: 1-6

Term(s) Typically Offered: Offered as Needed

## ENGR 298-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ENGR 301 - Fluid Mechanics

This course provides an overview of fluid statics and dynamics concepts. Topics covered will include fluid statics, laminar and turbulent flow of compressible and incompressible fluids, flow measurements, open channel flow and kinetics of fluids.

Prerequisites: ENGR $210^{\text {D }}$ and MATH $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## ENGR 310 - Introduction to Electrical Engineering

This course provides a review of the basic concepts in electrical engineering. Topics covered will include electrical engineering units, circuit elements, circuit laws, measurement principles, mesh and node equations, network theorems, operational amplifier circuits, energy storage elements, sinusoids and phasors, sinusoidal steady state analysis, average and RMS values, complex power.
Prerequisites: PHYS $212^{\text {D }}$ or PHYS $217^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with a semester level of Freshman 1, Freshman 2 or Sophomore 1.

## ENGR 320 - Thermodynamics

This course provides a detailed review of the basic thermodynamic principles. Topics covered will include properties of ideal gases and vapors; first and second laws of thermodynamics; basic gas and vapor cycles; basic refrigeration.

Prerequisite: PHYS $217^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGR 340 - Engineering Economics

This course covers the concepts of cash flow, cash flow equivalence, cash flow before taxes, depreciation and depletion, cash flows after taxes, profits, evaluation of alternatives, financial statements and multidisciplinary team project.
Prerequisite: MATH $225^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGR 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Graduate.

## ENGR 395-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGR 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGR 490 - Independent Study

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGR 495-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGR 498- Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ISE Courses

## ISE 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## ISE 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
ISE 198 - Selected Topics
A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ISE 290-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ISE 298-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
ISE 311 - Introduction to Operations Research
Topics include deterministic methods in operations research. Linear programming, duality, integer programming, dynamic programming, nonlinear programming, inventory theory, transportation and assignment and network theory.

Prerequisites: MATH $231^{\text {C }}$ or MATH $240^{\text {C }}$ or (MATH $122^{\text {C }}$ and MATH $230^{\circ}$ )
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

ISE 330-Six Sigma Methodology
Statistical methods of Six Sigma used for efficient new product development as well as methods for process improvement. The math and methodology of six Sigma including DMAIC and DMADV processes. Topics will include measurement and analysis mathematical techniques. Design of experiment will be introduced. Case studies will be used to illustrate advanced concepts of Six Sigma.

Prerequisite: STAT $350^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ISE 362 - Lean Systems

The design and delivery of services. Topics include how to design and improve service offerings for sustained excellence, how to identify and overcome challenges in service delivery. Both traditional services as well as e-commerce service will be studies for both the private and public sector.

Prerequisite: ISE 330 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ISE 370 - Design of Industrial Systems and Processes

This course covers advanced topics in Applied Engineering Statistics. It includes the introduction to linear regression analysis, simple linear models, multiple linear models, residual analysis, indicator variables, variable selection process, ANOVA, introduction to design of Industrial systems and processes, basic designs, factorial designs, fractional factoral designs, blocking, Taguchi designs, and response surface methodology. Extensive use of statistical software will be introduced throughout the course.

Prerequisite: STAT $350^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ISE 372 - Manufacturing Systems Design and Analysis

Contemporary techniques used to design and analyze manufacturing systems for economic manufacture of products. Design of manufacturing systems (human and automated) to satisfy differing types of product demand will be explored.
Prerequisite: ENGR $340^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ISE 373 - Quality Engineering

A comprehensive coverage of modern quality control techniques including the design of statistical process control systems, acceptance sampling and process improvement.

Prerequisites: MATH $230^{\mathrm{D}}$ and (STAT $252^{\mathrm{D}}$ or STAT $350^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ISE 382-Sustainable Processes

Exploration of the scientific and legal progress in sustainability. Students will learn both the theory of sustainability as well as how sustainable processes can be implemented throughout an organization.

Prerequisites: PHYS $217^{\text {D }}$ and MATH $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ISE 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ISE 398-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ISE 402 - Work Design

Introductory tools required for analyzing and designing both the job and the worksite in a cost-effective manner, as well as measuring the resulting output. These tools incllude human information processing, basic auditory and visual displays, anthropometry and musculoskeletal principles, cumulative trauma disorders, work measurement and stopwatch time study. Students taking this course should be familiar with the basic concepts of cost.
Prerequisite: ISE 372 (may be taken concurrently) ${ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ISE 410 - Engineering Project Management

This course is an introduction to the concepts and practices of project management. It provides students with a basic exposure to the tasks and challenges facing today's engineering projects and in particular, those of the project manager. This course also provides students with the quantitative tools for the successful management of engineering projects. The problems of selecting projects, initiating projects, and operating and controlling projects will be discussed in this course.

Prerequisite: ENGR $340^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ISE 420 - Simulation of Industrial Systems

In this course, the student will develop an understanding and need for discrete event simulation in practice. The course will focus on basic and advanced concepts in simulation modeling including analyzing simulation results, and successfully developing simulation models useful in production/manufacturing, supply chains, transportation, and other areas related to industrial and Manufacturing Engineering. Simulation package such as ARENA will be integrated and used throughout.

Prerequisites: (MATH $311^{\mathrm{D}}$ or ISE $311^{\mathrm{D}}$ ) and STAT $350^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 4

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ISE 421 - Supply Chain \& Logistics Engineering

Overview of key logistics and supply chain management processes, concepts and methodologies. Emphasis is given to the Lean development of supply chain management, the analysis of logistics cost and service trade-offs among inventory transportation and warehousing activities, the strategic role of information technology in supply chains, the use of third-party logistics providers, and the methods of measuring the value of logistics performance. Instruction may include problem-based learning pedagogy.

Prerequisites: ISE 311 (may be taken concurrently) ${ }^{\mathrm{D}}$ and ISE $373^{* D}$ (may be taken concurrently).
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ISE 430 - Production Planning \& Control

This course equips students with knowledge of fundamental issues in production and inventory planning and control while developing the students' modeling and analytical skills. This course emphasizes the application of industrial engineering theory and practice to the area of operations management and production planning/control. This course will cover analysis and understanding of forecasting, aggregate planning, operations strategy, capacity planning, supply-chain management, just-in-time systems, lean manufacturing, agile manufacturing, materials replacement planning, inventory management, and scheduling and sequencing.

Prerequisites: ENGR $340^{\mathrm{D}}$ and ISE $372^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## ISE 432 - Productivity Analysis

Techniques for measuring and assessing productivity for output, labor, capital and input. Aggregation of productivity growth will also be discussed.

Prerequisite: MATH $231^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ISE 440 - Health Care Systems Engineering

The course examines the technical structure of the healthcare delivery system and the role that industrial engineering (IE) plays in its design and improvement. Included will be how healthcare systems work in hospitals, medical offices, clinics and other healthcare organizations. Traditional IE methods for improving quality, patient safety, and employee productivity and satisfaction will be present within a systematic application of value chain engineering designed to produce lean processes.

Prerequisites: ISE $311^{\mathrm{D}}$ and ISE $373^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ISE 442 - Human Factors Engineering

An analytic study of human factors that need to be taken into account in the design and engineering of complex workplace systems. Body mechanics will be used to understand the needs of humans in the workplace under a variety of different constraints: physical demands, environmental conditions, human capability. system design considerations aimed at reducing safety hazards will be studied.

Prerequisite: ISE $402{ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ISE 460 - Engineering Risk Analysis

This course is an introduction to risk, risk assessment, and risk management in engineering systems. It focuses on building mathematical models to assess and quantify risk principally by following the methodologies of probabilistic risk analysis. In particular, the course covers concepts of risk analysis, risks in engineered systems; methods of risk analysis, fault trees and event trees; quantification of probabilities, use of data, models, and expert judgments; risks and decisions, interlinking risk analysis with risk management; applications to cybersecurity.

Prerequisite: STAT $350^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.
ISE 480-Industrial and Systems Engineering Undergraduate Research
Research and design problems of limited scope approved on an individual basis intended to promote independent study; results of study presented in writing.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.
ISE 487 - Industrial and Systems Engineering Senior Project I
This course provides a proposal preparation for ISE 488 which includes defining a comprehensive problem in design involving systems in manufacturing, service, and other systems to improve efficiency and quality, and optimize the resources utilization.

Prerequisites: ISE $370^{\mathrm{D}}$ and ISE $420^{\mathrm{D}}$ and ISE $421^{\mathrm{D}}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 1
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ISE 488 - Senior Project II

Senior project in industrial and systems engineering. Requires students to complete a multi-dimensional project in their area of interest: industry, health-care, etc. The project must be approved by ISE faculty no leater than the end of the fourth week of the start of the course. Students will be invited to propose their own projects of create one in collaboration with ISE faculty.

Prerequisite: ISE $487^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

## ISE 490 - Independent Study

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ISE 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MECH Courses

## MECH 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## MECH 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## MECH 195-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## MECH 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## MECH 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MECH 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## MECH 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MECH 310-Machines and Mechanisms

Analysis of motion and forces in linkages and mechanisms. Synthesis of plane mechanisms, analysis of cams, gears and gear trains.
Fundamentals of vibrations in machines. Analysis techniques include graphical, analytical and computational methods.

Prerequisite: ENGR $240^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 4
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MECH 320 - Manufacturing Processes

Introduction to properties and uses of engineering materials. Introduction to mechanical testing methods, metrology, tolerances, testing and inspection; semi-finished product manufacturing; macro-processing (forming, casting, powder metallurgy, metal working, composite fabrication); joining; nontraditional manufacturing processes; and surface processing.

Prerequisites: ENGR $220^{\text {D }}$ and ENGR $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## MECH 330 - Introduction to Mechatronics

Selection of mechanical and electronic components and integration of these components into complex systems. Hands-on laboratory and design experiments with components and measurement equipment used in the design of mechatronic products.

Prerequisite: ENGR $310^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 4
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MECH 340 - Heat Transfer

One-, two-, three-dimensional steady state conduction: transient conduction; free and forced convection; radiation; heat exchangers; heat and mass transfer by analytical, numerical analogical and experimental methods; design of thermal systems.

Prerequisites: ENGR $320^{\text {D }}$ and MATH $301^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 4

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MECH 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MECH 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MECH 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MECH 410 - Machine Design

Application of fundamental engineering principles to the design of various elements found in machines. Elements include connections, shafts, keys, couplings, springs, gears, belts, chains, bearings, clutches, brakes, screws, etc.

Prerequisite: MECH 310 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 4
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MECH 411 - Mechanical Control Systems

Introduction to theory of feedback and control. Performance and stability of linear systems. Design of feedback control systems. Practical application and introduction to state-space methods.

Prerequisites: ENGR $310^{\circ}$ and MECH $410^{D}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MECH 412 - Finite Element Analysis

Modern analysis techniques used to investigate a variety of systems in engineering and science. Computational models of problems are developed using energy concepts, structural mechanics, and matrix operations. The methods used are implemented using a general finite element program and the accuracy of the results is evaluated. The learned theoretical approach is applied to common structural elements such as trusses, beams, frames, and plates.

Prerequisite: ENGR $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MECH 420 - Design and Manufacturing

Manufacturing methods and operations. The interaction between design and manufacturing stressed in terms of drawing specifications versus process capability and tolerances, including standards applications and 1 redesign for producibility.

Prerequisite: MECH $320^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MECH 421 - Mechanical Vibrations

Introduction to mechanical vibrations: single and multi-degree of freedom systems, free and forced vibrations, impedance and modal analysis including applications.

Prerequisites: MECH $410^{\mathrm{D}}$ and ENGR $240^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MECH 422 - Thermal System Design

Device design and system design of compressors, turbines, heat exchangers, piping systems, internal combustion engines, and other component equipment. Optimization including thermo-economic evaluation and energy analysis.

Prerequisite: MECH $340^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MECH 423 - Additive Manufacturing

Introduction to technologies and processes used to translate virtual solid model data into physical models for prototyping and end-use manufacturing applications. Discussion of design tools and design considerations for additively manufactured components.

Prerequisite: MECH $320^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MECH 430-Mechatronics

Instrumentation and measurements emphasizing systems that combine electronics and mechanical components with modern controls and microprocessors. First and second order behavior, transducers and intermediate devices, measurement of rapidly changing engineering parameters, microcontrollers and actuators.

Prerequisite: MECH $330^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MECH 431- Introduction to Robotics

Introduction to robots and their types. Homogeneous transformations. Kinematic equations and their solutions. Motion trajectories, statics, dynamics, and control of robots. Robot programming. Actuators, sensors and vision systems.

Prerequisites: ENGR $310^{\mathrm{D}}$ and MECH $330^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MECH 440 - HVAC Systems

The analysis and design of heating air conditioning systems. Topics include: psychometrics, comfort \& health, heating and cooling loads, solar radiation, air distribution systems and refrigeration.

Prerequisites: MECH $340^{\text {D }}$ and ENGR $301^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MECH 441 - Sustainable Energy

The technical, economic, environmental and physical resources constraints of energy sources are discussed in terms of both national and global development needs. The current states of both non-renewable and renewable technologies are presented in terms of their potential contribution to sustainable energy resources required for continued viable economic development.

Prerequisite: ENGR $320^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MECH 460 - Capstone Design I

Capstone Design course is the culmination of the educational experience in Mechanical Engineering. The courses require students to draw upon all previous coursework and cultivate new skills in order to solve complex design problems associated with an assigned group project. This is the first course of a year-long design experience.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment limited to students with department of Physics and Engineering.

## MECH 461 - Capstone Design II Capstone Design II

Capstone Design course is the culmination of the educational experience in Mechanical Engineering. The courses require students to draw upon all previous coursework and cultivate new skills in order to solve complex design problems associated with an assigned group project. This is the second course of a year-long design experience.

Prerequisite: MECH 460 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Mechanical Engineering.
Enrollment limited to students in the Coll of Health, Engineer \& Sci college.

## MECH 490 - Independent Study

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MECH 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MECH 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS Courses

PHYS 101 - Concepts of Science I with Lab
A descriptive and conceptual course in physics designed for the nonscience major. Topics are selected from light, sound, motion, and astronomy to develop a necessary scientific attitude and background for today's society. There are two lectures and one-two hour laboratory per week.

Credits: 3
Term(s) Typically Offered: Offered Every Term

## PHYS 102 - Concepts of Science II

A descriptive and conceptual course in physics designed for the nonscience major to study energy systems. Topics are selected from heat, electricity, magnetism, and the structure of matter and modern areas of physics, such as lasers, X-rays, and nuclear energy. The purpose of the course is to develop a positive scientific attitude and background for today's society. No laboratory.

Credits: 3
PHYS 103 - Investigating Matter and Energy/ Lab
This is an activity-based and discussion-oriented course designed for the non-science major. The topics of light, matter, heat, and electricity have been selected to help students develop meaningful understanding of some powerful ideas that they can apply to a wide variety of interesting phenomena. Laboratory credit is given for taking this liberal studies enrichment course.

Credits: 3

## PHYS 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute

## PHYS 140 - Engineering Graphics

A beginning laboratory course in technological design and drawing. Topics: lettering, scales, geometric construction, orthographic sketching, and auxiliary views.

Credits: 2
Term(s) Typically Offered: Offered Fall Terms Odd

## PHYS 141 - Engineering Graphics II

An advanced laboratory course in technological drawing and implementation. Topics: Vectors, graphing, nomography, isometric pictorials, technical illustration, computer graphics, and working drawings.

Prerequisite: PHYS 140 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Spring Terms

## PHYS 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
PHYS 195 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## PHYS 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## PHYS 201 - Elements of Physics I with Lab

Introduction to physics at the algebra/trigonometry mathematical level. Topics include: mechanics, fluids, oscillations, waves, and sound. Course is especially designed for students enrolled in health science majors. This course must be taken with Elements of Physics Lab PHYS021.

Credits: 4
Term(s) Typically Offered: Offered Fall, Spring, \& Summer Enrollment limited to students with department of Exercise \& Rehabilitative Sci.

## PHYS 202 - Elements of Physics II/ Lab

Introduction to physics at the algebra/trigonometry mathematical level. Topics include: thermal physics, optics, electricity and magnetism, and nuclear physics. Course is especially designed for health science majors. This course must be taken with Elements of Physics II Lab PHYS022.

Prerequisite: PHYS $201{ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 4

Term(s) Typically Offered: Offered Spring \& Summer Terms
Enrollment limited to students with department of Exercise \&
Rehabilitative Sci.

## PHYS 204 - Environmental Biophysics

An introductory course covering the energy problem and alternative solutions; radiation and its effects on man; the eye and vision; the ear, hearing and noise pollution; electrical power production alternatives and the environmental costs; some instruments used in biophysics and medicine.

Credits: 3

## PHYS 211-General Physics I with Lab

Introduction to physics using calculus and including extensive problem solving. Topics include mechanics statics, kinematics, kinetics, workenergy, rotational motion, and impulse-momentum. This course must be taken with General Physics Lab PHYS011.

Prerequisite: MATH 225 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 4
Term(s) Typically Offered: Offered Fall \& Spring Terms

## PHYS 212-General Physics II with Lab

This is a calculus based course, which follows PHYS 211. It develops the concepts of electric and magnetic fields. Topics covered are Gauss' Law, Ampere's Law, Biot's Law, Faraday's Law, electric charges and their dynamics, capacitance, resistance inductance, etc. Offered fall semester only. Includes a lab.

Prerequisites: MATH $225^{\mathrm{D}}$ and PHYS $211^{\mathrm{D}}$ and MATH 230 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms

## PHYS 213-General Physics III/ Lab

Covers fluids, hydrostatics and hydro-dynamics, heat transfer and measurements, laws of thermodynamics, vibrating bodies, wave motion, light lenses and optical instruments, interference and diffraction, polarization. This course must be taken with General Physics III Lab PHYS023. Offered spring term only.

Prerequisite: PHYS $211^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 4

Term(s) Typically Offered: Offered Spring Terms

## PHYS 216 - University Physics 1 with Lab

First of a two semester calculus based introduction to physics sequence for science, engineering, and mathematics students. Students will acquire knowledge of fundamental physics principles and their applications as well as problem solving skills and laboratory and data acquisition experience. Topics covered: kinematics, dynamics, momentum of particles and rigid bodies, work and energy, gravitation, simple harmonic motion, and waves. This course must be taken with University Physics 1 Lab.

Prerequisite: MATH 225 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 4

## PHYS 217 - University Physics 2 with Lab

Second of a two semester calculus based introduction to physics sequence for science, engineering, and mathematics students. Students will acquire knowledge of fundamental physics principles and their applications as well as problem solving skills and laboratory and data acquisition experience. Topics Covered: Fluids, Thermodynamics, Electricity and Magnesium, Circuits, and Optics. This course must be taken with University Physics 2 Lab.

Prerequisites: PHYS $216^{\text {D }}$ and MATH 230 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 4

## PHYS 271 - Astronomy

This course is designed for the general student. Recent findings in astronomy are discussed, i.e., black holes, quasars, etc. Other topics of interest are the evolution of stars, galaxies, and the universe since the big bang. No math required.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): The Future, Revolutions, Transfer Thread Completion Course

## PHYS 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## PHYS 295-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## PHYS 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## PHYS 301-Physical Chemistry I

Thermodynamics and chemical kinetics. Cross listed as CHEM301.
Prerequisites: CHEM $108^{\mathrm{D}}$ and CHEM $112^{\mathrm{D}}$ and (PHYS $212^{\mathrm{D}}$ or PHYS $213^{\text {D }}$ ) and MATH $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 312 - Modern Physics 1

An introductory course that focuses on the transition from classical physics covered in the calculus based introductory physics sequence to contemporary physics. Topics include: Grief overview of special relativity, experimental and theoretical developments that led to the discovery of the atomic structure, early quantum mechanics, Schrodinger's equation and its application and a brief introduction to solid state physics.

Prerequisites: PHYS $212^{\text {D }}$ and PHYS $213^{\text {D }}$ and MATH $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 314- Statics

Includes the application of equilibrium conditions to structures, trusses, frames and machines, and beams with concentrated and distributed loads.

Prerequisites: PHYS $211^{\text {D }}$ and MATH 230 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 315- Dynamics

Integrates the subject content of kinematics and kinetics that deal respectively with the description of motion of bodies and the causes for their motion.

Prerequisites: PHYS $314^{\text {D }}$ and ENGR $210^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## PHYS 317-Space Science

Introductory course in space exploration. It emphasizes the evolution of the earth with respect to its neighbors in the solar system. Other topics covered are the earth's ionosphere, magnetosphere, hazards of satellite communication, and orbital dynamics.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): The Future, Transfer Thread Completion Course Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 325 - Analog \& Digital Electronics

An introductory analog and digital electronics course designed primarily for science students. The course will start with an analysis of AC and DC circuits using Kirchhoff's laws and complex numbers. The analog part will include a study of discrete components including diodes, transistors, and SCRs as well as linear integrated circuits. The digital part will include basic gates as well as MSI and LSI circuits and will be center around interfacing computers to experiments.

Prerequisite: PHYS 212 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 331 - Mathematical Methods of Physics

Applications in physical science and engineering of the following: vector analysis, complex variables, Fourier and Laplace transforms, linear algebra, and some boundary value problems. Cross-linked as MATH 331. This course may be counted as a physics course or as a mathematics course, but not both.

Prerequisites: MATH $240^{\text {D }}$ and PHYS $211^{\text {D }}$ and MATH 231 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 371 - Physical Optics

This is a physical optics course dealing with the nature and transmission of light. Topics covered will include the propagation of light, coherence, interference, diffraction, Maxwell's Equations, optics of solids, thermal radiation, optical spectra and lasers.

Prerequisites: PHYS $212^{\text {D }}$ and PHYS $213^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 375 - Thermal Physics

This is an introductory course in thermodynamics and statistical mechanics, with appication to both physics and engineering.

Prerequisites: PHYS $213^{\text {D }}$ and MATH $231^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 381 - Advanced Physics Laboratory

Selected experiments in all branches of physics that are of a more advanced grade than those given at the general or intermediate level. Each experiment will be an extended piece of careful, thorough work, culminating in a detailed report.

Prerequisites: PHYS $211^{\text {D }}$ and PHYS $212^{\text {D }}$ and PHYS $213^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 2
Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## PHYS 382 - Optics Laboratory

This course will provide in depth experience in laboratory techniques, data acquisition and analysis in the field of Optical Physics. Experiments are of a more advanced grade than those given at the general or intermediate level. Each experiment will be an extended piece of careful, thorough work, culminating in a detailed report. Appropriate for students majoring in the Biological, Earth, Environmental, Health, Mathematics and Physical sciences.

Prerequisites: PHYS $211^{\mathrm{D}}$ and PHYS $212^{\mathrm{D}}$ and (PHYS $213^{\mathrm{D}}$ or PHYS 201 ${ }^{\mathrm{D}}$ ) and PHYS $202{ }^{\mathrm{D}}$ and (MATH $225^{\mathrm{D}}$ or MATH $230^{\mathrm{D}}$ or MATH $231^{\mathrm{D}}$ )
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 2

Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## PHYS 385 - Computational Physics

An introduction to scientific computational methods and their application in physics. A range of numerical and symbolic computing techniques will be explored, including numerical integration, matrix methods, differential equations, random walks, and Monte Carlo simulations. These techniques together with visualization methods will be used to solve problems taken from different physics topics, such as classical mechanics, electricity and magnetism, thermodynamics, quantum mechanics, and biophysics.

Prerequisites: PHYS $213^{\mathrm{D}}$ and MATH $240^{\mathrm{D}}$ and CPSC $140^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 410 - Electricity and Magnetism

Electric fields and potentials of charge distributions and polarized materials, magnetic fields and vector potentials of current distributions and magnetized materials; electric and magnetic energies and application of Maxwell's equations.

Prerequisites: PHYS $212^{\text {D }}$ and PHYS $331^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 412 - Modern Physics 2

This course explores the applications of Quantum mechanics and relativity. Topics covered will include atomic physics, quantum statistics, solid state physics, nuclear physics, astrophysics and cosmology.
Prerequisites: PHYS $312^{\text {D }}$ and MATH $231^{\text {D }}$ and PHYS 331 (may be taken concurrently) ${ }^{\mathrm{D}}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 1

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 421 - Materials Safety and Equipment Overview for Nanofabrication - NMT 311

This course provides an overview of basic nanofabrication processing equipment and materials handling procedures with a focus on safety, environment, and health issues. Topics covered include: cleanroom operation, environmental, safety, and health issues, vacuum pump systems operation, environmental safety and health issues (covering direct drive mechanical, roots blowers, turbomolecular, and dry mechanical systems); thermal- processing equipment operation, safety, environmental, and health issues (covering horizontal, vertical, rapid thermal annealing tools); chemical vapor deposition system operation, safety, environmental, and health issues (covering gas delivery, corrosive and flammable gas storage and plumbing, regulators, and mass flow controllers); and vacuum deposition/etching system operation, safety, environment, and health issues (covering microwave and RF power supplies and tuners, heating and cooling units, vacuum gauges, valves, and process controllers). Specific materials handling issues include those arising from using deionization water, solvents, cleansers, organic materials, ion implementation sources, diffusion sources, photoiesists, developers, metal dielectrics and toxic, flammable, corrosive and high purity gases as well as packaging materials.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 422 - Basic Nanofabrication Processes - NMT 312

The course provides an overview of basic processing steps used in all applications of nanofabrication. Both top-down and bottom-up nanofabrication are included. The majority of the course details a step-by-step description of the equipment and processes needed to fabricate devices and structures such as bio- chips, CMOS transistors, power devices, microelectromechanical (MEM) devices, and opto-electronic structures. Students learn the similarities and differences in both the equipment and process flows needed in fabricating all of these various structures.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 423 - Thin Films in Nanofabrication - NMT 313

This course covers thin film deposition and etching practices in nanofabrication. The deposition techniques addressed in the first part of the course include atmospheric, low pressure, and plasma enhanced chemical vapor deposition and sputtering, thermal evaporation, and beam evaporation physical vapor deposition. Also included are self-assembling molecule based techniques. Materials considered include organics, dielectrics (e.g., nitrides, oxides), polysilicon (doped and undoped), metals (e.g., aluminum, tungsten, copper), adhesion promoters and diffusion barriers. The second part of the course focuses on etching processes and emphasizes reactive ion etching (single wafer, batch), high-ion-density reactors, ion beam etching and wet chemical etching. Students receive hands-on experience in depositing and etching dielectric, semiconductor, and metal materials using state-of-the-art tools and experience practicing the steps critical to micro- and nanofabrication of structures used in a variety of fields from biotechnology and the biomedical fields to microelectronics.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 424 - Advanced Lithography and Dielectrics Nanofabrication NMT 314

This course covers all aspects of lithography from design and mask fabrication to pattern transfer and inspection. The course is divided into three major sections. The first section describes the lithographic process from substrate preparation to exposure. The second section examines the processes from development through inspection (both before and after pattern transfer). This section introduces optical masks, aligners, steppers and scanners. In addition, critical dimension (CD) and profile control of photoresists are investigated. The last section discusses advances in optical lithographic techniques such as phase shifting masks and illumination schemes as well as molecular ruler, e-beam, x -ray, EUV, and ion beam lithography.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 425 - Materials Modification in Nanofabrication - NMT 315

This course covers in detail the processing steps used in modifying material properties in nanofabrication. Included are chemical reaction, growth and annealing processes. The impact of thermal processing and thermal processing on defects, gettering, and impurities and overall electrical, mechanical, optical, and chemical properties are studied. The student grows and measures gate and field oxides, implants and activates source and drain regions, and evaluates thermal budget requirements using state-of-the-art tools. Included also are other modification technologies such as ion implantation, diffusion and chemical surface preparation and treatment. Substrate preparation processing such as slicing, etching, polishing and epitaxial growth are also covered.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 426 - Characterization, Packaging and Testing of Nanofabrication

 Structures - NMT 316This course examines a variety of measurements and techniques essential for controlling micro- and nanofabrication processes. Monitoring techniques such as residual gas analysis (RGA), optical emission spectroscopy (OES) and end point detection are discussed. Characterization techniques such as scanning electron microscopy x-ray photoelectron spectroscopy, atomic probe methods advanced optical microscopy, optical thin film measurements, ellipsometry, and resistivity/conductivity measurements are introduced and tied to process control. Basic measurements for yield analysis and process control are also stressed. These include breakdown measurements, junction testing, and capacitance-voltage and current voltage characterization. In addition, the characteristics of some simple bio-chip structures and MEMs devices are obtained and discussed. The student learns about the manufacturing issues involved in interconnects, materials compatibility and final device assembly. Aluminum, refractory metals and plastic fabrication techniques and characterization are discussed in detail along with topics such as diffusion barriers, contact resistance, electro migration, corrosion, and adhesion. The importance of planarization techniques such as deposition/etchback and chemical/mechanical polishing are emphasized. Lastly, procedures such as die separation, bonding, and sealing and final test for both conventional Cs and MEMs and biomedical devices are examined.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 450 - Internship

Supervised placement and research in selected public and private agencies.

Credits: 1-12
Term(s) Typically Offered: Offered as Needed

## PHYS 480 - Quantum

In this introductory course in quantum mechanics, the foundations and origins will be covered. Other topics will include wave packets, the uncertainty principle, the Schroedinger equation, operator formalism, eigen functions, spherically symmetric systems, angular momentum, spin and scattering theory.

Prerequisites: PHYS $331^{\text {D }}$ and PHYS $411^{\text {D }}$ and MATH $240^{\text {D }}$ and
MATH 301*D (may be taken concurrently).
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 490 - Independent Study

Investigation of the theoretical or experimental area following a plan or proposal initiated by the student and approved by the major advisor. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 495-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 498- Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PNGE Courses

## PNGE 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## PNGE 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## PNGE 195-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## PNGE 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
PNGE 201 - Introduction to Petroleum and Natural Gas Engineering This course provides an overview of different aspects of petroleum and natural gas engineering from generation to exploration of petroleum reservoirs to drilling and production from these resources.

Credits: 1
Term(s) Typically Offered: Offered Fall Terms

## PNGE 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
PNGE 295 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## PNGE 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## PNGE 312 - Petrophysics

This course provides an in depth review of the properties of the reservoir rock and fluids. Topics covered will include theoretical and applied phase behavior of hydrocarbon systems and hydrocarbon fluid properties, basic properties of petroleum reservoir rocks and laboratory evaluation of basic and special petroleum reservoir rock and fluid properties.
Prerequisites: CHEM $107^{\text {D }}$ and CHEM $111^{\text {D }}$ and PNGE $201^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 4

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PNGE 315 - Reservoir Fluids

Thermodynamic behavior of naturally occurring hydrocarbon mixtures; evaluation and correlation of physical properties of petroleum reservoir fluids including laboratory and empirical methods.

Prerequisites: PNGE $312^{\text {D }}$ and CHEM $108^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PNGE 325 - Reservoir Engineering

This course provides an in depth review of reservoir characteristics and behavior. Topics covered will include fluid flow through porous materials, evaluation of oil and gas resources and the reserves under a variety of production methods, and prediction of reservoir performance to achieve maximum conservation.

Prerequisites: EGEO $327^{D}$ and PNGE $315^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PNGE 330 - Unconventional Reservoir Engineering

This course addresses topics that are specific to exploration of unconventional reservoirs - identification and characterization, economics, efficient completion technologies and development strategies. Tight gas and shale gas reservoirs and coal bed methane engineering are addressed.

Prerequisite: PNGE $325^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PNGE 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## PNGE 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PNGE 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PNGE 410 - Drilling engineering with Lab

This course provides an in depth review of drilling engineering practices. Topics covered will include functions and design considerations for the rotating system, hoisting system and circulating system; drilling fluids calculations and selections; hydraulic programs; drilling optimization; casing string design; cementing programs; and pressure control; laboratory evaluation of mud weight control filtration, chemical contaminants and rheological models.

Prerequisites: ENGR 301 (may be taken concurrently) ${ }^{D}$ and PNGE $312^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 4
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PNGE 420 - Production Engineering

This course provides an in depth review of petroleum production engineering practices. Topics covered will include well completion, performance of productive formations, drill stem tests, completion of wells, flowing wells, gas lift methods and equipment, pumping installation design, well stimulation, emulsion, treating, gathering and storage of oil and gas, field automation.

Prerequisites: PNGE 410 (may be taken concurrently) ${ }^{\text {D }}$ and PNGE $325^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PNGE 430-Reservoir Simulation

Mathematical models governing fluid flow in reservoirs; relevant numerical methods; numerical reservoir simulations; treatment of wells; history matching; simulation project performed using a commercial simulator.

Prerequisites: PNGE $325^{\text {D }}$ and ENGR $130^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PNGE 432 - Formation Evaluation

This course provides an in depth review of techniques for formation evaluation. Topics covered will include various well logging methods and related calculations with exercises in interpretation of data from actual well logs.

Prerequisite: PNGE 312 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PNGE 435 - Pressure Transient Analysis

This course provides an in depth review of the well test analysis methods. Topics covered will include pressure transient tests and interpretation methods, unsteady-state fluid flow through porous rock, analysis of the drawdown and buildup tests, wellbore storage, application of pressure derivative in pressure transient data analysis, testing of hydraulically fractured wells, type curve method, testing of horizontal wells, unified method of analysis, well test design.

Prerequisite: PNGE 420 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## PNGE 440-Hydraulic Fracturing

This course starts with a general overview of different types of unconventional reservoirs and their geological and petrophysical properties. Second part of the course emphasizes hydraulic fracturing design and data collection for proper fracture design. Economic analysis of hydraulic fracturing will be covered as well as more advanced topics such as completion design optimization.

Prerequisite: PNGE $325^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

PNGE 441- Oil and Natural Gas Resource Valuation and Economics
This course provides an in depth review of the techiques for oil and gas property evaluation. Topics covered will include reserve estimation, decline analysis, petroleum property evaluation, interest calculations, cost estimation, and tax evaluation, investment decision analysis and computer applications in property evaluation.

Prerequisites: PNGE $325^{\mathrm{D}}$ and PNGE $432^{* D}$ (may be taken concurrently).
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PNGE 443 - Enhanced Oil Recovery

This course teaches an integrated version of the basics of waterflooding and enhanced oil recovery (EOR), illustrating the connection of each process to a few fundamental principles. It reviews the specifics of thermal and solvent EOR by relating basic principles to the results of cases from the field.

Prerequisite: PNGE $325^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Petro \& Natl Gas Engineering.
Enrollment limited to students in the Coll of Health, Engineer \& Sci college.

## PNGE 445 - Natural Gas Engineering with Lab

This course provides an in depth review of natural gas evaluation and production engineering practices. Topics covered will include natural gas properties, compression, transmission, processing and application of reservoir engineering principles to predict the performance and design of gas, gas-condensate and storage reservoirs. Includes a laboratory devoted to gas measurements.

Prerequisite: PNGE $325^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PNGE 450 - Internship

Supervised placement and research in selected public and private agencies.

## Credits: 3-9

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PNGE 459 - Petroleum and Natural Gas Design/Capstone I

This course provides a proposal preparation for PNGE 460 which includes defining a comprehensive problem in design involving systems in oil and gas production, field processing, transportation, and storage.

Prerequisites: PNGE $325^{\mathrm{D}}$ and PNGE $410^{\mathrm{D}}$ and PNGE $420^{* D}$ and PNGE $432{ }^{* D}$ (may be taken concurrently).
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

PNGE 460 - Petroleum and Natural Gas Engineering Design/Capstone II
This course provides comprehensive problems in design involving systems in oil and gas production, field processing, transportation and storage.

Prerequisite: PNGE 459 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 2
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
PNGE 470 - Petroleum and Natural Gas Engineering Undergraduate
Research
Research and design problems of limited scope approved on an individual basis intended to promote independent inquiry.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## PNGE 490 - Independent Study

Investigation of the theoretical or experimental area following a plan or proposal initiated by the student and approved by the major advisor. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PNGE 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PNGE 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Civil Engineering, Bachelor of Science (BS)

## Program Learning Outcomes

Upon graduation, students will have:

- An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
- An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
- An ability to communicate effectively with a range of audiences
- An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
- An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
- An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
- An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.


## Related Links

Civil Engineering, BS Program Page (https://www.sru.edu/academics/ majors-and-minors/civil-engineering/)

Physics and Engineering Department Page (https://www.sru.edu/ academics/colleges-and-departments/ches/departments/physics-andengineering/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.00 or higher
Overall GPA: 2.00 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 41 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |

Major/Concentration Requirements 84

Natural Science and Math College-Wide Requirements 12

## Elective

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 225 | Calculus I | 4 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |

Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378)
Humanities Inquiry
Select 3 Credits (p. 1378) 3
Social Science Inquiry
Select 3 Credits (p. 1378)

| Natural Sciences Inquiry |  |  |
| :--- | :--- | :--- |
| CHEM 107 | General Chemistry I | 3 |

CHEM 111 General Chemistry I Lab 1

Physical Sciences Inquiry
PHYS $216 \quad$ University Physics 1 with Lab 4
Subtotal 17

| Additional Rock Studies Requirements |  |  |
| :--- | :--- | ---: |
| MATH 230 | Calculus II | 4 |
| PHYS 217 | University Physics 2 with Lab | 4 |
| Subtotal | 8 |  |
| Total Hours | 41 |  |

1 Course offered in multiple subjects; cannot take course in first major subject.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra | $\mathbf{0 - 3}$ |
| Total Hours |  |  |

## Computer Competency

| Code | Title | Hours |
| :---: | :---: | :---: |
| Demonstrate "computer competency" by one of the following: |  | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one institution: | ollowing at SRU or another post-secondary |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |
| Major/Concentration Requirements |  |  |
| - 42 major credits must be taken at SRU or PASSHE |  |  |
| - 42 major credits must be taken at the 300 level or above |  |  |

Code Title Hours

| Required Engineering Courses |  |  |
| :---: | :---: | :---: |
| ENGR 110 | Introduction to Engineering ${ }^{1}$ | 2 |
| ENGR 120 | Engineering Design Tools ${ }^{1}$ | 2 |
| ENGR 130 | Engineering Computing Tools ${ }^{1}$ | 2 |
| ENGR 210 | Statics ${ }^{1}$ | 3 |
| ENGR 220 | Engineering Materials ${ }^{1}$ | 3 |
| ENGR 230 | Mechanics of Materials | 3 |
| ENGR 231 | Mechanics of Materials Lab | 1 |
| ENGR 301 | Fluid Mechanics ${ }^{1}$ | 3 |
| ENGR 340 | Engineering Economics ${ }^{1}$ | 3 |
| CIVL 210 | Elementary Survey ${ }^{1}$ | 3 |
| CIVL 310 | Structural Engineering ${ }^{1}$ | 4 |
| CIVL 320 | Transportation Engineering ${ }^{1}$ | 3 |
| CIVL 330 | Environmental Engineering ${ }^{1}$ | 4 |
| CIVL 340 | Geotechnical Engineering ${ }^{1}$ | 3 |
| CIVL 350 | Water Resources Engineering ${ }^{1}$ | 3 |
| CIVL 410 | Structural Steel Design ${ }^{1}$ | 3 |
| CIVL 411 | Reinforced Concrete Design | 3 |
| CIVL 420 | Traffic Engineering ${ }^{1}$ | 3 |
| CIVL 430 | Storm Water Management ${ }^{1}$ | 3 |
| CIVL 440 | Construction Management | 3 |
| CIVL 460 | Capstone Design I ${ }^{1}$ | 3 |
| CIVL 461 | Capstone Design II | 3 |
| Subtotal |  | 63 |

## Engineering Elective

Select one of the following: 3

| ENGR 240 | Dynamics |
| :--- | :--- |
| ENGR 310 | Introduction to Electrical Engineering |
| ENGR 320 | Thermodynamics |
| Civil Engineering Electives $-\mathbf{4 0 0}$ Level |  |
| Select two of the following: |  |


| CIVL 412 | Finite Element Analysis |
| :--- | :--- |
| CIVL 421 | Highway Engineering |
| CIVL 422 | Transportation Terminal Design |
| CIVL 431 | Environmental Engineering Design |


| CIVL 432 | Groundwater Hydrology |  |
| :--- | :--- | :--- |
| CIVL 441 | Sustainable Development |  |
| Required Math and Science Courses |  |  |
| BIOL 105 | Environmental Biology | 3 |
| MATH 301 | Differential Equations I | 3 |
| MATH 309 | Linear Algebra | 3 |
| or MATH 309 | Linear Algebra |  |
| STAT 350 | Applied Statistics | 3 |
| Subtotal |  | $\mathbf{2 1}$ |
| Total Hours |  | $\mathbf{8 4}$ |

1 Course counts for $50 \%$ of Major requirements and Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## FREE ELECTIVE

| Code | Title | Hours |
| :--- | :--- | ---: |
| Select three credits |  | 3 |
| 隹 | 3 |  |

Total Hours

| Code | Title | Hours |
| :---: | :---: | :---: |
| CHEM 107 | General Chemistry ${ }^{1}$ | 3 |
| CHEM 111 | General Chemistry I Lab ${ }^{1}$ | 1 |
| MATH 225 | Calculus ${ }^{1}$ | 4 |
| PHYS 216 | University Physics 1 with Lab | 4 |
| Total Hours |  | 12 |

1 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
CIVIL ENGINEERING - BS (6183)
This program is effective as of Fall 2021
Revised 2.7.2022
UCC 10.26.2021

## Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall |  |  |
| ENGR 110 | Introduction to Engineering | 2 |
| CHEM 107 | General Chemistry I | 4 |
| \& CHEM 111 | and General Chemistry I Lab |  |


| ENGL 102 | Critical Writing | 3 |
| :--- | :--- | ---: |
| MATH 225 | Calculus I | 4 |
| INDS 101 | FYRST Seminar | 1 |
| \{SUBJ 139\} | University Seminar | 3 |
| Spring |  |  |
| ENGR 120 | Hours | $\mathbf{1 7}$ |
| ENGL 104 | Engineering Design Tools |  |
| MATH 230 | Critical Reading | 2 |
| PHYS 211 | Calculus II | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) | $\mathbf{4}$ |  |
|  | General Physics I with Lab | 4 |

## Second Year

Fall

| ENGR 130 | Engineering Computing Tools | 2 |
| :--- | :--- | :--- |
| BIOL 105 | Environmental Biology | 3 |
| MATH 301 | Differential Equations I | 3 |
| ENGR 210 | Statics | 3 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :---: | :--- | ---: |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy | 3 |
| Social Science Inquiry (p. 1378) | $\mathbf{1 7}$ |  |


| Spring |  |  |
| :--- | :--- | ---: |
| ENGR 220 | Engineering Materials | 3 |
| ENGR 230 | Mechanics of Materials | 3 |
| STAT 350 | Applied Statistics | 3 |
| MATH 309 | Linear Algebra | 3 |
| PHYS 213 | General Physics III/ Lab | $\mathbf{4}$ |
|  | Hours | $\mathbf{1 6}$ |


| Third Year |  |  |
| :--- | :--- | :--- |
| Fall |  | 3 |
| CIVL 210 | Elementary Survey | 4 |
| CIVL 310 | Structural Engineering | 3 |
| CIVL 320 | Transportation Engineering | 3 |
| CIVL 340 | Geotechnical Engineering | 3 |
| ENGR 301 | Fluid Mechanics | 1 |
| ENGR 231 | Mechanics of Materials Lab | $\mathbf{1 7}$ |

## Spring

ENGR xxx Engineering Elective 3
CIVL 330 Environmental Engineering 4
CIVL $350 \quad$ Water Resources Engineering 3
CIVL $420 \quad$ Traffic Engineering 3

| Humanities Inquiry (p. 1378) | 3 |
| ---: | ---: |
| Hours | 16 |

Fourth Year
Fall
CIVL 410 Structural Steel Design 3
CIVL 411 Reinforced Concrete Design 3

| CIVL 460 | Capstone Design I | 3 |
| :--- | :--- | ---: |
| ENGR 340 | Engineering Economics | 3 |
|  | Hours | $\mathbf{1 5}$ |
| Spring |  |  |
| CIVL 440 | Construction Management | 3 |
| CIVL 461 | Capstone Design II | 3 |
| CIVL 4xx | Civil Engineering Elective | 3 |
| CIVL 4xx | Civil Engineering Elective | 3 |
| Elective |  | 3 |
|  | Hours | $\mathbf{1 5}$ |
|  | Total Hours** | $\mathbf{1 2 9}$ |

1 Recommended: ECON 201 Macroeconomics

* Students are encouraged to take INDS 101 as a Free Elective.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6183
Revised: 08.04.2021

## Industrial and Systems Engineering, Bachelor of Science (BS) Program Learning Outcomes

Upon graduation, students will have:

- An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
- An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
- An ability to communicate effectively with a range of audiences
- An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
- An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
- An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
- An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.


## Related Links

Industrial and Systems Engineering, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/industrial-and-systemsengineering/)

| Physics and Engineering Department Page (https://www.sru.edu/ |
| :--- |
| academics/colleges-and-departments/ches/departments/physics-and- |
| engineering/) |
| Professional Licensure/Certification Page (https://www.sru.edu/ |
| students/student-consumer-information/professional-licensures/) |
| Curriculum Guide |
| GPA Requirement |
| Major GPA: 2.00 or higher |
| Overall GPA: 2.00 or higher |
| Summary* |
| Code |
| Rock Studies Requirements |
| Other Basic Requirements |
| Computer Competency |
| Major Requirements |
| Natural Science and Math College-Wide Requirements |
| Elective |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 225 | Calculus I | 4 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |

Subtotal ..... 16
Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378) ..... 3
Humanities Inquiry
Select 3 Credits (p. 1378) ..... 3
Social Science Inquiry
Select 3 Credits (p. 1378) ..... 3
Natural Sciences Inquiry
CHEM 107 General Chemistry I ..... 3
CHEM 111 General Chemistry I Lab ..... 1
Sciences InquiryAdditional Rock Studies Requirements

| MATH 230 | Calculus II | 4 |
| :--- | :--- | :--- |
| PHYS 217 | University Physics 2 with Lab | 4 |


| Subtotal |  |  |
| :---: | :---: | :---: |
| Total Hours |  | 41 |
| 1 Course offered in multiple subjects; cannot take course in first major subject. |  |  |
| Basic Math Requirement |  |  |
| Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree. |  |  |
| Code | Title | Hours |
| Complete one | following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 Beginning Algebra |  |  |
| Total Hours 0-3 |  |  |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate "computer competency" by one of the following: |  | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 Introduction to Computing for Liberal Arts |  |  |
| CPSC 110 Computer Concepts |  |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major Requirements

- 44 major credits must be taken at SRU or PASSHE
- 44 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Engineering Courses |  |  |
| ENGR 110 | Introduction to Engineering ${ }^{1}$ | 2 |
| ENGR 120 | Engineering Design Tools ${ }^{1}$ | 2 |
| ENGR 130 | Engineering Computing Tools ${ }^{1}$ | 2 |
| ENGR 210 | Statics ${ }^{1}$ | 3 |
| ENGR 220 | Engineering Materials ${ }^{1}$ | 3 |
| ENGR 310 | Introduction to Electrical Engineering ${ }^{1}$ | 3 |
| ENGR 340 | Engineering Economics ${ }^{1}$ | 3 |
| ISE 311 | Introduction to Operations Research ${ }^{1}$ | 3 |
| ISE 362 | Lean Systems ${ }^{1}$ | 3 |
| ISE 370 | Design of Industrial Systems and Processes ${ }^{1}$ | 3 |
| ISE 372 | Manufacturing Systems Design and Analysis ${ }^{1}$ | 3 |
| ISE 373 | Quality Engineering ${ }^{1}$ | 3 |
| ISE 402 | Work Design ${ }^{1}$ | 3 |
| ISE 410 | Engineering Project Management ${ }^{1}$ | 3 |
| ISE 420 | Simulation of Industrial Systems ${ }^{1}$ | 4 |
| ISE 421 | Supply Chain \& Logistics Engineering ${ }^{1}$ | 3 |
| ISE 430 | Production Planning \& Control ${ }^{1}$ | 3 |


| ISE 440 | Health Care Systems Engineering ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| ISE 442 | Human Factors Engineering ${ }^{1}$ | 3 |
| ISE 460 | Engineering Risk Analysis ${ }^{1}$ | 3 |
| ISE 487 | Industrial and Systems Engineering Senior Project I ${ }^{1}$ | 1 |
| ISE 488 | Senior Project II ${ }^{1}$ | 3 |
| MECH 330 | Introduction to Mechatronics ${ }^{1}$ | 4 |
| Subtotal |  | 66 |
| ISE Electives |  |  |
| Select three of the following: |  | 8 |
| ISE 330 | Six Sigma Methodology |  |
| ISE 382 | Sustainable Processes |  |
| ISE 432 | Productivity Analysis |  |
| ISE 480 | Industrial and Systems Engineering Undergraduate Research |  |
| MATH 316 | Advanced Methods of Operations Research |  |
| Subtotal |  | 8 |
| Required Math and Science Courses |  |  |
| MATH 231 | Calculus III ${ }^{1}$ | 4 |
| MATH 309 | Linear Algebra ${ }^{1}$ | 3 |
| STAT 350 | Applied Statistics ${ }^{1}$ | 3 |
| Subtotal |  | 10 |
| Total Hours |  | 84 |

1 Course counts for $50 \%$ of Major requirements and Major GPA
2 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## free elective

| Code | Title | Hours |
| :--- | :--- | ---: |
| Select three credits |  | 3 |
| Total Hours | 3 |  |



## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information
on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
INDUSTRIAL AND SYSTEMS ENGINEERING - BS (6182)
This program is effective as of Summer 2021
Revised 2.21.2022
UCC 10.26.2021
Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| MATH 225 | Calculus I | 4 |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
| ENGR 110 | Introduction to Engineering | 2 |
| ENGL 102 | Critical Writing | 3 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
|  | Hours | 16 |
| Spring |  |  |
| MATH 230 | Calculus II | 4 |
| PHYS 211 | General Physics I with Lab | 4 |
| ENGR 120 | Engineering Design Tools | 2 |
| ENGL 104 | Critical Reading | 3 |
| Social Science Inquiry (p. 1378) |  | 3 |
|  | Hours | 16 |
| Second Year |  |  |
| Fall |  |  |
| MATH 231 | Calculus III | 4 |
| PHYS 213 | General Physics III/ Lab | 4 |
| ENGR 130 | Engineering Computing Tools | 2 |
| ENGR 210 | Statics | 3 |
| ENGR 340 | Engineering Economics | 3 |
|  | Hours | 16 |
| Spring |  |  |
| MATH 309 | Linear Algebra | 3 |
| PHYS 212 | General Physics II with Lab | 3 |
| STAT 350 | Applied Statistics | 3 |
| ENGR 310 | Introduction to Electrical Engineering | 3 |
| ENGR 220 | Engineering Materials | 3 |
|  | Hours | 15 |


| Third Year |  |  |
| :--- | :--- | ---: |
| Fall |  | 3 |
| ISE 311 | Introduction to Operations Research | 3 |
| ISE 372 | Manufacturing Systems Design and | 3 |
|  | Analysis | 3 |
| ISE 373 | Quality Engineering | 3 |
| ISE 402 | Work Design | 4 |
| MECH 330 | Introduction to Mechatronics | $\mathbf{1 6}$ |


| Spring |  |  |
| :---: | :---: | :---: |
| ISE 370 | Design of Industrial Systems and Processes | 3 |
| ISE 420 | Simulation of Industrial Systems | 4 |
| ISE 421 | Supply Chain \& Logistics Engineering | 3 |
| ISE 430 | Production Planning \& Control | 3 |
| ISE 440 | Health Care Systems Engineering | 3 |
|  | Hours | 16 |
| Fourth Year |  |  |
| Fall |  |  |
| ISE 442 | Human Factors Engineering | 3 |
| ISE 410 | Engineering Project Management | 3 |
| ISE 487 | Industrial and Systems Engineering Senior Project I | 1 |


| ISE Elective | 3 |
| :--- | ---: |
| Creative \& Aesthetic Inquiry (p. 1378) | 3 |
| Humanities Inquiry (p. 1378) | 3 |
| Hours | $\mathbf{1 6}$ |


| Spring |  |  |
| :--- | :--- | :--- |
| ISE 362 | Lean Systems | 3 |
| ISE 488 | Senior Project II | 3 |
| ISE Elective |  | 2 |
| ISE 460 | Engineering Risk Analysis | 3 |
| Free Elective |  | 3 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :--- | :--- | ---: |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
|  | Hours | $\mathbf{1 7}$ |
|  | Total Hours** | $\mathbf{1 2 8}$ |

1 Course offered in multiple subjects; cannot take course in first major subject.

* Students are encouraged to take INDS 101 as a Free Elective.

Major Code: 6182
Revised: 06.07.2021
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Mechanical Engineering, Bachelor of Science (BS) Program Learning Outcomes

Upon graduation, students will have:

- An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
- An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
- An ability to communicate effectively with a range of audiences
- An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
- An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
- An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
- An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.


## Related Links

Mechanical Engineering, BS Program Page (https://www.sru.edu/ academics/majors-and-minors/mechanical-engineering/)

Physics and Engineering Department Page (https://www.sru.edu/ academics/colleges-and-departments/ches/departments/physics-andengineering/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.00 or higher
Overall GPA: 2.00 or higher
Summary*
Code Title Hours
Rock Studies Requirements 41
Other Basic Requirements 0-3
Computer Competency 0-3

Major/Concentration Requirements 84
Natural Science and Math College-Wide Requirements 12
Elective 3

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 225 | Calculus I | 4 |
| Select one of the following: | 3 |  |

Select one of the following: 3

| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |

POLS 235 Civil Discourse and Democracy
Subtotal 16
Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378) 3
Humanities Inquiry
Select 3 Credits (p. 1378) 3

Social Science Inquiry
Select 3 Credits (p. 1378) 3

Natural Sciences Inquiry

| CHEM 107 | General Chemistry I | 3 |
| :--- | :--- | :--- |
| CHEM 111 | General Chemistry I Lab | 1 |

Physical Sciences Inquiry
PHYS $216 \quad 4$

Subtotal ..... 17

Additional Rock Studies Requirements
MATH $230 \quad$ Calculus II 4
PHYS 217 University Physics 2 with Lab 4
Subtotal 8
Total Hours ..... 41

1 Course offered in multiple subjects; cannot take course in first major subject.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal A |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |
| Major/Concentration Requirements |  |  |
| - 42 major credits must be taken at SRU or PASSHE |  |  |
| - 42 major credits must be taken at the 300 level or above |  |  |
| Code | Title | Hours |
| Required Engineering Courses |  |  |
| ENGR 110 | Introduction to Engineering ${ }^{1}$ | 2 |


| ENGR 120 | Engineering Design Tools ${ }^{1}$ | 2 |
| :---: | :---: | :---: |
| ENGR 130 | Engineering Computing Tools ${ }^{1}$ | 2 |
| ENGR 210 | Statics ${ }^{1}$ | 3 |
| ENGR 220 | Engineering Materials ${ }^{1}$ | 3 |
| ENGR 230 | Mechanics of Materials ${ }^{1}$ | 3 |
| ENGR 231 | Mechanics of Materials Lab ${ }^{1}$ | 1 |
| ENGR 240 | Dynamics ${ }^{1}$ | 3 |
| ENGR 301 | Fluid Mechanics ${ }^{1}$ | 3 |
| ENGR 310 | Introduction to Electrical Engineering ${ }^{1}$ | 3 |
| ENGR 320 | Thermodynamics ${ }^{1}$ | 3 |
| ENGR 340 | Engineering Economics ${ }^{1}$ | 3 |
| MECH 310 | Machines and Mechanisms ${ }^{1}$ | 4 |
| MECH 320 | Manufacturing Processes ${ }^{1}$ | 3 |
| MECH 330 | Introduction to Mechatronics ${ }^{1}$ | 4 |
| MECH 340 | Heat Transfer ${ }^{1}$ | 4 |
| MECH 410 | Machine Design ${ }^{1}$ | 4 |
| MECH 420 | Design and Manufacturing ${ }^{1}$ | 3 |
| MECH 430 | Mechatronics ${ }^{1}$ | 3 |
| MECH 460 | Capstone Design ${ }^{1}$ | 3 |
| MECH 461 | Capstone Design II Capstone Design II ${ }^{1}$ | 3 |
| Subtotal |  | 62 |

## Mechanical Engineering Electives

Select three of the following: 9

| MECH 411 | Mechanical Control Systems |  |
| :---: | :---: | :---: |
| MECH 412 | Finite Element Analysis |  |
| MECH 421 | Mechanical Vibrations |  |
| MECH 422 | Thermal System Design |  |
| MECH 423 | Additive Manufacturing |  |
| MECH 431 | Introduction to Robotics |  |
| MECH 440 | HVAC Systems |  |
| MECH 441 | Sustainable Energy |  |
| Required Math and Science Courses |  |  |
| MATH 231 | Calculus III ${ }^{1}$ | 4 |
| MATH 301 | Differential Equations ${ }^{1}$ | 3 |
| MATH 309 | Linear Algebra ${ }^{1}$ | 3 |
| STAT 350 | Applied Statistics ${ }^{1}$ | 3 |
| Subtotal |  | 22 |
| Total Hours |  | 84 |

1 Course counts for $50 \%$ of Major requirements and Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## FREE ELECTIVE

| Code | Title | Hours |
| :--- | :--- | ---: |
| Select three credits |  | 3 |
| Total Hours |  | 3 |
| Natural Science |  |  |
| Code | Title | Math College-Wide Requirements |
| CHEM 107 | General Chemistry I |  |
| CHEM 111 | General Chemistry I Lab $^{1}$ | 3 |
|  |  | 1 |


| MATH 225 | Calculus ${ }^{1}$ |
| :---: | :---: |
| PHYS 216 | University Physics 1 with Lab |
| Total Hours | 2 |
| 1 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total. |  |
| Important Curriculum Guide Notes |  |
| This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University. |  |
| PASSHE - Pennsylvania State System of Higher Education Institutions |  |
| MECHANICAL ENGINEERING - BS (6184) |  |
| This program is effective as of Fall 2021 |  |
| Revised 02.21.2022 |  |
| UCC 10.26.2 |  |

Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall |  |  |
| ENGR 110 | Introduction to Engineering | 2 |
| ENGL 102 | Critical Writing | 3 |
| CHEM 107 | General Chemistry I | 4 |
| \& CHEM 111 | and General Chemistry I Lab |  |
| MATH 225 | Calculus I | 4 |
| \{SUBJ 139 \} | University Seminar | 3 |
| INDS 101 | FYRST Seminar | 1 |
|  | Hours | $\mathbf{1 7}$ |
| Spring |  |  |
| ENGR 120 | Engineering Design Tools | 2 |
| ENGL 104 | Critical Reading | 3 |
| MATH 230 | Calculus II | 4 |
| PHYS 211 | General Physics I with Lab | 4 |
| Creative \& Aesthetic Inquiry (p. 1378) | 3 |  |
|  | Hours | $\mathbf{1 6}$ |

## Second Year

Fall

| ENGR 130 | Engineering Computing Tools | 2 |
| :--- | :--- | ---: |
| ENGR 210 | Statics | 3 |
| MATH 231 | Calculus III | 4 |
| MATH 309 | Linear Algebra | 3 |
| PHYS 212 | General Physics II with Lab | 3 |
|  | Hours | $\mathbf{1 5}$ |


| Spring |  |  |
| :--- | :--- | :--- |
| ENGR 220 | Engineering Materials | 3 |
| ENGR 230 | Mechanics of Materials | 3 |
| ENGR 240 | Dynamics | 3 |


| ENGR 310 | Introduction to Electrical Engineering | 3 |
| :--- | :--- | ---: |
| PHYS 213 | General Physics III/ Lab | 4 |
|  | Hours | $\mathbf{1 6}$ |
| Third Year |  |  |
| Fall | Machines and Mechanisms | 4 |
| MECH 310 | Introduction to Mechatronics | 4 |
| MECH 330 | Mechanics of Materials Lab | 1 |
| ENGR 231 | Fluid Mechanics | 3 |
| ENGR 301 | Thermodynamics | 3 |
| ENGR 320 | Differential Equations I | 3 |
| MATH 301 | Hours | $\mathbf{1 8}$ |
|  |  | 3 |
| Spring | Manufacturing Processes | 4 |
| MECH 320 | Heat Transfer | 4 |
| MECH 340 | Machine Design | 3 |
| MECH 410 | Mechatronics | 3 |
| MECH 430 | Applied Statistics | $\mathbf{1 7}$ |


| Fourth Year |  |  |
| :--- | :--- | ---: |
| Fall |  | 3 |
| MECH 420 | Design and Manufacturing | 3 |
| MECH 460 | Capstone Design I | 3 |
| MECH 4XX | Mechanical Engineering Elective | 3 |
| ECON 201 | Principles of Macroeconomics | $\mathbf{3}$ |
| ENGR 340 | Engineering Economics | $\mathbf{1 5}$ |


| Spring |  | 3 |
| :--- | :--- | :--- |
| MECH 460 | Capstone Design I | 6 |
| MECH 4XX | Mechanical Engineering Elective | 3 |
| PHIL 123 | Ethics |  |

Select one of the following: 3

| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :--- | :--- | ---: |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy | $\mathbf{1 5}$ |
|  | Hours | $\mathbf{1 2 9}$ |

** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major: 6184
Revised: 11.18.2020

## Petroleum and Natural Gas Engineering, Bachelor of Science (BS)

## Program Learning Outcomes

Upon graduation, students will have:

- An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
- An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
- An ability to communicate effectively with a range of audiences
- An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
- An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
- An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
- An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.


## Related Links

Petroleum and Natural Gas Engineering, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/petroleum-and-natural-gasengineering/)

Physics and Engineering Department Page (https://www.sru.edu/ academics/colleges-and-departments/ches/departments/physics-andengineering/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

Code Title Hours
Rock Studies Requirements 41

Other Basic Requirements 0-3
Computer Competency 0-3
Major Requirements 84
Natural Science and Math College-Wide Requirements 12
Elective 3

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 225 | Calculus I | 4 |

Select one of the following: 3

| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |

Subtotal 16
Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378)

## Humanities Inquiry

Select 3 Credits (p. 1378) 3

Social Science Inquiry
Select 3 Credits (p. 1378) 3
Natural Sciences Inquiry
CHEM $107 \quad$ General Chemistry I

CHEM 111 General Chemistry I Lab 1
Physical Sciences Inquiry

| PHYS 216 | University Physics 1 with Lab | 4 |
| :--- | ---: | ---: |
| Subtotal | 17 |  |


| Additional Rock Studies Requirements |  |  |
| :--- | ---: | ---: |
| MATH 230 | Calculus II | 4 |
| PHYS 217 | University Physics 2 with Lab | 4 |
| Subtotal |  | 8 |
| Total Hours | $\mathbf{4 1}$ |  |

1 Course offered in multiple subjects; cannot take course in first major subject.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours | $\mathbf{0 - 3}$ |  |

## Computer Competency

Code Title Hours
Demonstrate "computer competency" by one of the following: 0-3
Pass Computer Competency Exam OR
Select one of the following at SRU or another post-secondary institution:

| CPSC 100 | Introduction to Computing for Liberal Arts |
| :--- | :--- |
| CPSC 110 | Computer Concepts |
| CPSC 130 | Introduction to Computing and <br> Programming |
| PE 202 | Technology for Wellness |
| Total Hours |  |

## Major Requirements

- 42 major credits must be taken at SRU or PASSHE
- 42 major credits must be taken at the 300 level or above
Code Title Hours

Required Engineering Courses

| ENGR 110 | Introduction to Engineering ${ }^{1}$ | 2 |
| :---: | :---: | :---: |
| ENGR 120 | Engineering Design Tools ${ }^{1}$ | 2 |
| ENGR 130 | Engineering Computing Tools | 2 |
| ENGR 210 | Statics | 3 |
| ENGR 230 | Mechanics of Materials | 3 |
| ENGR 301 | Fluid Mechanics ${ }^{1}$ | 3 |
| ENGR 320 | Thermodynamics ${ }^{1}$ | 3 |
| ENGR 340 | Engineering Economics | 3 |
| PNGE 201 | Introduction to Petroleum and Natural Gas Engineering ${ }^{1}$ | 1 |
| PNGE 312 | Petrophysics ${ }^{1}$ | 4 |
| PNGE 315 | Reservoir Fluids ${ }^{1}$ | 3 |
| PNGE 325 | Reservoir Engineering ${ }^{1}$ | 3 |
| PNGE 410 | Drilling engineering with Lab ${ }^{1}$ | 4 |
| PNGE 420 | Production Engineering ${ }^{1}$ | 3 |
| PNGE 430 | Reservoir Simulation ${ }^{1}$ | 3 |
| PNGE 432 | Formation Evaluation ${ }^{1}$ | 3 |
| PNGE 435 | Pressure Transient Analysis ${ }^{1}$ | 3 |
| PNGE 440 | Hydraulic Fracturing ${ }^{1}$ | 3 |
| PNGE 441 | Oil and Natural Gas Resource Valuation and Economics ${ }^{1}$ | 3 |
| PNGE 459 | Petroleum and Natural Gas Design/ Capstone I ${ }^{1}$ | 1 |
| PNGE 460 | Petroleum and Natural Gas Engineering Design/Capstone II ${ }^{1}$ | 2 |

Subtotal 57

## PNGE Electives (PNGE or EGEO)

Students must select two of the following courses, a minimum of 6 six credits:

| PNGE 330 | Unconventional Reservoir Engineering ${ }^{1}$ |
| :--- | :--- |
| PNGE 443 | Enhanced Oil Recovery ${ }^{1}$ |
| PNGE 445 | Natural Gas Engineering with Lab ${ }^{1}$ |
| PNGE 470 | Petroleum and Natural Gas Engineering <br> Undergraduate Research ${ }^{1}$ |
| EGEO 358 | Introduction to Geophysics/Lab $^{1}$ |

Required Math and Science Courses

| CHEM 108 | General Chemistry II $^{1}$ | 3 |
| :--- | :--- | :--- |
| CHEM 112 | General Chemistry II Lab $^{1}$ | 1 |
| EGEO 201 | Earth Materials and Processes/Lab ${ }^{1}$ | 4 |
| EGEO 327 | Structural Geology ${ }^{1}$ | 4 |


| MATH 301 | ${\text { Differential Equations }{ }^{1}}^{1}$ | 3 |
| :--- | :--- | ---: |
| MATH 309 $^{1}$ | Linear Algebra $^{1}$ | 3 |
| STAT 350 | Applied Statistics $^{\text {Subtotal }}$ |  |
| Total Hours |  | 3 |

1 Course counts for $50 \%$ of Major requirements and Major GPA
2 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

| Code | Title | Hours |
| :---: | :---: | :---: |
| CHEM 107 | General Chemistry ${ }^{1}$ | 3 |
| CHEM 111 | General Chemistry I Lab ${ }^{1}$ | 1 |
| MATH 225 | Calculus ${ }^{1}$ | 4 |
| PHYS 216 | University Physics 1 with Lab ${ }^{1}$ | 4 |
| Total Hours |  | 12 |

1 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
PETROLEUM AND NATURAL GAS ENGINEERING - BS (6180)
This program is effective as of Summer 2021
Revised 2.7.2022
UCC 10.26.2021

## Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall |  |  |
| ENGR 110 | Introduction to Engineering | 2 |
| ENGL 102 | Critical Writing | 3 |
| MATH 225 | Calculus I | 4 |
| CHEM 107 | General Chemistry I | 4 |
| \& CHEM 111 | and General Chemistry I Lab |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| INDS 101 | FYRST Seminar | 1 |
|  | Hours | $\mathbf{1 7}$ |
| Spring |  |  |
| ENGR 120 | Engineering Design Tools | 2 |
| ENGL 104 | Critical Reading | 3 |


| MATH 230 | Calculus II | 4 |
| :---: | :---: | :---: |
| CHEM 108 <br> \& CHEM 112 | General Chemistry II and General Chemistry II Lab | 4 |
| PHYS 211 | General Physics I with Lab | 4 |
|  | Hours | 17 |
| Second Year |  |  |
| Fall |  |  |
| ENGR 130 | Engineering Computing Tools | 2 |
| ENGR 210 | Statics | 3 |
| PNGE 201 | Introduction to Petroleum and Natural Gas Engineering | 1 |
| PHYS 212 | General Physics II with Lab | 3 |
| EGEO 201 | Earth Materials and Processes/Lab | 4 |
| Humanities Inquiry (p. 1378) |  | 3 |
|  | Hours | 16 |
| Spring |  |  |
| PHYS 213 | General Physics III/ Lab | 4 |
| ENGR 230 | Mechanics of Materials | 3 |
| PNGE 312 | Petrophysics | 4 |
| MATH 301 | Differential Equations I | 3 |
| Select one of the following: |  | 3 |


| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :--- | :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
|  | Hours | $\mathbf{1 7}$ |


| Third Year |  |  |
| :--- | :--- | ---: |
| Fall |  | 3 |
| ENGR 301 | Fluid Mechanics | 3 |
| PNGE 315 | Reservoir Fluids | 3 |
| ENGR 320 | Thermodynamics | 4 |
| PNGE 410 | Drilling engineering with Lab | 4 |
| EGEO 327 | Structural Geology | $\mathbf{1 7}$ |

Spring

| PNGE 325 | Reservoir Engineering | 3 |
| :--- | :--- | :--- |
| PNGE 432 | Formation Evaluation | 3 |

MATH 309 Linear Algebra 3
STAT $350 \quad$ Applied Statistics 3

| Social Science Inquiry (p. 1378) | 3 |
| :---: | ---: |
| Hours | 15 |

## Fourth Year

Fall

| ENGR 340 | Engineering Economics | 3 |
| :--- | :--- | :--- |
| PNGE 420 | Production Engineering | 3 |

PNGE 430 Reservoir Simulation 3
PNGE 440 Hydraulic Fracturing 3
PNGE $441 \quad$ Oil and Natural Gas Resource Valuation 3
PNGE $459 \quad$ Petroleum and Natural Gas Design/ 1

Capstone I

## Hours

16

## Spring

PNGE 435

| PNGE 460 | Petroleum and Natural Gas Engineering Design/Capstone II | 2 |
| :---: | :---: | :---: |
| PNGE Elect |  | 3 |
| Creative \& | Inquiry (p. 1378) | 3 |
| Free Electiv |  | 3 |
|  | Hours | 4 |
|  | Total Hours** | 129 |
| * Students are encouraged to take INDS 101 as a Free Elective. <br> 1 Select PNGE Elective from: PNGE 470, EGEO 358, PNGE 445, or PNGE 330. |  |  |
| Major Code: 6180 |  |  |
| Revised: 06.07.2021 |  |  |
| ** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year. |  |  |

## Physics, Bachelor of Arts (BA) Program Learning Outcomes

Upon graduation, students in the Physics Program at SRU will be:

- Proficient in the basic and advanced concepts of classical and modern physics.
- Accomplished problem solvers capable of applying inductive and deductive logic, mathematical modeling, computational tools, and principles of physics to novel situations.
- Skilled at constructing and assembling experimental apparatuses conducting and analyzing measurements of physical phenomena, and drawing valid conclusions from experimental data.
- Effective communicators, capable of presenting scientific results effectively to diverse audiences.
- Prepared for a career in science, industry, and education or to pursue a graduate program in physics or related areas.


## Related Links

Physics, BA Program Page (https://www.sru.edu/academics/majors-andminors/physics/)

Physics and Engineering Department Page (https://www.sru.edu/ academics/colleges-and-departments/ches/departments/physics-andengineering/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.00 or higher
Overall GPA: 2.00 or higher

| Summary* |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| Rock Studies | ments | 45 |
| Modern Langu | equirements | 0-9 |
| Other Basic R | ents | 0-3 |
| Computer Com |  | 0-3 |
| Major Require |  | 39 |
| Natural Scien | Math College-Wide Requirements | 12 |
| Electives |  | 35 |
| * All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. |  |  |
| Rock Studies Requirements |  |  |
| Code | Title | Hours |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 225 | Calculus I | 4 |
| Select one of the following: |  |  |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 16 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p.1378) 3 |  |  |
| Humanities Inquiry |  |  |
| Select 3 Credits (p.1378) |  |  |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  |  |
| Natural Sciences Inquiry |  |  |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| Physical Sciences Inquiry |  |  |
| PHYS 211 | General Physics I with Lab | 4 |
| Subtotal |  | 17 |
| Thematic Thread |  |  |
| Select 12 Credits (p. 1378) ${ }^{2}$ |  | 12 |
| Total Hours |  | 45 |
| 1 Course offered in multiple subjects; cannot take course in first major subject. |  |  |
| 2 From at le departmen | ategories; no more than 6 credits dits must be $300-l e v e l ~ o r ~ a b o v e . ~$ |  |

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete 0-9 credits |  | 0-9 |
| Total Hours |  | 0-9 |
| Basic Math Requirement |  |  |
| Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree. |  |  |
| Code | Title | Hours |
| Complete one | following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal A |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major Requirements

- 20 major credits must be taken at SRU or PASSHE
- 20 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Physics Courses |  |  |
| PHYS 212 | General Physics II with Lab ${ }^{1}$ | 3 |
| PHYS 213 | General Physics III/ Lab ${ }^{1}$ | 4 |
| PHYS 312 | Modern Physics $1^{1}$ | 3 |
| PHYS 314 | Statics ${ }^{1}$ | 3 |
| Select one of the following: |  | 3 |
| PHYS 331 | Mathematical Methods of Physics ${ }^{1}$ |  |
| MATH 331 | Mathematical Methods of Physics ${ }^{1}$ |  |
| Select one of the following: |  | 2 |


| PHYS 381 | Advanced Physics Laboratory ${ }^{1}$ |  |
| :---: | :--- | ---: |
| PHYS 382 | Optics Laboratory ${ }^{1}$ | 19 |
| PHYS 412 | Modern Physics $\mathbf{2}^{1}$ | 19 |
| Subtotal |  |  |
| Required Physics Electives |  |  |
| Select two of the following: | 6 |  |
| PHYS 315 | Dynamics $^{1}$ |  |
| PHYS 375 | Thermal Physics $^{1}$ |  |
| PHYS 385 | Computational Physics $^{1}$ |  |
| PHYS 410 | Electricity and Magnetism $^{1}$ |  |
| PHYS 480 | Quantum $^{1}$ | 6 |
| Subtotal |  |  |

## Related Field Work

| CPSC 146 $^{2}$ | Programming Principles $^{1}$ | 3 |
| :--- | :--- | ---: |
| MATH 230 | Calculus II $^{1,2}$ | 4 |
| MATH 231 | Calculus III $^{1}$ | 4 |
| MATH 240 | Linear Algebra and Differential Equations $^{1}$ | 3 |
| Subtotaal |  | 14 |
| Total Hours |  | $\mathbf{3 9}$ |

1 Course counts for 50\% of Major requirements and Major GPA
2 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Natural Science and Math College-Wide Requirements

Code Title Hours

| Students must take the following four courses: |  |  |
| :--- | :--- | :--- |
| CHEM 107 General Chemistry I  <br>    <br> CHEM 111 General Chemistry I Lab $^{1}$ 3 <br> MATH 225 Calculus I $^{1}$ 1 <br> PHYS 211 General Physics I with Lab $^{1}$ 4 |  |  |

Total Hours 12

1 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.

PHYSICS - BA (6 64)
This program is effective as of Fall 2019.
Revised 07-2019
UCC 2.5.2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall |  |  |
| ENGL 102 | Critical Writing | 3 |
| MATH 225 | Calculus I | 4 |
| PHYS 211 | General Physics I with Lab | 4 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| INDS 101 | FYRST Seminar | 1 |
|  | Hours | $\mathbf{1 5}$ |
| Spring |  |  |
| ENGL 104 | Critical Reading | 3 |


| PHYS 213 | General Physics III/ Lab | 4 |
| :---: | :---: | :---: |
| MATH 230 | Calculus II | 4 |
| RSP |  | 3 |
|  | Hours | 14 |
| Second Year |  |  |
| Fall |  |  |
| Civil Discourse |  | 3 |
| MATH 231 | Calculus III | 4 |
| PHYS 213 | General Physics III/ Lab | 4 |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
| Free Elective |  | 3 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 18 |
| Spring |  |  |
| RSP |  | 3 |
| CHEM 108 <br> \& CHEM 112 | General Chemistry II and General Chemistry II Lab | 4 |
| MATH 240 | Linear Algebra and Differential Equations | 3 |
| CPSC 146 | Programming Principles | 3 |
| Free Elective |  | 3 |
|  | Hours | 16 |
| Third Year |  |  |
| Fall |  |  |
| PHYS 314 | Statics | 3 |
| RSP |  | 3 |
| PHYS 312 | Modern Physics 1 | 3 |
| RSP |  | 3 |
| Free Elective |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| Free Elective |  | 3 |
| Physics Elective |  | 3 |
| Free Elective |  | 3 |
| RSP |  | 3 |
| PHYS 412 | Modern Physics 2 | 1 |
| Free Elective |  | 3 |
|  | Hours | 16 |


|  | chnical Elective |
| :---: | :---: |
|  | Hours |
|  | Total Hours** 12 |
| Course offered in multiple subjects; cannot take course in first major subject. |  |
| Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/ ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UIdNTi4u)to declare a thread. |  |
|  | Students are encouraged to take INDS 101 as a Free Elective. |

Major Code: 664
Revised: 09.2019
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Physics, Bachelor of Arts (BA) - Pre Master of Education (7-12) <br> Program Learning Outcomes

Upon graduation, students in the Physics Program at SRU will be:

- Proficient in the basic and advanced concepts of classical and modern physics.
- Accomplished problem solvers capable of applying inductive and deductive logic, mathematical modeling, computational tools, and principles of physics to novel situations.
- Skilled at constructing and assembling experimental apparatuses, conducting and analyzing measurements of physical phenomena, and drawing valid conclusions from experimental data.
- Effective communicators, capable of presenting scientific results effectively to diverse audiences.
- Prepared for a career in science, industry, and education or to pursue a graduate program in physics or related areas.


## Related Links

Physics - Pre-Masters of Education, BA Program Page (https:// www.sru.edu/academics/majors-and-minors/physics-pre-masters-ofeducation/)

Physics and Engineering Department Page (https://www.sru.edu/ academics/colleges-and-departments/ches/departments/physics-andengineering/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide <br> GPA Requirement

Major GPA: 2.00 or higher

| Overall GPA: 2.00 or higher |  |
| :--- | ---: |
| Summary* $\quad$ Title | Hours |
| Code | 45 |
| Rock Studies Requirements | $0-9$ |
| Modern Language Requirements | $0-3$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | 39 |
| Major Requirements | 15 |
| Concentration Requirements | 12 |
| Natural Science and Math College-Wide Requirements | 35 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

Rock Studies Requirements


1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 Categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete $0-9$ credits | $0-9$ |  |
| Total Hours | $\mathbf{0 - 9}$ |  |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |

Total Hours

## Computer Competency

Code Title Hours

Demonstrate "computer competency" by one of the following: 0-3
Pass Computer Competency Exam OR
Select one of the following at SRU or another post-secondary institution:

| CPSC 100 | Introduction to Computing for Liberal Arts |
| :--- | :--- |
| CPSC 110 | Computer Concepts |
| CPSC 130 | Introduction to Computing and |
|  | Programming |

PE 202 Technology for Wellness
$\begin{array}{ll}\text { Total Hours } & \mathbf{0 - 3}\end{array}$

## Major Requirements

- 20 major credits must be taken at SRU or PASSHE
- 20 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Physics Courses |  |  |
| PHYS 212 | General Physics II with Lab ${ }^{1}$ | 3 |
| PHYS 213 | General Physics III/ Lab ${ }^{1}$ | 4 |
| PHYS 312 | Modern Physics $1{ }^{1}$ | 3 |
| PHYS 314 | Statics ${ }^{1}$ | 3 |
| Select one of the following: |  | 3 |
| PHYS 331 | Mathematical Methods of Physics ${ }^{1}$ |  |
| MATH 331 | Mathematical Methods of Physics ${ }^{1}$ |  |
| Select one of the following: |  | 2 |


| PHYS 381 | Advanced Physics Laboratory ${ }^{1}$ |  |
| ---: | :--- | ---: |
| PHYS 382 | Optics Laboratory ${ }^{1}$ |  |
| PHYS 412 | Modern Physics 2 ${ }^{1}$ | 1 |
| Subtotal |  | 19 |

Required Physics Electives
Select two of the following:
PHYS 315 Dynamics
PHYS 375 Thermal Physics ${ }^{1}$
PHYS 385 Computational Physics ${ }^{1}$
PHYS $410 \quad$ Electricity and Magnetism ${ }^{1}$
PHYS $480 \quad$ Quantum ${ }^{1}$
Subtotal

| CPSC 146 | Programming Principles ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| MATH 230 | Calculus II ${ }^{1,2}$ | 4 |
| MATH 231 | Calculus III ${ }^{1}$ | 4 |
| MATH 240 | Linear Algebra and Differential Equations ${ }^{1}$ | 3 |
| Subtotaal |  | 14 |
| Total Hours |  | 39 |

1 Course counts for $50 \%$ of Major requirements and Major GPA
2 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

| Code | Title | Hours |
| :---: | :---: | :---: |
| CHEM 107 | General Chemistry ${ }^{1}$ | 3 |
| CHEM 111 | General Chemistry I Lab ${ }^{1}$ | 1 |
| MATH 125 or MATH 225 | Precalculus ${ }^{1}$ <br> Calculus I | 4 |
| PHYS 201 or PHYS 211 | Elements of Physics I with Lab ${ }^{1}$ General Physics I with Lab | 4 |

Total Hours

1 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.

## Recommended Courses for Optional Physics Pre Masters in Education Major

| Code | Title | Hours |
| :--- | :--- | ---: |
| SPED 121 | Overview of Special Education | 3 |
| SEFE 338 | Standards-Based Instruction \& Assessment <br> in the Inclusionary Classroom | 3 |
| BIOL 101 | General Biology |  |
| or BIOL 105 | Environmental Biology | 3 |
| EGEO 100 | Environmental Geology |  |
| or EGEO 101 Physical Geology |  |  |
| PHYS 317 | Space Science | 3 |
| Total Hours |  | $\mathbf{1 5}$ |

PHYSICS - BA (6 64)
w/optional Pre Masters in Education (PX)
This program is effective as of Fall 2019.
Revised 07-2019
UCC 2.5.2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information
on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## Physics, Bachelor of Arts (BA) / Dual Degree Pre-Engineering (PSU) Program Learning Outcomes

Upon graduation, students in the Physics Program at SRU will be:

- Proficient in the basic and advanced concepts of classical and modern physics.
- Accomplished problem solvers capable of applying inductive and deductive logic, mathematical modeling, computational tools, and principles of physics to novel situations.
- Skilled at constructing and assembling experimental apparatuses, conducting and analyzing measurements of physical phenomena, and drawing valid conclusions from experimental data.
- Effective communicators, capable of presenting scientific results effectively to diverse audiences.
- Prepared for a career in science, industry, and education or to pursue a graduate program in physics or related areas.


## Related Links

Physics - Pre-Engineering PSU, BA Program Page (https://www.sru.edu/ academics/majors-and-minors/pre-engineering-with-psu/)

Physics and Engineering Department Page (https://www.sru.edu/ academics/colleges-and-departments/ches/departments/physics-andengineering/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.00 or higher
Overall GPA: 3.50 or higher

## Summary*

| Code Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 41 |
| Modern Language Requirements | Waived |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 58 |
| Natural Science and Math College-Wide Requirements | 12 |
| Flectives | 20 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 225 | Calculus I | 4 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :---: | :--- | :---: |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy | 16 |
| Subtotal |  |  |

Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378)

| Humanities Inquiry | 3 |
| :--- | :--- |
| Select 3 Credits (p. 1378) |  |


| Social Science Inquiry | 3 |
| :--- | :--- |
| Select 3 Credits (p. 1378) |  |

Natural Sciences Inquiry

| CHEM 107 | General Chemistry I | 3 |
| :--- | :--- | :--- |
| CHEM 111 | General Chemistry I Lab | 1 |

Physical Sciences Inquiry

| PHYS 211 | General Physics I with Lab | 4 |
| :--- | ---: | ---: |
| Subtotal | 17 |  |

Additional Rock Studies Requirements

| MATH 230 | Calculus II | 4 |
| :--- | :--- | :--- |
| PHYS 213 | General Physics III/ Lab | 4 |

Subtotal 8

Total Hours
1 Course offered in multiple subjects; cannot take course in first major subject.

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

## Code <br> Title <br> Hours

This Requirement is Waived.
Total Hours

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra | $\mathbf{0 - 3}$ |
| Total Hours |  |  |

## Computer Competency

| Code | Title | Hours |
| :--- | :--- | ---: |
| Demonstrate "computer competency" by one of the following: | $0-3$ |  |
| Pass Computer Competency Exam OR |  |  |$\quad$| Select one of the following at SRU or another post-secondary |  |
| :--- | :--- |
| institution: |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |
| CPSC 110 | Computer Concepts |
| CPSC 130 | Introduction to Computing and <br> Programming |
| PE 202 | Technology for Wellness |

## Total Hours

## Major Requirements

| Code | Title | Hours |
| :--- | :--- | :---: |
| Required Physics Courses |  |  |
| PHYS 140 | Engineering Graphics I ${ }^{1}$ | 2 |
| PHYS 141 $^{\text {PH }}$ | Engineering Graphics II |  |

## Major and Related Electives

Select nine credits of the following: ${ }^{2}$
PHYS $315 \quad$ Dynamics ${ }^{1}$
PHYS 371 Physical Optics ${ }^{1}$
PHYS 375 Thermal Physics ${ }^{1}$
PHYS 381 Advanced Physics Laboratory ${ }^{1}$
PHYS 382 Optics Laboratory ${ }^{1}$
PHYS 385 Computational Physics ${ }^{1}$
PHYS $410 \quad$ Electricity and Magnetism ${ }^{1}$
PHYS $480 \quad$ Quantum ${ }^{1}$
CHEM 201 Organic Chemistry I ${ }^{1}$
CHEM 202 Organic Chemistry II ${ }^{1}$
CHEM 211 Organic Chemistry Laboratory I ${ }^{1}$
CHEM 212 Organic Chemistry Laboratory II ${ }^{1}$
CHEM $301 \quad$ Physical Chemistry $1^{1}$
or PHYS 301 Physical Chemistry I
EGEO 101 Physical Geology ${ }^{1}$
EGEO 202 Earth History/Lab ${ }^{1}$
EGEO 111 Physical Geology Lab ${ }^{1}$
EGEO 201 Earth Materials and Processes/Lab ${ }^{1}$
EGEO 327 Structural Geology ${ }^{1}$
EGEO 360 Introduction to Hydrology/Lab ${ }^{1}$
CPSC 236 Selected Computer Languages ${ }^{1}$
CPSC 246 Advanced Programming Principles ${ }^{1}$
CPSC 370 Computer Organization and Architecture
MATH 315 Numerical Mathematics ${ }^{1}$
STAT 352 Mathematical Statistics I $^{1}$

| Subtotal |  | 9 |
| :---: | :---: | :---: |
| Required Related Courses |  |  |
| CHEM 107 | General Chemistry I ${ }^{1,3}$ | 3 |
| CHEM 108 | General Chemistry II 1,3 | 3 |
| CHEM 111 | General Chemistry I Lab ${ }^{1,3}$ | 1 |
| CHEM 112 | General Chemistry II Lab ${ }^{1,3}$ | 1 |
| CPSC 140 | Introduction to Programming Principles 1,3 | 3 |
| MATH 225 | Calculus I ${ }^{1}$ | 4 |
| MATH 230 | Calculus II ${ }^{1}$ | 4 |
| MATH 231 | Calculus III ${ }^{1}$ | 4 |
| MATH 240 | Linear Algebra and Differential Equations ${ }^{1}$ | 3 |
| MATH 301 | Differential Equations ${ }^{1}$ | 3 |
| Subtotal |  | 29 |
| Total Hours |  | 58 |

1 Course counts for $50 \%$ of Major requirements and Major GPA
2 Elective courses need to be selected based upon area of Engineering chosen. Please contact your Adviser for specific courses.
3
Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

Natural Science and Math College-Wide Requirements
Code Title Hours

Students must take the following four courses:

| CHEM 107 $^{\text {CHEM 111 }}$ | General Chemistry I $^{1}$ | 3 |
| :--- | :--- | :--- |
| MATH 125 | General Chemistry I Lab $^{1}$ | 1 |
| or MATH 225 | Precalculus 1 | 4 |
| PHYS 201 | Calculus I | 4 |
| or PHYS 211 | Elements of Physics I with Lab | General Physics I with Lab |

Total Hours
1 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
PHYSICS PRE ENGINEERING - BA (6 64)
with Penn State University (665)
This program is effective as of Fall 2019.
Revised 07.29.2021
UCC 2.5.2019

## Physics, Bachelor of Arts (BA) / PreEngineering (Pitt) (3+2) <br> Program Learning Outcomes

Upon graduation, students in the Physics Program at SRU will be:

- Proficient in the basic and advanced concepts of classical and modern physics.
- Accomplished problem solvers capable of applying inductive and deductive logic, mathematical modeling, computational tools, and principles of physics to novel situations.
- Skilled at constructing and assembling experimental apparatuses, conducting and analyzing measurements of physical phenomena, and drawing valid conclusions from experimental data.
- Effective communicators, capable of presenting scientific results effectively to diverse audiences.
- Prepared for a career in science, industry, and education or to pursue a graduate program in physics or related areas.


## Related Links

Physics - Pre-Engineering PITT, BA Program Page (https://www.sru.edu/ academics/majors-and-minors/pre-engineering-with-pitt/)

Physics and Engineering Department Page (https://www.sru.edu/ academics/colleges-and-departments/ches/departments/physics-andengineering/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.00 or higher
Overall GPA: 3.00 or higher

## Summary*

Code Title Hours

Rock Studies Requirements 41
Modern Language Requirements Waived
Other Basic Requirements 0-3

Computer Competency 0-3
Major Requirements 58

Natural Science and Math College-Wide Requirements 12
Electives

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the $1^{\text {st }}$ year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.


## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |


| ENGL 104 | Critical Reading | 3 |
| :--- | :--- | :--- |
| MATH 225 | Calculus I | 4 |
| Select one of the following: | 3 |  |

Select one of the following: 3

| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |

Subtotal ..... 16
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378) ..... 3 ..... 3
Select 3 Credits (p. 1378) ..... 3
Social Science Inquiry
Select 3 Credits (p. 1378) ..... 3
Natural Sciences Inquiry

CHEM 107 General Chemistry I 3
CHEM 111 General Chemistry I Lab 1

| Physical Sciences Inquiry |  |
| :--- | :--- |
| PHYS $211 \quad$ General Physics I with Lab | 4 |

Subtotal ..... 17

| Additional Rock Studies Requirements |  |  |
| :--- | :--- | ---: |
| MATH 230 | Calculus II | 4 |
| PHYS 213 | General Physics III/ Lab | 4 |
| Subtotal |  | 8 |
| Total Hours |  | $\mathbf{4 1}$ |

1 Course offered in multiple subjects; cannot take course in first major subject.

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

| Code $\quad$ Title | Hours |
| :--- | :--- | :--- |
| This Requirement is Waived. |  |

## Total Hours

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code Title | Hours |
| :---: | :---: |
| Complete one of the following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |
| ESAP 110 Beginning Algebra |  |
| Total Hours | 0-3 |
| Computer Competency |  |
| Code Title | Hours |
| Demonstrate "computer competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |
| Select one of the following at SRU or another post-secondary institution: |  |
| CPSC 100 Introduction to Computing for Liberal Arts |  |


| CPSC 110 | Computer Concepts |
| :--- | :--- |
| CPSC 130 | Introduction to Computing and <br> Programming |
| PE 202 | Technology for Wellness |

Total Hours

## Major Requirements

Code Title Hours

## Required Physics Courses

PHYS $140 \quad$ Engineering Graphics I ${ }^{1} \quad 2$
PHYS $141 \quad$ Engineering Graphics II ${ }^{1} \quad 1$

PHYS 211 General Physics I with Lab ${ }^{1} \quad 4$
PHYS 212 General Physics II with Lab ${ }^{1} 3$
PHYS 213 General Physics III/ Lab ${ }^{1}$ 4
PHYS 314 Statics ${ }^{1} 3$
PHYS 331 Mathematical Methods of Physics ${ }^{1} 3$
or MATH 331 Mathematical Methods of Physics
Subtotal 20
Major and Related Electives
Select nine credits of the following: ${ }^{2} 9$

| PHYS 315 | Dynamics ${ }^{1}$ |
| :---: | :---: |
| PHYS 371 | Physical Optics ${ }^{1}$ |
| PHYS 375 | Thermal Physics ${ }^{1}$ |
| PHYS 381 | Advanced Physics Laboratory ${ }^{1}$ |
| PHYS 382 | Optics Laboratory ${ }^{1}$ |
| PHYS 385 | Computational Physics ${ }^{1}$ |
| PHYS 410 | Electricity and Magnetism ${ }^{1}$ |
| PHYS 480 | Quantum ${ }^{1}$ |
| CHEM 201 | Organic Chemistry I ${ }^{1}$ |
| CHEM 202 | Organic Chemistry II ${ }^{1}$ |
| CHEM 211 | Organic Chemistry Laboratory $\mathrm{I}^{1}$ |
| CHEM 212 | Organic Chemistry Laboratory II ${ }^{1}$ |
| CHEM 301 | Physical Chemistry $1^{1}$ |
| or PHYS 301 | Physical Chemistry I |
| EGEO 101 | Physical Geology ${ }^{1}$ |
| EGEO 202 | Earth History/Lab ${ }^{1}$ |
| EGEO 111 | Physical Geology Lab ${ }^{1}$ |
| EGEO 201 | Earth Materials and Processes/Lab ${ }^{1}$ |
| EGEO 327 | Structural Geology ${ }^{1}$ |
| EGEO 360 | Introduction to Hydrology/Lab ${ }^{1}$ |
| CPSC 236 | Selected Computer Languages ${ }^{1}$ |
| CPSC 246 | Advanced Programming Principles ${ }^{1}$ |
| CPSC 370 | Computer Organization and Architecture ${ }^{1}$ |
| MATH 315 | Numerical Mathematics ${ }^{1}$ |
| STAT 352 | Mathematical Statistics I ${ }^{1}$ |
| Subtotal |  |

## Required Related Courses

| CHEM 107 | General Chemistry I I,3 | 3 |
| :--- | :--- | :--- |
| CHEM 108 | General Chemistry II ${ }^{1,3}$ | 3 |
| CHEM 111 | General Chemistry I Lab $^{1,3}$ | 1 |
| CHEM 112 | General Chemistry II Lab $^{1,3}$ | 1 |
| CPSC 140 | Introduction to Programming Principles $^{1,3}$ | 3 |


| MATH 225 | Calculus I $^{1}$ | 4 |
| :--- | :--- | ---: |
| MATH 230 | Calculus II $^{1}$ | 4 |
| MATH 231 | Calculus III $^{1}$ | 4 |
| MATH 240 | Linear Algebra and Differential Equations $^{1}$ | 3 |
| MATH 301 | Differential Equations I $^{1}$ | 3 |
| Subtotal |  | 29 |
| Total Hours |  | 58 |

1 Course counts for $50 \%$ of Major requirements and Major GPA
2 Elective courses need to be selected based upon area of Engineering chosen. Please contact your Adviser for specific courses.
3 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Students must take the following four courses: |  |  |
| CHEM 107 | General Chemistry I ${ }^{1}$ | 3 |
| CHEM 111 | General Chemistry I Lab ${ }^{1}$ | 1 |
| MATH 125 | Precalculus ${ }^{1}$ | 4 |
| or MATH 225 | Calculus I |  |
| PHYS 201 | Elements of Physics I with Lab | 4 |
| or PHYS 211 | General Physics I with Lab |  |

Total Hours
1 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
PHYSICS PRE ENGINEERING - BA (6 64)
with University of Pittsburgh (6 62)
This program is effective as of Fall 2019.
Revised 10.16.2020
UCC 2.5.2019
Physics, Bachelor of Arts (BA) / PreEngineering (WVU) (3+2)
Program Learning Outcomes
Upon graduation, students in the Physics Program at SRU will be:

- Proficient in the basic and advanced concepts of classical and modern physics.
- Accomplished problem solvers capable of applying inductive and deductive logic, mathematical modeling, computational tools, and principles of physics to novel situations.
- Skilled at constructing and assembling experimental apparatuses, conducting and analyzing measurements of physical phenomena, and drawing valid conclusions from experimental data.
- Effective communicators, capable of presenting scientific results effectively to diverse audiences.
- Prepared for a career in science, industry, and education or to pursue a graduate program in physics or related areas.


## Related Links

Physics - Pre-Engineering WVU, BA Program Page (https://www.sru.edu/ academics/majors-and-minors/pre-engineering-with-wvu/)

Physics and Engineering Department Page (https://www.sru.edu/ academics/colleges-and-departments/ches/departments/physics-andengineering/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.00 or higher
Overall GPA: 2.75 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 41 |
| Modern Language Requirements | Waived |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 58 |
| Natural Science and Math College-Wide Requirements | 12 |
| Electives | 20 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 225 | Calculus I | 4 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :--- | :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy | 16 |
| Subtotal |  |  |
| Integrated Inquiry |  |  |

Creative and Aesthetic Inquiry

| Humanities Inquiry |  |
| :---: | :---: |
| Select 3 Credits (p. 1378) | 3 |
| Social Science Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Natural Sciences Inquiry |  |
| CHEM 107 General Chemistry I | 3 |
| CHEM 111 General Chemistry I Lab | 1 |
| Physical Sciences Inquiry |  |
| PHYS 211 General Physics I with Lab | 4 |
| Subtotal | 17 |


| Additional Rock Studies Requirements |  |  |
| :--- | :--- | ---: |
| MATH 230 | Calculus II | 4 |
| PHYS 213 | General Physics III/ Lab | 4 |
| Subtotal |  | 8 |
| Total Hours | $\mathbf{4 1}$ |  |

1 Course offered in multiple subjects; cannot take course in first major subject.

## BA Modern Language Requirements

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

| Code | Title | Hours |
| :--- | :---: | :--- |
| This Requirement is Waived. |  |  |

Total Hours

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate " | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |

## Major Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Physics Courses |  |  |
| PHYS 140 | Engineering Graphics ${ }^{1}$ | 2 |
| PHYS 141 | Engineering Graphics II ${ }^{1}$ | 1 |
| PHYS 211 | General Physics I with Lab ${ }^{1}$ | 4 |
| PHYS 212 | General Physics II with Lab ${ }^{1}$ | 3 |
| PHYS 213 | General Physics III/ Lab ${ }^{1}$ | 4 |
| PHYS 314 | Statics ${ }^{1}$ | 3 |
| PHYS 331 | Mathematical Methods of Physics ${ }^{1}$ | 3 |
| or MATH 331 | Mathematical Methods of Physics |  |
| Subtotal |  | 20 |
| Major and Related Electives |  |  |
| Select nine credits | the following: ${ }^{2}$ | 9 |
| PHYS 315 | Dynamics ${ }^{1}$ |  |
| PHYS 371 | Physical Optics ${ }^{1}$ |  |
| PHYS 375 | Thermal Physics ${ }^{1}$ |  |
| PHYS 381 | Advanced Physics Laboratory ${ }^{1}$ |  |
| PHYS 382 | Optics Laboratory ${ }^{1}$ |  |
| PHYS 385 | Computational Physics ${ }^{1}$ |  |
| PHYS 410 | Electricity and Magnetism ${ }^{1}$ |  |
| PHYS 480 | Quantum ${ }^{1}$ |  |
| CHEM 201 | Organic Chemistry I ${ }^{1}$ |  |
| CHEM 202 | Organic Chemistry II ${ }^{1}$ |  |
| CHEM 211 | Organic Chemistry Laboratory I ${ }^{1}$ |  |
| CHEM 212 | Organic Chemistry Laboratory II ${ }^{1}$ |  |
| CHEM 301 | Physical Chemistry $1^{1}$ |  |
| or PHYS 301 | Physical Chemistry I |  |
| EGEO 101 | Physical Geology ${ }^{1}$ |  |
| EGEO 202 | Earth History/Lab ${ }^{1}$ |  |
| EGEO 111 | Physical Geology Lab ${ }^{1}$ |  |
| EGEO 201 | Earth Materials and Processes/Lab ${ }^{1}$ |  |
| EGEO 327 | Structural Geology ${ }^{1}$ |  |
| EGEO 360 | Introduction to Hydrology/Lab ${ }^{1}$ |  |
| CPSC 236 | Selected Computer Languages ${ }^{1}$ |  |
| CPSC 246 | Advanced Programming Principles ${ }^{1}$ |  |
| CPSC 370 | Computer Organization and Architecture ${ }^{1}$ |  |
| MATH 315 | Numerical Mathematics ${ }^{1}$ |  |
| STAT 352 | Mathematical Statistics ${ }^{1}$ |  |
| Subtotal |  | 9 |
| Required Related Courses |  |  |
| CHEM 107 | General Chemistry I 1,3 | 3 |
| CHEM 108 | General Chemistry II ${ }^{1,3}$ | 3 |
| CHEM 111 | General Chemistry I Lab ${ }^{1,3}$ | 1 |
| CHEM 112 | General Chemistry II Lab ${ }^{1,3}$ | 1 |
| CPSC 140 | Introduction to Programming Principles ${ }^{1,3}$ | 3 |
| MATH 225 | Calculus ${ }^{1}$ | 4 |
| MATH 230 | Calculus II ${ }^{1}$ | 4 |
| MATH 231 | Calculus III ${ }^{1}$ | 4 |
| MATH 240 | Linear Algebra and Differential Equations ${ }^{1}$ | 3 |
| MATH 301 | Differential Equations I ${ }^{1}$ | 3 |


| Subtotal | 29 |  |
| :--- | :--- | :--- |
| Total Hours | 58 |  |
| 1 | Course counts for $50 \%$ of Major requirements and Major GPA |  |
| 2 | Elective courses need to be selected based upon area of Engineering <br> chosen. Please contact your Adviser for specific courses |  |
| 3 | Course can be counted as a Rock Studies Requirement, but earns |  |
| *credit only once toward your 120-credits total. |  |  |
| Some courses may require pre-requisites. Please see course <br> descriptions to determine if there are any pre-requisites for that |  |  |
| specific course. |  |  |

Natural Science and Math College-Wide Requirements Code Title Hours
Students must take the following four courses:

| CHEM 107 | General Chemistry I $^{1}$ | 3 |
| :--- | :--- | :--- |
| CHEM 111 | General Chemistry I Lab |  |
| Select one of the following: | 1 |  |

Select one of the following:

| MATH 125 | Precalculus $^{1}$ |  |
| :---: | :--- | :---: |
| MATH 225 | Calculus I $^{1}$ | 4 |
| PHYS 201 | Elements of Physics I with Lab |  |
| or PHYS 211 | General Physics I with Lab |  |

Total Hours
1 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
PHYSICS PRE ENGINEERING - BA (6 64)
with West Virginia University (663)
This program is effective as of Fall 2019.
Revised 07.29.2021
UCC 2.5.2019

## Physics, Bachelor of Arts (BA) / PreEngineering (YSU) (3+2) <br> Program Learning Outcomes

Upon graduation, students in the Physics Program at SRU will be:

- Proficient in the basic and advanced concepts of classical and modern physics.
- Accomplished problem solvers capable of applying inductive and deductive logic, mathematical modeling, computational tools, and principles of physics to novel situations.
- Skilled at constructing and assembling experimental apparatuses, conducting and analyzing measurements of physical phenomena, and drawing valid conclusions from experimental data.
- Effective communicators, capable of presenting scientific results effectively to diverse audiences.
- Prepared for a career in science, industry, and education or to pursue a graduate program in physics or related areas.


## Related Links

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Physics and Engineering Department Page (https://www.sru.edu/ academics/colleges-and-departments/ches/departments/physics-andengineering/)

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## Curriculum Guide

## GPA Requirement <br> Major GPA: 2.00 or higher <br> Overall GPA: 2.75 or higher

## Summary*

| Code Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 41 |
| Modern Language Requirements | Waived |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 58 |
| Natural Science and Math College-Wide Requirements | 12 |
| Electives | 20 |
|  |  |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 225 | Calculus I | 4 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 16 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |


| Select 3 Credits (p. 1378) |  |  |
| :---: | :---: | :---: |
| Natural Sciences Inquiry |  |  |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab |  |
| Physical Sciences Inquiry |  |  |
| PHYS 211 | General Physics I with Lab |  |
| Subtotal |  |  |
| Additional Rock Studies Requirements |  |  |
| MATH 230 | Calculus II |  |
| PHYS 213 | General Physics III/ Lab |  |
| Subtotal |  | 8 |

1 Course offered in multiple subjects; cannot take course in first major subject.

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

| Code $\quad$ Title | Hours |
| :--- | :---: | :---: |
| This Requirement is Waived. |  |

Total Hours
0

## Basic Math Requirement

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| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one | following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
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| Select one of the following at SRU or another post-secondary institution: |  |  |
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| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |


| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Physics Courses |  |  |
| PHYS 140 | Engineering Graphics $I^{1}$ | 2 |
| PHYS 141 | Engineering Graphics II ${ }^{1}$ | 1 |
| PHYS 211 | General Physics I with Lab ${ }^{1}$ | 4 |
| PHYS 212 | General Physics II with Lab ${ }^{1}$ | 3 |


| PHYS 213 | General Physics III/ Lab $^{1}$ | 4 |
| :--- | :--- | ---: |
| PHYS 314 | Statics $^{1}$ | 3 |
| PHYS 331 | Mathematical Methods of Physics $^{1}$ | 3 |
| or MATH 331 | Mathematical Methods of Physics |  |
| Subtotal |  | 20 |

## Major and Related Electives

Select nine credits of the following: ${ }^{2} 9$

| PHYS 315 | Dynamics ${ }^{1}$ |
| :---: | :---: |
| PHYS 371 | Physical Optics ${ }^{1}$ |
| PHYS 375 | Thermal Physics ${ }^{1}$ |
| PHYS 381 | Advanced Physics Laboratory ${ }^{1}$ |
| PHYS 382 | Optics Laboratory ${ }^{1}$ |
| PHYS 385 | Computational Physics ${ }^{1}$ |
| PHYS 410 | Electricity and Magnetism ${ }^{1}$ |
| PHYS 480 | Quantum ${ }^{1}$ |
| CHEM 201 | Organic Chemistry $I^{1}$ |
| CHEM 202 | Organic Chemistry II ${ }^{1}$ |
| CHEM 211 | Organic Chemistry Laboratory $I^{1}$ |
| CHEM 212 | Organic Chemistry Laboratory II ${ }^{1}$ |
| CHEM 301 | Physical Chemistry $1{ }^{1}$ |
| or PHYS 301 | Physical Chemistry I |
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| EGEO 202 | Earth History/Lab ${ }^{1}$ |
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| EGEO 201 | Earth Materials and Processes/Lab ${ }^{1}$ |
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| MATH 315 | Numerical Mathematics ${ }^{1}$ |
| STAT 352 | Mathematical Statistics ${ }^{1}$ |
| Subtotal |  |Required Related Courses


| CHEM 107 | General Chemistry I ${ }^{1,3}$ | 3 |
| :---: | :---: | :---: |
| CHEM 108 | General Chemistry II ${ }^{1,3}$ | 3 |
| CHEM 111 | General Chemistry I Lab ${ }^{1,3}$ | 1 |
| CHEM 112 | General Chemistry II Lab ${ }^{1,3}$ | 1 |
| CPSC 140 | Introduction to Programming Principles ${ }^{\text {1,3 }}$ | 3 |
| MATH 225 | Calculus ${ }^{1}$ | 4 |
| MATH 230 | Calculus II ${ }^{1}$ | 4 |
| MATH 231 | Calculus III ${ }^{1}$ | 4 |
| MATH 240 | Linear Algebra and Differential Equations ${ }^{1}$ | 3 |
| MATH 301 | Differential Equations ${ }^{1}$ | 3 |
| Subtotal |  | 29 |
| Total Hours |  | 58 |

1 Course counts for 50\% of Major requirements and Major GPA
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| Select one of the following: |  | 4 |
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| MATH 225 | Calculus ${ }^{1}$ |  |
| PHYS 201 | Elements of Physics I with Lab | 4 |
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- Skilled at constructing and assembling experimental apparatuses, conducting and analyzing measurements of physical phenomena, and drawing valid conclusions from experimental data.
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Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.00 or higher
Overall GPA: 2.00 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 41 |
| Modern Language Requirements | Waived |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 58 |
| Natural Science and Math College-Wide Requirements | 12 |
| Electives | 20 |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 225 | Calculus I | 4 |
| Select one of the following: | 3 |  |

Select one of the following: 3

| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |

Subtotal
Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378) 3

## Humanities Inquiry

Select 3 Credits (p. 1378) 3

## Social Science Inquiry

Select 3 Credits (p. 1378) 3

Natural Sciences Inquiry
CHEM 107 General Chemistry I 3

CHEM 111 General Chemistry I Lab 1
Physical Sciences Inquiry
PHYS 211 General Physics I with Lab 4

| Additional Rock Studies Requirements |  |  |
| :--- | :--- | ---: |
| MATH 230 | Calculus II | 4 |
| PHYS 213 | General Physics III/ Lab | 4 |
| Subtotal |  | 8 |
| Total Hours |  | $\mathbf{4 1}$ |

1 Course offered in multiple subjects; cannot take course in first major subject.

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

| Code Title | Hours |
| :--- | :--- |
| This Requirement is Waived. |  |
| Tol |  |

## Total Hours

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate "co | uter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |
| Major Requirements |  |  |
| Code | Title | Hours |
| Required Physics Courses |  |  |
| PHYS 140 | Engineering Graphics I ${ }^{1}$ | 2 |
| PHYS 141 | Engineering Graphics II ${ }^{1}$ | 1 |
| PHYS 211 | General Physics I with Lab ${ }^{1}$ | 4 |
| PHYS 212 | General Physics II with Lab ${ }^{1}$ | 3 |
| PHYS 213 | General Physics III/ Lab ${ }^{1}$ | 4 |
| PHYS 314 | Statics ${ }^{1}$ | 3 |
| PHYS 331 | Mathematical Methods of Physics ${ }^{1}$ | 3 |
| or MATH 331 | Mathematical Methods of Physics |  |
| Subtotal |  | 20 |

## Major and Related Electives

Select nine credits of the following: ${ }^{2}$

| PHYS 315 | Dynamics ${ }^{1}$ |
| :---: | :---: |
| PHYS 371 | Physical Optics ${ }^{1}$ |
| PHYS 375 | Thermal Physics ${ }^{1}$ |
| PHYS 381 | Advanced Physics Laboratory ${ }^{1}$ |
| PHYS 382 | Optics Laboratory ${ }^{1}$ |
| PHYS 385 | Computational Physics ${ }^{1}$ |
| PHYS 410 | Electricity and Magnetism ${ }^{1}$ |
| PHYS 480 | Quantum ${ }^{1}$ |
| CHEM 201 | Organic Chemistry $I^{1}$ |
| CHEM 202 | Organic Chemistry II ${ }^{1}$ |
| CHEM 211 | Organic Chemistry Laboratory $\mathrm{I}^{1}$ |
| CHEM 212 | Organic Chemistry Laboratory II ${ }^{1}$ |
| CHEM 301 | Physical Chemistry $1{ }^{1}$ |
| or PHYS 301 | Physical Chemistry I |
| EGEO 101 | Physical Geology ${ }^{1}$ |
| EGEO 202 | Earth History/Lab ${ }^{1}$ |
| EGEO 111 | Physical Geology Lab ${ }^{1}$ |
| EGEO 201 | Earth Materials and Processes/Lab ${ }^{1}$ |
| EGEO 327 | Structural Geology ${ }^{1}$ |
| EGEO 360 | Introduction to Hydrology/Lab ${ }^{1}$ |
| CPSC 236 | Selected Computer Languages ${ }^{1}$ |
| CPSC 246 | Advanced Programming Principles ${ }^{1}$ |
| CPSC 370 | Computer Organization and Architecture ${ }^{1}$ |
| MATH 315 | Numerical Mathematics ${ }^{1}$ |
| STAT 352 | Mathematical Statistics ${ }^{1}$ |
| Subtotal |  |

Required Related Courses

| CHEM 107 | General Chemistry I ${ }^{1,3}$ | 3 |
| :---: | :---: | :---: |
| CHEM 108 | General Chemistry II ${ }^{1,3}$ | 3 |
| CHEM 111 | General Chemistry I Lab ${ }^{1,3}$ | 1 |
| CHEM 112 | General Chemistry II Lab ${ }^{1,3}$ | 1 |
| CPSC 140 | Introduction to Programming Principles ${ }^{1,3}$ | 3 |
| MATH 225 | Calculus I ${ }^{1}$ | 4 |
| MATH 230 | Calculus II ${ }^{1}$ | 4 |
| MATH 231 | Calculus III ${ }^{1}$ | 4 |
| MATH 240 | Linear Algebra and Differential Equations ${ }^{1}$ | 3 |
| MATH 301 | Differential Equations I ${ }^{1}$ | 3 |
| Subtotal |  | 29 |
| Total Hours |  | 58 |

1 Course counts for $50 \%$ of Major requirements and Major GPA
2 Elective courses need to be selected based upon area of Engineering chosen. Please contact your Adviser for specific courses
3 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Natural Science and Math College-Wide Requirements

Code Title Hours

Students must take the following four courses:
CHEM 107 General Chemistry I ${ }^{1}$
3

| CHEM 111 | General Chemistry I Lab ${ }^{1}$ | 1 |
| :---: | :---: | :---: |
| MATH 125 | Precalculus ${ }^{1}$ | 4 |
| or MATH 225 | Calculus I |  |
| PHYS 201 | Elements of Physics I with Lab | 4 |
| or PHYS 211 | General Physics I with Lab |  |
| Total Hours |  | 12 |

1 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
PHYSICS PRE ENGINEERING TECH - BA (6 64)
with Youngstown State University (6 68)
This program is effective as of Fall 2019.
Revised 07.29.2021
UCC 2.5.2019

## Physics, Bachelor of Science (BS) Program Learning Outcomes

Upon graduation, students in the Physics Program at SRU will be:

- Proficient in the basic and advanced concepts of classical and modern physics.
- Accomplished problem solvers capable of applying inductive and deductive logic, mathematical modeling, computational tools, and principles of physics to novel situations.
- Skilled at constructing and assembling experimental apparatuses, conducting and analyzing measurements of physical phenomena, and drawing valid conclusions from experimental data.
- Effective communicators, capable of presenting scientific results effectively to diverse audiences.
- Prepared for a career in science, industry, and education or to pursue a graduate program in physics or related areas.


## Related Links

Physics, BS Program Page (https://www.sru.edu/academics/majors-andminors/physics/)

Physics and Engineering Department Page (https://www.sru.edu/ academics/colleges-and-departments/ches/departments/physics-andengineering/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide <br> GPA Requirement

Major GPA: 2.00 or higher Overall GPA: 2.00 or higher

## Summary*

Code Title Hours

Rock Studies Requirements 45
Other Basic Requirements 0-3
Computer Competency 0-3

Major Requirements 57
Natural Science and Math College-Wide Requirements 12
Electives 17

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 225 | Calculus 1 | 4 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :---: | :---: | :---: |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 16 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Sciences Inquiry |  |  |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |

Physical Sciences Inquiry

| PHYS 211 | General Physics I with Lab | 4 |
| :--- | ---: | ---: |
| Subtotal | 17 |  |

Thematic Thread

| Select 12 Credits $(\mathrm{p} .1378)^{2}$ | 12 |
| :--- | :--- |
| Total Hours | 45 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 Categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code $\quad$ Title | Hours |  |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |

## Total Hours

## Computer Competency

| Code | Title | Hours |
| :--- | :--- | ---: |
| Demonstrate "computer competency" by one of the following: | $0-3$ |  |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary |  |  |
| institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts <br> CPSC 130 | Introduction to Computing and <br> Programming |
| PE 202 | Technology for Wellness | $\mathbf{0 - 3}$ |
| Total Hours |  |  |

## Major Requirements

- 29 major credits must be taken at SRU or PASSHE
- 29 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Physics Courses |  |  |
| PHYS 212 | General Physics II with Lab ${ }^{1}$ | 3 |
| PHYS 213 | General Physics III/ Lab ${ }^{1}$ | 4 |
| PHYS 312 | Modern Physics $1{ }^{1}$ | 3 |
| PHYS 314 | Statics ${ }^{1}$ | 3 |
| PHYS 331 | Mathematical Methods of Physics ${ }^{1}$ | 3 |
| or MATH 331 | Mathematical Methods of Physics |  |
| PHYS 371 | Physical Optics ${ }^{1}$ | 3 |
| PHYS 410 | Electricity and Magnetism ${ }^{1}$ | 3 |
| PHYS 412 | Modern Physics $2^{1}$ | 1 |
| PHYS 480 | Quantum ${ }^{1}$ | 3 |
| Subtotal |  | 26 |

## Advanced Lab and Optics Lab

| PHYS 381 | Advanced Physics Laboratory ${ }^{1}$ | 2 |
| :--- | :--- | :--- |
| PHYS 382 | Optics Laboratory ${ }^{1}$ | 2 |
| Subtotal |  | 4 |

## Required Physics Electives

Select two of the following: 6

| PHYS 315 | Dynamics $^{1}$ |  |
| :--- | :--- | :---: |
| PHYS 375 | Thermal Physics $^{1}$ | 6 |
| PHYS 385 | Computational Physics $^{1}$ | 6 |
| Subtotal |  | 3 |
| Related Field Work |  | 1 |
| CHEM 108 | General Chemistry II $^{1,2}$ |  |
| CHEM 112 | General Chemistry II Lab $^{1,2}$ |  |


| MATH 230 | Calculus II $^{1,2}$ | 4 |
| :--- | :--- | ---: |
| MATH 231 $^{1}$ | Calculus III $^{1}$ | 4 |
| MATH 240 $^{\text {MATH 301 }}$ | Linear Algebra and Differential Equations $^{1}$ | 3 |
| CPSC 146 $_{\text {Subtotal }}$ Differential Equations I $^{1}$ | 3 |  |
| Total Hours | Programming Principles $^{1,2}$ | 3 |

1 Course counts for 50\% of Major requirements and Major GPA
2 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Natural Science and Math College-Wide Requirements

Code Title Hours

| Students must take the following four courses: |  |  |
| :--- | :--- | :--- |
| CHEM 107 General Chemistry I |  |  |
| CHEM 111 | General Chemistry I Lab $^{1}$ | 3 |
| MATH 225 | Calculus I $^{1}$ | 1 |
| PHYS 211 | General Physics I with Lab $^{1}$ | 4 |


| Total Hours | 12 |
| :--- | :--- |

1 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.

## PHYSICS - BS (6164)

This program is effective as of Fall 2019.
Revised 7-2019
UCC 2.5.2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall |  |  |
| ENGL 102 | Critical Writing | 3 |
| MATH 225 | Calculus I | 4 |
| PHYS 211 | General Physics I with Lab | 4 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| INDS 101 | FYRST Seminar | 1 |
|  | Hours | $\mathbf{1 5}$ |
| Spring |  |  |
| ENGL 104 | Critical Reading | 3 |


| PHYS 213 | General Physics III/ Lab | 4 |
| :---: | :---: | :---: |
| MATH 230 | Calculus II | 4 |
| RSP |  | 3 |
|  | Hours | 14 |
| Second Year |  |  |
| Fall |  |  |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| RSP |  | 3 |
| MATH 231 | Calculus III | 4 |
| PHYS 212 | General Physics II with Lab | 3 |
| CHEM 107 | General Chemistry I | 4 |
| \& CHEM 111 | and General Chemistry I Lab |  |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 17 |
| Spring |  |  |
| RSP |  | 3 |
| CHEM 108 <br> \& CHEM 112 | General Chemistry II and General Chemistry II Lab | 4 |
| MATH 301 | Differential Equations I | 3 |
| CPSC 146 | Programming Principles | 3 |
| Free Elective |  | 3 |
|  | Hours | 16 |
| Third Year |  |  |
| Fall |  |  |
| PHYS 314 | Statics | 3 |
| PHYS 331 | Mathematical Methods of Physics | 3 |
| PHYS 312 | Modern Physics 1 | 3 |
| RSP |  | 3 |
| MATH 240 | Linear Algebra and Differential Equations | 3 |
|  | Hours | 15 |
| Spring |  |  |
| Free Elective |  | 3 |
| PHYS 375 | Thermal Physics | 3 |
| PHYS 315 | Dynamics | 3 |
| PHYS 381 or PHYS 382 | Advanced Physics Laboratory or Optics Laboratory | 2 |
| PHYS 412 | Modern Physics 2 | 1 |
| Free Elective |  | 3 |
|  | Hours | 15 |


| PHYS 410 | Electricity and Magnetism | 3 |
| :--- | :--- | ---: |
| PHYS 480 | Quantum | 3 |
| RSP |  | 3 |
| Technical Elective |  | 3 |
|  | Hours | $\mathbf{1 4}$ |
|  | Total Hours** | $\mathbf{1 2 0 - 1 2 1}$ |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/ ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UldNTi4u)to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.


## Major Code: 6164

Revised: 12-2019
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Physics, Bachelor of Science (BS) <br> - Concentration in Computational Biophysics <br> Program Learning Outcomes

Upon graduation, students in the Physics Program at SRU will be:

- Proficient in the basic and advanced concepts of classical and modern physics.
- Accomplished problem solvers capable of applying inductive and deductive logic, mathematical modeling, computational tools, and principles of physics to novel situations.
- Skilled at constructing and assembling experimental apparatuses, conducting and analyzing measurements of physical phenomena, and drawing valid conclusions from experimental data.
- Effective communicators, capable of presenting scientific results effectively to diverse audiences.
- Prepared for a career in science, industry, and education or to pursue a graduate program in physics or related areas.


## Related Links

Physics - Computational Biophysics, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/physics-computationalbiophysics/)

Physics and Engineering Department Page (https://www.sru.edu/ academics/colleges-and-departments/ches/departments/physics-andengineering/)

## Spring

PHYS 381
or PHYS 382

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide <br> GPA Requirement

Major GPA: 2.00 or higher
Overall GPA: 2.00 or higher

## Summary*

| Title | Hours |
| :--- | ---: |
| Code | 45 |
| Rock Studies Requirements | $0-3$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | 57 |
| Major Requirements | 29 |
| Concentration Requirements | 12 |
| Natural Science and Math College-Wide Requirements |  |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

Rock Studies Requirements
Code Title Hours

The Rock

| SUBJ 139 | University Seminar $^{1}$ | 3 |
| :--- | :--- | :--- |
| ENGL 102 | Critical Writing $^{104}$ |  |
| ENGL 104 | Critical Reading | 3 |
| MATH 225 | Calculus I | 3 |

Select one of the following: 3

| COMM 200 | Civil Discourse: Theory \& Pr |  |
| :---: | :---: | :---: |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democr |  |
| Subtotal |  | 16 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Sciences Inquiry |  |  |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| Physical Sciences Inquiry |  |  |
| PHYS 211 | General Physics I with Lab | 4 |
| Subtotal |  | 17 |
| Thematic Thread |  |  |
| Select 12 Credits (p.1378) ${ }^{2}$ |  | 12 |
| Total Hours |  | 45 |

[^17]
## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title |
| :--- | ---: |
| Complete one of the following: | Hours |
| $0-3$ |  |

Meet required minimum SAT or ACT math score OR
ESAP $110 \quad$ Beginning Algebra

Total Hours 0-3

## Computer Competency

Code Title Hours

Demonstrate "computer competency" by one of the following: 0-3
Pass Computer Competency Exam OR
Select one of the following at SRU or another post-secondary institution:

| CPSC 100 | Introduction to Computing for Liberal Arts |
| :--- | :--- |
| CPSC 110 | Computer Concepts |
| CPSC 130 | Introduction to Computing and <br> Programming |
| PE 202 | Technology for Wellness |
| Total Hours |  |

## Major/Concentration Requirements

- 29 major credits must be taken at SRU or PASSHE
- 29 major credits must be taken at the 300 level or above
Code Title Hours


## Required Physics Courses

| PHYS 212 | General Physics II with Lab ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| PHYS 213 | General Physics III/ Lab ${ }^{1}$ | 4 |
| PHYS 312 | Modern Physics $1{ }^{1}$ | 3 |
| PHYS 314 | Statics ${ }^{1}$ | 3 |
| PHYS 331 | Mathematical Methods of Physics ${ }^{1}$ | 3 |
| or MATH 331 | Mathematical Methods of Physics |  |
| PHYS 371 | Physical Optics ${ }^{1}$ | 3 |
| PHYS 410 | Electricity and Magnetism ${ }^{1}$ | 3 |
| PHYS 412 | Modern Physics $2^{1}$ | 1 |
| PHYS 480 | Quantum ${ }^{1}$ | 3 |
| Subtotal |  | 26 |

## Advanced Lab Requirements

PHYS $381 \quad$ Advanced Physics Laboratory ${ }^{1}$ 2
PHYS 382 Optics Laboratory ${ }^{1} \quad 2$
Subtotal 4

Required Physics Electives
Select two of the following: 6

| PHYS 315 | Dynamics $^{1}$ |  |
| :--- | :--- | ---: |
| PHYS 375 | Thermal Physics $^{1}$ |  |
| PHYS 385 | Computational Physics $^{1}$ | 6 |
| Subtotal |  |  |
| Related Field Work |  | 3 |
| CHEM 108 | General Chemistry II $^{1}$ | 1 |
| CHEM 112 | General Chemistry II Lab $^{1}$ |  |


| MATH 230 | Calculus II ${ }^{1}$ | 4 |
| :---: | :---: | :---: |
| MATH 231 | Calculus III ${ }^{1}$ | 4 |
| MATH 240 | Linear Algebra and Differential Equations ${ }^{1}$ | 3 |
| MATH 301 | Differential Equations ${ }^{1}$ | 3 |
| CPSC 146 | Programming Principles ${ }^{1,2}$ | 3 |
| Subtotal |  | 21 |
| Total Hours |  | 57 |

Course counts for 50\% of Major requirements and Major GPA
2 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Natural Science and Math College-Wide Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Students must take the following four courses: |  |  |
| CHEM 107 | General Chemistry I $^{1}$ | 3 |
| CHEM 111 | General Chemistry I Lab $^{1}$ | 1 |
| MATH 225 | Calculus I $^{1}$ | 4 |
| PHYS 211 | General Physics I with Lab $^{1}$ | 4 |
| T |  |  |

1 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120 -credits total.

## Computational Biophysics Concentration for BS Physics <br> Majors

| Code | Title | Hours |
| :--- | :--- | ---: |
| BIOL 104 | Principles of Biology with Lab | 4 |
| BIOL 250 | Genetics with Lab ${ }^{1}$ | 4 |
| BIOL 325 | Biometry with Lab | 3 |
| BIOL 335 | Cell Biology/Lab | 3 |
| BIOL 370 | Molecular Biology with Lab | 3 |
| CHEM 201 | Organic Chemistry I | 3 |
| CPSC 246 | Advanced Programming Principles | 3 |
| CPSC 374 | Algorithms and Data Structures | 3 |
| CPSC 480 | Topics in Computer Science: Machine | 3 |
|  | Learning |  |

## Total Hours

Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.

PHYSICS - BS (6164)
Concentration in Computational Biophysics (COBP)
This program is effective as of Fall 2019.
Revised 7-2019
UCC 2.5.2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum
categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall |  |  |
| ENGL 102 | Critical Writing | 3 |
| MATH 225 | Calculus I | 4 |
| PHYS 211 | General Physics I with Lab | 4 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| INDS 101 | FYRST Seminar | 1 |
|  | Hours | $\mathbf{1 5}$ |
| Spring |  |  |
| ENGL 104 | Critical Reading | 3 |
| PHYS 213 | General Physics III/ Lab | 4 |
| MATH 230 | Calculus II | 4 |
| RSP |  | 3 |
|  | Hours | $\mathbf{1 4}$ |

## Second Year

Fall

| CPSC 146 | Programming Principles | 3 |
| :---: | :---: | :---: |
| RSP |  | 3 |
| MATH 231 | Calculus III | 4 |
| PHYS 212 | General Physics II with Lab | 3 |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |


| Spring |  |  |
| :--- | :--- | ---: |
| MATH 240 | Linear Algebra and Differential Equations | 3 |
| CHEM 108 | General Chemistry II | 4 |
| \& CHEM 112 | and General Chemistry II Lab |  |
| MATH 301 | Differential Equations I | 3 |
| CPSC 246 | Advanced Programming Principles | 3 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :--- | :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
|  | Hours | $\mathbf{1 6}$ |

Third Year
Fall

| PHYS 314 | Statics | 3 |
| :--- | :--- | ---: |
| PHYS 331 | Mathematical Methods of Physics | 3 |
| PHYS 312 | Modern Physics 1 | 3 |
| RSP |  | 3 |
| MATH 240 | Linear Algebra and Differential Equations | $\mathbf{3}$ |
|  | Hours | $\mathbf{1 5}$ |



## Physics, Bachelor of Science (BS) <br> - Concentration in Computational Physics

## Program Learning Outcomes

Upon graduation, students in the Physics Program at SRU will be:

- Proficient in the basic and advanced concepts of classical and modern physics.
- Accomplished problem solvers capable of applying inductive and deductive logic, mathematical modeling, computational tools, and principles of physics to novel situations.
- Skilled at constructing and assembling experimental apparatuses, conducting and analyzing measurements of physical phenomena, and drawing valid conclusions from experimental data.
- Effective communicators, capable of presenting scientific results effectively to diverse audiences.
- Prepared for a career in science, industry, and education or to pursue a graduate program in physics or related areas.


## Related Links

Physics - Computational Physics, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/physics-computationalphysics/)

Physics and Engineering Department Page (https://www.sru.edu/ academics/colleges-and-departments/ches/departments/physics-andengineering/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.00 or higher
Overall GPA: 2.00 or higher

## Summary*

Code Title Hours

Rock Studies Requirements 45
Other Basic Requirements 0-3
Computer Competency 0-3
Major/Concentration Requirements 59
Natural Science and Math College-Wide Requirements 12
Electives 15

* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 225 | Calculus I | 4 |
| Select one of the following: | 3 |  |
| COMM 200 |  | Civil Discourse: Theory \& Practice |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 |  | Civil Discourse and Democracy |
| Subtotal |  | 16 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |


| Select 3 Credits (p. 1378) | 3 |
| :---: | :---: |
| Humanities Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Social Science Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Natural Sciences Inquiry |  |
| CHEM 107 General Chemistry I | 3 |
| CHEM 111 General Chemistry I Lab | 1 |
| Physical Sciences Inquiry |  |
| PHYS 211 General Physics I with Lab | 4 |
| Subtotal | 17 |
| Thematic Thread |  |
| Select 12 Credits (p.1378) ${ }^{2}$ | 12 |
| Total Hours | 45 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 Categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required | minimum SAT or ACT math score OR |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | $\mathbf{0 - 3}$ |

## Computer Competency

| Code | Title | Hours |
| :--- | :--- | ---: |
| Demonstrate "computer competency" by one of the following: | $0-3$ |  |
| Pass Computer Competency Exam OR |  |  |

## Major/Concentration Requirements

- 30 major credits must be taken at SRU or PASSHE
- 29 major credits must be taken at the 300 level or above


## Code Title

Hours
Required Physics Courses

| PHYS 212 | General Physics II with Lab ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| PHYS 213 | General Physics III/ Lab ${ }^{1}$ | 4 |
| PHYS 312 | Modern Physics $1{ }^{1}$ | 3 |
| PHYS 315 | Dynamics ${ }^{1}$ | 3 |
| PHYS 331 | Mathematical Methods of Physics ${ }^{1}$ | 3 |


| or MATH 331 | Mathematical Methods of Phys |  |
| :---: | :---: | :---: |
| PHYS 381 | Advanced Physics Laboratory ${ }^{1}$ | 2 |
| PHYS 385 | Computational Physics ${ }^{1}$ | 3 |
| PHYS 412 | Modern Physics $2^{1}$ | 1 |
| PHYS 480 | Quantum ${ }^{1}$ | 3 |
| PHYS 490 | Independent Study ${ }^{1}$ | 2 |
| Subtotal |  | 27 |
| Required Physics Electives |  |  |
| Select two of the following: ${ }^{2}$ |  | 6 |
| PHYS 314 | Statics ${ }^{1}$ |  |
| PHYS 325 | Analog \& Digital Electronics ${ }^{1}$ |  |
| PHYS 371 | Physical Optics ${ }^{1}$ |  |
| PHYS 375 | Thermal Physics ${ }^{1}$ |  |
| PHYS 410 | Electricity and Magnetism ${ }^{1}$ |  |
| Subtotal |  | 6 |

Related Field Work

| CPSC 146 | Programming Principles ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| CPSC 246 | Advanced Programming Principles ${ }^{1}$ | 3 |
| CPSC 374 | Algorithms and Data Structures ${ }^{1}$ | 3 |
| MATH 230 | Calculus II ${ }^{1}$ | 4 |
| MATH 231 | Calculus III ${ }^{1}$ | 4 |
| MATH 240 | Linear Algebra and Differential Equations ${ }^{1}$ | 3 |
| MATH 301 | Differential Equations ${ }^{1}$ | 3 |
| MATH 315 | Numerical Mathematics ${ }^{1}$ | 3 |
| Subtotal |  | 26 |
| Total Hours |  | 59 |

1 Course counts for $50 \%$ of Major requirements and Major GPA
2 Students are encouraged to take PHYS 410.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Natural Science and Math College-Wide Requirements

Code Title Hours

| CHEM 107 | General Chemistry ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| CHEM 111 | General Chemistry I Lab ${ }^{1}$ | 1 |
| MATH 225 | Calculus $1^{1}$ | 4 |
| PHYS 211 | General Physics I with Lab ${ }^{1}$ | 4 |
| Total Hours |  | 12 |

1 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.

PHYSICS - BS (6164)
Concentration in Computational Physics (COPH)
This program is effective as of Fall 2019.
Revised 02.2020
UCC 2.5.2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-
earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| ENGL 102 | Critical Writing | 3 |
| MATH 225 | Calculus I | 4 |
| PHYS 211 | General Physics I with Lab | 4 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| INDS 101 | FYRST Seminar | 1 |
|  | Hours | 15 |
| Spring |  |  |
| ENGL 104 | Critical Reading | 3 |
| PHYS 213 | General Physics III/ Lab | 4 |
| MATH 230 | Calculus II | 4 |
| RSP |  | 3 |
|  | Hours | 14 |
| Second Year |  |  |
| Fall |  |  |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
| CPSC 146 | Programming Principles | 3 |
| MATH 231 | Calculus III | 4 |
| PHYS 212 | General Physics II with Lab | 3 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 14 |
| Spring |  |  |
| CPSC 246 | Advanced Programming Principles | 3 |
| MATH 240 | Linear Algebra and Differential Equations | 3 |
| MATH 301 | Differential Equations I | 3 |
| RSP |  | 3 |
| RSP |  | 3 |
|  | Hours | 15 |


| Third Year |
| :--- |
| Fall |
| Free Elective |

RSP 3
PHYS 312 Modern Physics 1 3
PHYS 385 Computational Physics 3
Select one of the following: 3

| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |
|  | Hours |


| Spring |  | 3 |
| :--- | :--- | ---: |
| PHYS 315 | Dynamics | 3 |
| PHYS 375 | Thermal Physics | 2 |
| PHYS 381 | Advanced Physics Laboratory | 3 |
| MATH 315 | Numerical Mathematics | 3 |
| CPSC 374 | Algorithms and Data Structures | 1 |
| PHYS 412 | Modern Physics 2 | $\mathbf{1 5}$ |

## Fourth Year

Fall

| PHYS 490 | Independent Study (Computational Physics <br> Research) | 1 |
| :--- | :--- | :--- |
| PHYS 331 | Mathematical Methods of Physics | 3 |

RSP 3
Free Elective 3
RSP ..... 3
Physics Elective ..... 3
16
Spring
Technical Elective ..... 3
PHYS $410 \quad$ Electricity and Magnetism ..... 3
PHYS 480 Quantum ..... 3

| Free Elective |  | 3 |
| :--- | :--- | :--- |
| PHYS 490 | Independent Study (Computational Physics | 1 | Research)


| RSP | 3 |
| :--- | :--- | ---: |
| Hours | 16 |
| Total Hours** | $\mathbf{1 2 0}$ |

1 Course offered in multiple subjects; cannot take course in first major subject.

* Students are encouraged to take INDS 101 as a Free Elective.

2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/
ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UIdNTi4u)to declare a thread.

Major Code: 6164
Concentration: COPH
Revised: 12-2019
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Physics, Bachelor of Science (BS) Pre Master of Education (7-12)

Upon graduation, students in the Physics Program at SRU will be:

- Proficient in the basic and advanced concepts of classical and modern physics.
- Accomplished problem solvers capable of applying inductive and deductive logic, mathematical modeling, computational tools, and principles of physics to novel situations.
- Skilled at constructing and assembling experimental apparatuses, conducting and analyzing measurements of physical phenomena, and drawing valid conclusions from experimental data.
- Effective communicators, capable of presenting scientific results effectively to diverse audiences.
- Prepared for a career in science, industry, and education or to pursue a graduate program in physics or related areas.


## Related Links

Physics - Pre-Masters of Education, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/physics-pre-masters-ofeducation/)

Physics and Engineering Department Page (https://www.sru.edu/ academics/colleges-and-departments/ches/departments/physics-andengineering/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.00 or higher
Overall GPA: 2.00 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 45 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 57 |
| Natural Science and Math College-Wide Requirements | 12 |
| Electives | 17 |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

## Rock Studies Requirements

Code Title Hours

| The Rock |  |  |
| :--- | :--- | :--- |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 225 | Calculus I | 4 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |

Subtotal 16

## Integrated Inquiry

Creative and Aesthetic Inquiry

| Select 3 Credits (p. 1378) | 3 |
| :--- | :---: |
| Humanities Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Social Science Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Natural Sciences Inquiry |  |
| CHEM $107 \quad$ General Chemistry I | 3 |
| CHEM $111 \quad$ General Chemistry I Lab | 1 |
| Physical Sciences Inquiry |  |
| PHYS 211 | General Physics I with Lab |
| Subtotal | 17 |
| Thematic Thread |  |
| Select 12 Credits (p. 1378) |  |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 Categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra | $\mathbf{0 - 3}$ |
| Total Hours |  |  |

## Computer Competency

Code Title Hours

Demonstrate "computer competency" by one of the following: 0-3
Pass Computer Competency Exam OR
Select one of the following at SRU or another post-secondary institution:

| CPSC 100 | Introduction to Computing for Liberal Arts |
| :--- | :--- |
| CPSC 110 | Computer Concepts |
| CPSC 130 | Introduction to Computing and |
|  | Programming |

PE 202 Technology for Wellness
Total Hours

## Major Requirements

- 29 major credits must be taken at SRU or PASSHE
- 29 major credits must be taken at the 300 level or above
Code Title Hours

Required Physics Courses

| PHYS 212 | General Physics II with Lab $^{1}$ | 3 |
| :--- | :--- | :--- |
| PHYS 213 | General Physics III/ Lab $^{1}$ | 4 |
| PHYS 312 $^{1}$ | Modern Physics 1 | 3 |
| PHYS 314 | Statics $^{1}$ | 3 |
| PHYS 331 $^{\text {PHathematical Methods of Physics }}{ }^{1}$ | 3 |  |


| or MATH 331 | Mathematical Methods of Physics |  |
| :---: | :---: | :---: |
| PHYS 371 | Physical Optics ${ }^{1}$ | 3 |
| PHYS 410 | Electricity and Magnetism ${ }^{1}$ | 3 |
| PHYS 412 | Modern Physics $2^{1}$ | 1 |
| PHYS 480 | Quantum ${ }^{1}$ | 3 |
| Subtotal |  | 26 |
| Advanced Lab and Optics Lab |  |  |
| PHYS 381 | Advanced Physics Laboratory ${ }^{1}$ | 2 |
| PHYS 382 | Optics Laboratory ${ }^{1}$ | 2 |
| Subtotal |  | 4 |
| Required Physics Electives |  |  |
| Select two of the | wing: | 6 |
| PHYS 315 | Dynamics ${ }^{1}$ |  |
| PHYS 375 | Thermal Physics ${ }^{1}$ |  |
| PHYS 385 | Computational Physics ${ }^{1}$ |  |
| Subtotal |  | 6 |
| Related Field Work |  |  |
| CHEM 108 | General Chemistry II ${ }^{1,2}$ | 3 |
| CHEM 112 | General Chemistry II Lab ${ }^{1,2}$ | 1 |
| MATH 230 | Calculus II ${ }^{1,2}$ | 4 |
| MATH 231 | Calculus III ${ }^{1}$ | 4 |
| MATH 240 | Linear Algebra and Differential Equations ${ }^{1}$ | 3 |
| MATH 301 | Differential Equations ${ }^{1}$ | 3 |
| CPSC 146 | Programming Principles ${ }^{1,2}$ | 3 |
| Subtotal |  | 21 |
| Total Hours |  | 57 |

1 Course counts for $50 \%$ of Major requirements and Major GPA
2 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Students must take the following four courses: |  |  |
| CHEM 107 | General Chemistry ${ }^{1}$ | 3 |
| CHEM 111 | General Chemistry I Lab ${ }^{1}$ | 1 |
| MATH 225 | Calculus ${ }^{1}$ | 4 |
| PHYS 211 | General Physics I with Lab ${ }^{1}$ | 4 |
| Total Hours |  | 12 |

1 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.

## Recommended Courses for Optional Physics Pre

 Masters in Education Major| Code | Title | Hours |
| :--- | :--- | ---: |
| SPED 121 | Overview of Special Education | 3 |
| SEFE 338 | Standards-Based Instruction \& Assessment <br> in the Inclusionary Classroom | 3 |
| BIOL 101 | General Biology | 3 |
| or BIOL 105 | Environmental Biology |  |

$\left.\begin{array}{llr}\text { EGEO 100 } & \text { Environmental Geology } \\ \text { or EGEO 101 } & \text { Physical Geology }\end{array}\right] 3$

PHYSICS - BS (6164)
w/optional Pre Masters in Education (PX)
This program is effective as of Fall 2019.
Revised 7-2019
UCC 2.5.2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## Physics, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Physics, Minor Program Page (https://www.sru.edu/academics/majors-and-minors/physics/)

Physics and Engineering Department Page (https://www.sru.edu/ academics/colleges-and-departments/ches/departments/physics-andengineering/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Physics Courses |  |  |
| PHYS 211 | General Physics I with Lab | 4 |
| PHYS 212 | General Physics II with Lab | 3 |
| PHYS 213 | General Physics III/ Lab | 4 |
| PHYS 312 | Modern Physics 1 | 3 |
| Elective Physics Courses | $4-6$ |  |
| Select two or three of the following courses: |  |  |
| PHYS 314 |  | Statics |


| PHYS 315 | Dynamics |
| :--- | :--- |
| PHYS 331 | Mathematical Methods of Physics |
| PHYS 371 | Physical Optics |
| PHYS 375 | Thermal Physics |
| PHYS 381 | Advanced Physics Laboratory |
| PHYS 382 | Optics Laboratory |
| PHYS 385 | Computational Physics |
| PHYS 410 | Electricity and Magnetism |
| PHYS 412 | Modern Physics 2 |
| PHYS 480 | Quantum |
| Total Hours |  |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Minor in Physics (64A)
This program is effective as of Fall 2013.
Revised 8-2019

## Psychology

| Chair | Secretary | Location | Department <br> Phone |
| :--- | :--- | :--- | :--- |
| Dr. Jennifer | Patricia Kingerski | 309 Vincent | 724-738-2077 |
| Sanftner McGraw | Science Center |  |  |

## Faculty

Elizabeth Boerger
Assistant Professor
Psychology
Ph.D., University of Texas at Austin
M.S., University of Pittsburgh
M.A., University of Texas at Austin
B.A., Grinnell College

## Robert Faux

Instructor
Psychology

## Emily Keener

Associate Professor

Psychology
Ph.D., West Virginia University
M.A., Radford University
B.A., Wheeling Jesuit University

Catherine Massey
Professor
Psychology
Ph.D., West Virginia University
M.A., West Virginia University
B.S., University of Central Florida in Orlando

## Jennifer Sanftner McGraw

Professor
Psychology
Ph.D., Kent State University
M.A., Kent State University
B.A., George Mason University

Patric Plesa
Instructor
Psychology

## Beth Ann Rice

Assistant Professor
Psychology
M.A., University of Kentucky
B.S., Indiana University Southeast

## Ann Romanczyk

Assistant Professor
Psychology
Ph.D., De Paul University
M.A., De Paul University
B.S., State University of New York at Oswego

Linda Veronie
Assistant Professor
Psychology
Ph.D., Kent State University
M.A., Oklahoma City University
B.A., University of Toledo

## Benjamin White

Instructor
Psychology
Jennifer Willford
Associate Professor
Psychology
Ph.D., University of Kentucky
M.S., University of Kentucky
B.S., Muskingum College

## Programs

All first-year students who enter SRU in the Summer and Fall terms of 2019 and after will follow Rock Studies. Students who entered SRU before Spring 2019 will follow Liberal Studies. All new transfer students beginning Summer 2019 and after will follow Liberal Studies. We anticipate that transfer students will begin to enter under Rock Studies during the Summer/Fall term of 2021.

## Majors

- Psychology, Bachelor of Arts (BA) (p. 634)
- Psychology, Bachelor of Science (BS) (p. 638)
- Psychology, Bachelor of Science (BS) - Concentration in Developmental (p. 641)
- Psychology, Bachelor of Science (BS) - Concentration in Neuroscience (p. 644)
- Psychology, Bachelor of Science (BS) - Concentration in Neuroscience / Pre-Physician Assistant (SRU) (Traditional) (p. 648)
- Psychology, Bachelor of Science (BS) / Counseling Psychology w/ Chatham University (MSCP), Accelerated (p. 651)
- Psychology, Bachelor of Science (BS) / Pre-Counseling (SRU) (3+3) (p. 654)
- Psychology, Bachelor of Science (BS) / Pre-Occupational Therapy (SRU) (3+3) (p. 657)
- Psychology, Bachelor of Science (BS) / Pre-Occupational Therapy (SRU) (Traditional) (p. 660)
- Psychology, Bachelor of Science (BS) / Pre-Physician Assistant (SRU) (3+2) (p. 664)
- Psychology, Bachelor of Science (BS) / Pre-Student Affairs (SRU) (3+2) (p. 667)
- Psychology, Bachelor of Science (BS) / Psychology w/ Chatham University (MAP), Accelerated (p. 670)


## Minors

- Psychology, Minor (p. 673)


## Courses

## PSYC 105 - Introduction to Psychology

This course serves as an introduction to the science of psychology. Psychological theory, concepts, and research spanning the breadth of the discipline are explored. Content will provide an introduction to research methods and ethics and include selected topics from each of the five domains of psychological inquiry: Biological, Cognitive, Developmental, Social and Personality, and Mental and Physical Health. Students will explore questions involving four themes that arise across the domains: Cultural and Social Diversity, Ethics, Variations in Human Functioning, and Applications. A grade of C or higher is required to remain in the major. Students may only repeat this course one time.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Transfer Thread Completion Course

## PSYC 139-University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## PSYC 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## PSYC 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## PSYC 198-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## PSYC 205 - Environmental Psychology

Man's interference with the environment, including over-population, isolation, social institutions as environments, noise, housing, community design, behavioral effects of pollutants and behavior genetics.

Prerequisite: PSYC $105^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Transfer Thread Completion Course, Violence

## PSYC 208 - Personality

Review of the major historical and contemporary theoretical approaches to the study of personality, including their antecedents, underlying assumptions, research/evidential basis, influence on the field and relevance to the theory and practice of psychology.

Prerequisite: PSYC $105^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Transfer Thread Completion Course, Who Do We
Think We Are

PSYC 221 - Introduction to Behavioral Statistics
Introduction to descriptive and inferential statistics used in evaluation and reporting of behavioral research.

Prerequisites: PSYC $105^{\text {C }}$ and (MATH $152^{\text {C }}$ or STAT $152^{\text {C }}$ )
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Enrollment is limited to students with a program in Psychology,
Psychology, Psychology-Developmental, Psychology-Neuroscience or Psychology-Pre PA-SRU 3+2.

## PSYC 231 - Psychological Science I: Research Methods

This project-based course introduces students to research methods and designs used in psychology. The course prepares students to evaluate published reports of psychological research and to design and conduct research studies in Psychology. Each student will apply concepts learned in a class to design and write a formal research proposal of an original experiment, which will be written in APA style.
Prerequisites: PSYC $105^{\text {C }}$ and (MATH $152^{\text {C }}$ or STAT $152^{\circ}$ ) and ENGL $102^{\text {C }}$ and (INDS $110^{\mathrm{C}}$ or LIBR $110^{\mathrm{C}}$ )
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment is limited to students with a program in Psychology,
Psychology, Psychology-Developmental or Psychology-Neuroscience.

## PSYC 232 - Psychological Science II: Statistical Applications

This is a project-based course in which students apply knowledge of descriptive and inferential statistics to answer research questions in psychology. Topics include selection of appropriate descriptive and inferential statistics to use with descriptive, correlational, predictive, and experimental designs; planning statistical analysis; using statistical software to organize data and conduct analyses; interpreting results, and writing formal reports of research in APA style. Students will apply knowledge and skills learned in the course to write an APA style lab report of a quantitative study.
Prerequisites: PSYC $105^{\mathrm{C}}$ and ENGL $102^{\mathrm{C}}$ and (MATH $152^{\mathrm{C}}$ or STAT $152^{\mathrm{C}}$ ) and (INDS $110^{\text {C }}$ or LIBR 110) and PSYC $231^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Requires minimum grade of .
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment is limited to students with a program in Psychology,
Psychology, Psychology-Developmental or Psychology-Neuroscience.

## PSYC 233-Sensation \& Perception

This combined lecture and lab covers the basic anatomy, physiology and role of the sensory systems in perception and sensation.

Prerequisite: PSYC $105^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3

## PSYC 240 - Human Sexual Behavior

Examines personal sociocultural factors in sexual functioning.
Motivational, developmental, personality and clinical implications are explored.
Prerequisite: PSYC $105^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Body and Self, Gender and Diversity, Revolutions, Transfer Thread Completion Course, Violence

## PSYC 244 - Developmental Psychology

Human development from conception to senescence with emphasis on the theoretical and practical implications.

Prerequisite: PSYC $105^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): 21st Century Healthcare, Fighting Social Problems, Mind \& Brain, Transfer Thread Completion Course, Who Do We Think We Are

PSYC 276 - Introduction to Abnormal Psychology
Introduction to the field of abnormal behavior, including DSM
classification and examination of major categories of mental disorders.
Prerequisite: PSYC $105^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Comparative Perspectives of Justice \& Society,
Transfer Thread Completion Course

## PSYC 289 - Positive Psychology

In this course, students will explore human flourishing - defined as a life of deep meaning, fulfillment and service to others. Students will be taught about human flourishing through the lens of science and their own experience. Through exposure to diverse scientific theories and research on the skills associated with flourishing and to a variety of reflective and applied practice, and laboratory experiences, students will develop conceptual knowledge, experiential insight, and practical skills related to living a "good life".

Prerequisite: PSYC $105^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Mind \& Brain, Transfer Thread Completion Course

## PSYC 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## PSYC 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## PSYC 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
PSYC 300 - Psychology of Women, Gender and Culture
Overview of psychological perspectives and current research concerning the field of the psychology of women and gender. Topics related to the role of culture in the social construction of gender will be emphasized. Topics include similarities and differences between women and men, gender development, emotions, relationships, sexuality, education and work, health and fitness, psychological distress, and social roles. CAPP Prerequisites: A grade of C or higher in PSYC 105 or any gender studies course or permission from the instructor.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Being American, Gender and Diversity, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 302 - Psychology of Criminal Behavior

The study of how individual criminal behavior is acquired, evoked, maintained and modified.

Prerequisite: PSYC $105^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Demystifying Crime \& Justice, Transfer Thread

## Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 303 - Learning

This lecture/lab course will facilitate a deeper understanding of the basic mechanisms of learning, which are expressed as changes in behavior that are altered by experience.

Prerequisite: PSYC $231{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 4

Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 304- Theories of Counseling

This course will examine the major approaches to psychotherapy through critical review of the theoretical assumptions, historical influences, process and outcome research, techniques of intervention and relevant context for the major theoretical paradigms. Professional and ethical issues, contemporary topics and issues of fundamental conceptualization skill development will be addressed. This course does not prepare students to function as counselors; rather it is designed to provide meaningful preparation for pursuit of post-Baccalaureate training.

Prerequisites: PSYC $208^{\text {D }}$ and PSYC $276^{\text {D }}$ and PSYC $105^{\text {C }}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 306 - Introduction to Psychological Testing

Includes the historical, theoretical and statistical foundations of testing; exposure to ability (aptitude, achievement and intelligence) and personality tests; and the settings in which psychologists administer these tests.

Prerequisites: PSYC $105^{\text {C }}$ and (PSYC $221^{\text {C }}$ or PSYC $2322^{\text {C }}$ )
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

PSYC 310 - Introduction to Industrial-Organizational Psychology
The application of psychological theory, techniques, and research to business, industry, and other organizational behavior. Subjects include employee recruitment and selection, retention and promotion; job satisfaction; job evaluation/performance measures; training; motivation; stress; and human factors.

Prerequisite: PSYC $105^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 311 - Introduction to Behavioral Neuroscience

This lecture/lab course will help you to develop knowledge of the biological basis of human behavior and learn to design and conduct research to study brain structure, function, and behavior. Topics may include neuroanatomy, neutral communication, development of the nervous system, genetics, sensory and motor systems, emotion, learning and memory, language, sexual behavior, consciousness and neurological and psychological disorders.

Prerequisite: PSYC $232^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 4
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students with department of Psychology.

## PSYC 315 - Psychology of Sexual and Gender Diversity

Overview of psychological perspectives and current research concerning the field of lesbian, gay, bisexual, transgender and queer psychology.
The course takes a life-span developmental perspective and examines the diversity of gender and sexual identities. Topics include theories of sexual orientation and gender identity, oppression and discrimination, history of the Queer community and the coming out process. CAPP Prerequisites: A grade of C or higher in PSYC 105 or any gender studies course or permission from the instructor.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Transfer Thread Completion Course, Who Do We Think We Are
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 318 - Psychopathology of Childhood and Adolescence

An overview of clinical practice with children, adolescents and their families with advanced study of the emergence, diagnosis and treatment of psychological disorders in children and adolescents. Coursework includes theories of normal and abnormal child development, etiology of disorders, current DSM diagnosis, and an overview of assessment and intervention methods relevant to children and adolescents.

Prerequisites: PSYC $105^{\text {C }}$ and PSYC $276^{\text {D }}$ and PSYC $244^{\text {D }}$
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 320 - Introduction to Clinical Psychology

Introduction to the field of clinical psychology. Includes an overview of training, similarities, and differences among various mental health service providers. Students will be introduced to interviewing skills, approaches to psychotherapy, assessment, treatment planning, and areas of specialization and application within the field. Emphasis is placed on consideration of issues that tend to arise when working with individuals from diverse backgrounds, including differences in racial and ethnic background, sex and gender, age, sexual orientation, religious background, and those with mental and physical disabilities.

Prerequisites: PSYC $105^{\circ}$ and (PSYC $221^{\text {C }}$ or PSYC $2322^{\text {C }}$ ) and (PSYC $325^{\text {C }}$ and PSYC $326^{\text {C }}$ or PSYC $231^{\text {C }}$ ) and PSYC $276^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 321 - Drugs and Behavior

Psychoactive drugs and their action on the human nervous system; legal and sociocultural aspects of drug abuse.

Prerequisite: PSYC $105^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Fighting Social Problems, Transfer Thread
Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Psychology,
Psychology, Psychology-Developmental, Psychology-Neuroscience or Psychology-Pre PA-SRU 3+2.

## PSYC 325 - Introduction to Experimental Psychology

This course will teach students how to design, conduct, and report psychological research. Topics include the nature of science, formulation of hypotheses, research methods and design, and ethical issues in using human and nonhuman subjects. Emphasis will be given to experimental design techniques, evaluation of published research in psychology, and the writing of research reports. The course will also focus on the teaching of library research skills and producing formal research reports in APA manuscript style

Prerequisites: INDS $110^{\mathrm{D}}$ and ENGL $102^{\mathrm{C}}$ and PSYC $105^{\mathrm{C}}$ and PSYC $221^{\mathrm{C}}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
${ }^{C}$ Requires minimum grade of $C$.
Corequisite(s): PSYC 326
Credits: 3
Students with a semester level of Freshman 1 or Freshman 2 may not enroll.
Enrollment is limited to students with a program in Psychology,
Psychology, Psychology-Developmental, Psychology-Neuroscience or Psychology-Pre PA-SRU 3+2.

## PSYC 326 - Experimental Psychology Laboratory

A laboratory experience to accompany PSYC 325 in which students will conduct a series of literature searches, design and execute laboratory experiments, perform and interpret statistical analyses of data collected, and report experimental findings in APA style.

Prerequisites: PSYC $105^{\mathrm{C}}$ and PSYC $221^{\mathrm{C}}$ and INDS $110^{\mathrm{D}}$ and ENGL $102^{\mathrm{C}}$
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Corequisite(s): PSYC 325
Credits: 1
Students with a semester level of Freshman 1 or Freshman 2 may not enroll.
Enrollment is limited to students with a program in Psychology,
Psychology, Psychology-Developmental, Psychology-Neuroscience or Psychology-Pre PA-SRU 3+2.

## PSYC 334 - Health Psychology

An overview of the field and of the role of psychology in health. Topics include health-enhancing and health-compromising behaviors; the effects of stress, coping, and personality on health; psychoneuroimmunology; treatments of specific problems and disorders; and interacting with health care services.

Prerequisite: PSYC $105^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Healthy Body, Mind \& Environment, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 338 - Cognitive Psychology

A survey of theories and facts related to complex information processing and conscious experience in humans. Topics covered will include attention, memory, problem solving, symbolic processes and human consciousness.

Prerequisite: PSYC $105^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
PSYC 350 - Contemporary Topics in Psychological Science
Contemporary topics In Psychology are critically examined. Specific topics will vary within the major subfields of Psychology: Clinical/ Counseling; Cognitive; Developmental; Environmental; Experimental/ Quantitative; Forensic; Gender/Sexual Identity; Health; IndustrialOrganizational; Multicultural; Neuroscience; Positive; Rehabilitation; Social; Sport/Performance.

Prerequisite: PSYC $105^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .

## Credits: 1

Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Psychology.

## PSYC 355 - Topical Seminar in Neuroscience

Topical Seminar in Neuroscience will focus on reading, evaluating, and presenting primary literature. This course will provide students with an opportunity to read and discuss primary literature related to Neuroscience. Through reading and discussing primary literature students in this course will explore a breadth of career paths and neuroscience techniques while developing methodological and content knowledge in the foundations of neuroscience, and will gain skills in the ability to critically evaluate primary literature. Students may repeat the course once for credit.

Prerequisite: PSYC $105^{\text {C }}$
${ }^{C}$ Requires minimum grade of C .
Credits: 1
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 360 - History of Psychology

A review of the philosophical and natural science antecedents to the science of psychology and the development of psychological paradigms from our origins to the present, including attention to the interactive influence of world events/psychology. The historical perspective allows students to understand the relationships between different fields in psychology.

Prerequisite: PSYC $105^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## PSYC 364 - Child and Adolescent Development

Intensive study of the biosocial, cognitive, and psychosocial aspects of development of children and adolescents.

Prerequisite: PSYC $105^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Demystifying Crime \& Justice, Transfer Thread Completion Course, Well-Being of Children and Youth
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 365 - Psychology of Aging

Psychosocial, clinical and developmental aspects of aging, implications of optimal developmental and effective management of problems confronting the aged.
Prerequisites: PSYC $105^{\text {C }}$ and (PSYC $325^{\text {C }}$ and PSYC $326^{\text {C }}$ ) or (PSYC $232^{\text {C }}$ and PSYC $231^{\circ}$ ) and (PSYC $344^{\text {C }}$ or PSYC $244^{\text {C }}$ )
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 375 - Psychopathology of Adulthood

Advanced study of adult mental disorders, including symptoms, phenomenological aspects, diagnosis, and treatment. Students will examine the etiology, symptom constellations, and treatment of psychological disorders in depth and begin to understand what people with the disorders experience through various stages of adulthood. Psychological theory and research findings will guide the student in gaining an understanding of mental illness.

Prerequisites: PSYC $105^{\text {C }}$ and PSYC $244^{\text {D }}$ and PSYC $276^{\text {D }}$
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Psychology,
Psychology, Psychology-Developmental or Psychology-Neuroscience.

## PSYC 377-Social Psychology

The psychological implications of our social existence; a study of the social forces affecting human behavior.

Prerequisite: PSYC $105^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 392-Cross Cultural Psychology

This course will introduce and familiarize students with the concept of cross-cultural psychology by examining the extent to which the theories, principles, and knowledge of the discipline of psychology are universally applicable to humans. The goal of exploring the psychological implications of cultural differences and of contact among members of different cultures is to consider the role which psychological research and theory can play in advancing intercultural understanding.

Prerequisites: PSYC $105^{\text {C }}$ and PSYC $377^{\text {D }}$
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 415 - Multicultural Identity Development

This course examines biological, psychological and social influences on identity formation through the lifespan with a focus on intersectionality of identities such as race, gender, sexual orientation, class and disability.
Prerequisites: PSYC $105^{\text {C }}$ and (PSYC $344^{\text {C }}$ or PSYC $244^{\text {C }}$ )
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 420 - Community Service Practicum in Psychology

160 hours of documented, relevant volunteer placement in an approved public, not for profit, or private agency. A formal paper related to the experience is required to assist the student with meaningful integration of the experience. Notes: Course grading: Pass/No Credit. Prerequisites: Declared major; Jr/Sr standing; minimum 2.5 GPA in major, 2.0 GPA overall; a grade of C or higher in PSYC 105, PSYC 231, and PSYC 232; at least 12 additional credits in Psychology; written application and departmental permission.

Prerequisites: PSYC $105^{\text {C }}$ and PSYC $232^{\text {C }}$ and PSYC $231^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## PSYC 421 - Advanced Behavioral Statistics

Intermediate forms of statistical analysis of behavioral research, their rationale, and computer applications are introduced.
Prerequisites: PSYC $105^{\circ}$ and PSYC $221^{\circ}$ and PSYC $325^{\text {C }}$ and PSYC $326^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
PSYC 428 - Social and Emotional Development Across the Lifespan This course uses a lifespan theoretical perspective to examine social and emotional influences on social relationships (e.g., parent-child, sibling, grandparent-grandchild, romantic) with an emphasis on the sociohistorical context and the influence of intersecting identity factors (e.g., age and race).

Prerequisites: PSYC $105^{\circ}$ and (PSYC $244^{\text {C }}$ or PSYC $344^{\text {C }}$ )
${ }^{\mathrm{C}}$ Requires minimum grade of C .

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Psychology,
Psychology, Psychology-Developmental or Psychology-Neuroscience.

## PSYC 430 - Research Practicum in Psychology

Supervised research experience with Psychology department faculty member. Students identify a mentor and work together with their mentor to develop and implement a research plan, and write an APA style paper reporting the results. Notes: Course grading: Pass/No Credit. Prerequisites: Declared major; Jr/Sr standing; minimum overall and Psychology GPA of 3.0; a grade of C or higher in PSYC 105, PSYC 231 and PSYC 232; at least 12 additional credits in Psychology; written application and departmental permission.

Prerequisites: PSYC $105^{\text {C }}$ and PSYC $232^{\text {C }}$ and PSYC $231^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## PSYC 445 - Infant and Child Cognition

This course examines theories and research in cognitive development with an emphasis on infancy and early childhood. Piagetian, Vygotskian, Information-processing, and Dynamic Systems Approaches are explored while examining the development of processes including attention, perception, memory, language, and reasoning. In addition to learning about theories and research findings in the field, students will (1) become familiar with the research methods employed by psychologists to study cognitive development; (2) think critically about current cognitive developmental questions; and (3) apply cognitive developmental findings to real world contexts.

Prerequisite: PSYC $105^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 449 - Seminar in Psychology

Advanced topics will be announced in the schedule.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 450 - Field Placement Internship in Psychology

Supervised placement in selected public and private agencies at appropriate institutions. Students are required to co-register for Senior Integration Seminar (PSYC 485) in order to synthesize the experience. Notes: Course grading: Pass/No Credit. Prerequisites: Declared major; Jr/ Sr standing; minimum Overall GPA of 2.0 and Psychology GPA of 2.5; a grade of C or higher in PSYC 105, PSYC 231; and PSYC 232; at least 15 additional credits in Psychology; written application and departmental permission. Corequisite: PSYC 485.

Prerequisites: PSYC $105^{\text {C }}$ and PSYC $232^{\text {C }}$ and PSYC $231^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Corequisite(s): PSYC 485
Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.
Enrollment limited to students with department of Psychology.

## PSYC 451 - Research Capstone Internship

This course is designed to provide an immersion experience in undergraduate research in laboratory or clinical settings. Under supervision of a SRU psychology faculty member, the student will integrate concepts gleaned from prerequisite undergraduate courses and scientific knowledge. Psychology theory, research methods, and statistical applications will be applied to prepare students who are planning to pursue careers in research in psychology related fields or to further their education in graduate programs in all psychology related fields, neuroscience, and professional programs such as physician assistant, occupational therapy, and medical schools. Notes: Declared major; Jr/Sr standing; minimum Overall GPA of 2.0 and Psychology GPA of 3.0; a grade of C or higher in: PSYC 105 and (PSYC 231 or (PSYC 325 and PSYC 326)) and (PSYC 232 or PSYC 221); written application and departmental permission. (repeatable up to 12 credits)

Prerequisites: PSYC $105^{\text {C }}$ and (PSYC $231^{\text {C }}$ or (PSYC $325^{\text {C }}$ and
PSYC $326^{\text {C }}$ ) ) and (PSYC $232^{\text {C }}$ or PSYC $221^{\text {C }}$ )
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3-6

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.
Enrollment is limited to students with a program in Psychology-
Developmental or Psychology-Neuroscience.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## PSYC 471 - Psychopharmacology

This combined lecture and laboratory course will provide a basic introduction to psychopharmacology. the study of the effects of drugs on the brain and human behavior. Emphasis will be on drugs that effect the central nervous system and treat mental health disorders.

Prerequisite: PSYC $311^{B}$
${ }^{B}$ Requires minimum grade of $B$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 473 - Hormones and Behavior

This combined lecture and laboratory course will provide an in-depth exploration of the study of hormones and behavior, introduce students to methodologies used to study hormones and behavior, and explore the evolutionary, behavioral and social influences that can change the expression of hormones and the resulting behavioral consequences.
Prerequisite: PSYC $311^{B}$
${ }^{B}$ Requires minimum grade of $B$.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 475 - Behavior Modification

Application of learning and other psychological principles in behavior therapy.

Prerequisite: PSYC $105^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 476 - Clinical Neuroscience

This course surveys the role of neural mechanisms on the development, diagnosis and treatment of psychological disorders. The biological basis of neurological and psychiatric disorders will be explored using integrative approach that includes genetics, nueroanatomy, chemistry and physiology, development, environment, behavior, culture and evolution.

Prerequisites: PSYC $276^{\text {C }}$ and (PSYC $325^{\text {C }}$ and PSYC $326^{C}$ ) or (PSYC $231^{\text {C }}$ and PSYC $232^{\circ}$ ) and PSYC $311^{\text {B }}$ and PSYC $312^{\text {B }}$
${ }^{C}$ Requires minimum grade of $C$.
${ }^{B}$ Requires minimum grade of $B$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students with department of Psychology.

## PSYC 477 - Developmental Neuroscience

This course explores the biology of behavioral development and the integration of organismic and environmental process that regulate the development of the brain and behavior. Topics will include phases of ontogeny including prenatal, perinatal, early childhood, adolescent, adult and aging brain development, sensitive and critical periods, the role of environment, genetics and child-parent interactions on brain development and implications of neuroscience research on assessment and intervention.

Prerequisites: PSYC $276^{\text {C }}$ and (PSYC $325^{\text {C }}$ and PSYC $326^{\circ}$ ) or (PSYC $231^{\text {C }}$ and PSYC $232^{\text {C }}$ ) and (PSYC $344^{\text {C }}$ or PSYC $244^{\text {C }}$ ) and PSYC $311^{\text {B }}$
${ }^{C}$ Requires minimum grade of $C$.
${ }^{B}$ Requires minimum grade of $B$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students with department of Psychology.
PSYC 480 - Behavior Management
Principles, methods and ethics of behavior management in community, industrial and/or congregate facilities.
Prerequisites: PSYC $105^{\circ}$ and PSYC $303^{\text {D }}$
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 485 - Senior Integration Seminar

This course integrates knowledge and skills acquired through the psychology curriculum and during the Field Placement Internship in Psychology with didactic experiences that facilitate learning and synthesis of information. Students are required to be co-enrolled with Field Placement Internship in Psychology (PSYC 450).

Prerequisites: PSYC $105^{C}$ and (PSYC $221^{C}$ or PSYC $232^{C}$ ) and (PSYC $325^{C}$ and PSYC $326^{\text {C }}$ or PSYC $231^{\text {C }}$ )
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment is limited to students with a program in Psychology,
Psychology, Psychology-Developmental, Psychology-Neuroscience or Psychology-Pre PA-SRU 3+2.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## PSYC 490 - Independent Study

Propose and complete a supervised project, either historical, theoretical or experimental. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## PSYC 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Psychology, Bachelor of Arts (BA)

Students are required to maintain a minimum Psychology GPA of 2.0 in order to retain a declared major. Students are required to earn a grade of C or higher in Introduction to Psychology (PSYC 105) in order to take all other Psychology courses. Students are required to earn a grade of C or higher in Psychological Science I: Research Methods (PSYC 231) and Psychological Science II: Statistical Applications (PSYC 232) in order to progress in the program. Each course can only be repeated once.

## Program Learning Outcomes

- Theory and Content of Psychology: Students should be familiar with the major theoretical approaches, findings, and historical trends in psychology.
- Methodology: Students should understand and be able to use major research methods in psychology, including design, data analysis, and interpretation.
- Critical Thinking, Logic, and Problem-Solving: Students should use and respect skeptical inquiry, critical thinking, and the scientific approach to understanding behavior.
- Information Competence, Technology, and Computers: Students should demonstrate information competence and the ability to use computers and other technology for multiple purposes.
- Communication Skills: Students should be able to express themselves effectively in written and oral communication.
- Application of Psychology: Students should have an understanding of applications of psychology to personal, social, and organizational issues.


## Related Links

Psychology, BA Program Page (https://www.sru.edu/academics/majors-and-minors/psychology/)

Psychology Department Page (https://www.sru.edu/academics/colleges-and-departments/ches/departments/psychology/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Code Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Modern Language Requirement | $0-9$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | $36-38$ |
| Electives | 42 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

| Rock Studies Requirements <br> Code <br> The Rock <br> Title | Hours |  |
| :--- | :--- | ---: |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Select one of the following: | 3 |  |



## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete $0-9$ credits | $0-9$ |  |
| Total Hours | $\mathbf{0 - 9}$ |  |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra | $\mathbf{0 - 3}$ |
| Total Hours |  |  |

## Computer Competency

Code Title Hours

Demonstrate "computer competency" by one of the following: 0-3
Pass Computer Competency Exam OR
Select one of the following at SRU or another post-secondary institution:

| CPSC 100 | Introduction to Computing for Liberal Arts |
| :--- | :--- |
| CPSC 110 | Computer Concepts |
| CPSC 130 | Introduction to Computing and |
|  | Programming |

PE 202
Technology for Wellness
Total Hours

## Major Requirements

- 18 major credits must be taken at SRU or PASSHE
- 18 major credits must be taken at the 300 level or above
- Students who do not meet minimum standards will be dismissed from the program. All dismissals are permanent.


1 Courses count for $50 \%$ of Major requirements and Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Psychology Electives ${ }^{1}$

| Code | Title | Hours |
| :--- | :--- | ---: |
| PSYC 205 | Environmental Psychology | 3 |
| PSYC 208 | Personality | 3 |
| PSYC 233 | Sensation \& Perception | 3 |
| PSYC 240 | Human Sexual Behavior | 3 |
| PSYC 244 | Developmental Psychology | 3 |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |
| PSYC 289 | Positive Psychology | 3 |
| PSYC 300 | Psychology of Women, Gender and Culture | 3 |
| PSYC 302 | Psychology of Criminal Behavior | 3 |
| PSYC 303 | Learning | 4 |
| PSYC 304 | Theories of Counseling | 3 |
| PSYC 306 | Introduction to Psychological Testing | 3 |
| PSYC 310 | Introduction to Industrial-Organizational | 3 |


| PSYC 311 | Introduction to Behavioral Neuroscience | 4 |
| :---: | :---: | :---: |
| PSYC 315 | Psychology of Sexual and Gender Diversity | 3 |
| PSYC 318 | Psychopathology of Childhood and Adolescence | 3 |
| PSYC 320 | Introduction to Clinical Psychology | 3 |
| PSYC 321 | Drugs and Behavior | 3 |
| PSYC 334 | Health Psychology | 3 |
| PSYC 338 | Cognitive Psychology | 3 |
| PSYC 350 | Contemporary Topics in Psychological Science ${ }^{2}$ | 1 |
| PSYC 360 | History of Psychology | 3 |
| PSYC 364 | Child and Adolescent Development | 3 |
| PSYC 365 | Psychology of Aging | 3 |
| PSYC 375 | Psychopathology of Adulthood | 3 |
| PSYC 377 | Social Psychology | 3 |
| PSYC 392 | Cross Cultural Psychology | 3 |
| PSYC 415 | Multicultural Identity Development | 3 |
| PSYC 428 | Social and Emotional Development Across the Lifespan | 3 |
| PSYC 430 | Research Practicum in Psychology | 3 |
| PSYC 445 | Infant and Child Cognition | 3 |
| PSYC 449 | Seminar in Psychology | 3 |
| PSYC 450 <br> \& PSYC 485 | Field Placement Internship in Psychology and Senior Integration Seminar | 9 |
| PSYC 471 | Psychopharmacology | 3 |
| PSYC 473 | Hormones and Behavior | 3 |
| PSYC 475 | Behavior Modification | 3 |
| PSYC 476 | Clinical Neuroscience | 3 |
| PSYC 477 | Developmental Neuroscience | 3 |
| PSYC 490 | Independent Study | 3 |

1 Courses count for $50 \%$ of Major requirements and Major GPA
2 Course may be repeated for a total of 2 credits

## Electives

| Code | Title | Hours |
| :--- | :--- | ---: |
| LIBR 110 | Introduction to Library \& Information | 1 |
|  | Resources (Required) |  |

Writing Competency Requirements
Code Title Hours

Writing in Psychology \#1
Writing in Psychology \#2
Writing in Psychology \#3
Writing in Psychology \#4

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International Study Programs
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership (Psi Chi, Psychology Club, Reflections Body Image Organization, Nu Rho Psi, Neuro Rocks)
5. Service-learning classes
6. Career education planning (Office of Career Education and Development)
7. Internships
8. Volunteering in local human services and mental health agencies
9. Job shadowing Volunteering

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
PSYCHOLOGY - BA (6 70)
This program is effective as of Fall 2019.
Revised 09.10.20
UCC 02.18.20

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| PSYC 105 | Introduction to Psychology | 3 |
| ENGL 102 | Critical Writing | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Creative and Aesthetic Inquiry Course |  | 3 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| LIBR 110 | Introduction to Library \& Information Resources | 1 |
| INDS 101 | FYRST Seminar * | 1 |
|  | Hours | 17 |
| Spring |  |  |
| PSYC 231 | Psychological Science I: Research Methods | 3 |
| PSYC Core Elective \#1 |  | 3 |
| ENGL 104 | Critical Reading | 3 |
| SCI 101 | Science of Life | 3 |
| Humanities or Social Science Inquiry Course |  | 3 |
|  | Hours | 15 |
| Second Year |  |  |
| Fall |  |  |
| PSYC 232 | Psychological Science II: Statistical Applications | 3 |
| PSYC Core Elective \#2 |  | 3 |
| Civil Discourse Requirement - select one |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |


** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 670
Revised: 09.21.20

## Psychology, Bachelor of Science (BS)

Students are required to maintain a minimum Psychology GPA of 2.0 in order to retain a declared major. Students are required to earn a grade of C or higher in Introduction to Psychology (PSYC 105) in order to take all other Psychology courses. Students are required to earn a grade of C or higher in Psychological Science I: Research Methods (PSYC 231) and Psychological Science II: Statistical Applications (PSYC 232) in order to progress in the program. Each course can only be repeated once.

## Program Learning Outcomes

- Theory and Content of Psychology: Students should be familiar with the major theoretical approaches, findings, and historical trends in psychology.
- Methodology: Students should understand and be able to use major research methods in psychology, including design, data analysis, and interpretation.
- Critical Thinking, Logic, and Problem-Solving: Students should use and respect skeptical inquiry, critical thinking, and the scientific approach to understanding behavior.
- Information Competence, Technology, and Computers: Students should demonstrate information competence and the ability to use computers and other technology for multiple purposes.
- Communication Skills: Students should be able to express themselves effectively in written and oral communication.
- Application of Psychology: Students should have an understanding of applications of psychology to personal, social, and organizational issues.


## Related Links

Psychology, BS Program Page (https://www.sru.edu/academics/majors-and-minors/psychology/)

Psychology Department Page (https://www.sru.edu/academics/colleges-and-departments/ches/departments/psychology/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

Code Title Hours

Rock Studies Requirements 42
Other Basic Requirements 0-3
Computer Competency

| Major Requirements | $46-47$ |
| :--- | ---: |
| Electives | 32 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements



1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra | $\mathbf{0 - 3}$ |
| Total Hours |  |  |

## Computer Competency

Code Title Hours

Demonstrate "computer competency" by one of the following: 0-3
Pass Computer Competency Exam OR

| Select one of the following at SRU or another post-secondary |
| :--- |
| institution: |
| CPSC 100 Introduction to Computing for Liberal Arts <br> CPSC 110 Computer Concepts <br> CPSC 130 130 Introduction to Computing and <br> PE Pragramming 202 |

Total Hours

## Major Requirements

- 23 major credits must be taken at SRU or PASSHE
- 23 major credits must be taken at the 300 level or above
- Students who do not meet minimum standards will be dismissed from the program. All dismissals are permanent

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses (Grades of ' $C$ ' or higher required) ${ }^{1}$ |  |  |
| Required Courses may only be repeated once. |  |  |
| PSYC 105 | Introduction to Psychology | 3 |
| PSYC 231 | Psychological Science I: Research Methods | 3 |
| PSYC 232 | Psychological Science II: Statistical Applications | 3 |
| Subtotal |  | 9 |
| Core Electives ${ }^{1}$ |  |  |
| Select five of the following: |  | 15-17 |
| PSYC 244 | Developmental Psychology |  |
| PSYC 276 | Introduction to Abnormal Psychology |  |
| PSYC 303 | Learning |  |
| PSYC 306 | Introduction to Psychological Testing |  |
| PSYC 311 | Introduction to Behavioral Neuroscience |  |
| PSYC 338 | Cognitive Psychology |  |
| PSYC 360 | History of Psychology |  |
| PSYC 377 | Social Psychology |  |
| Subtotal |  | 15-17 |

## Required Professional Competency ${ }^{1}$

Select one of the following:

| PSYC 430 | Research Practicum in Ps |  |
| :---: | :---: | :---: |
| PSYC 450 <br> \& PSYC 485 | Field Placement Internship in Psychology and Senior Integration Seminar |  |
| Subtotal |  | 3-9 |
| Psychology Electives ${ }^{1}$ |  |  |
| Select 12-20 c | rom Psychology Electives ${ }^{2}$ | 12-20 |
| Psychology Electives (p.639) |  |  |
| Total Hours |  | 46-47 |

Courses count for $50 \%$ of Major requirements and Major GPA
2 If a 3-credit Professional Competency is taken, 18 credits of electives are needed; If a 9-credit Professional Competency is taken, 12 credits of electives are needed.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

Psychology Electives ${ }^{1}$

| Code | Title | Hours |
| :---: | :---: | :---: |
| PSYC 205 | Environmental Psychology | 3 |
| PSYC 208 | Personality | 3 |
| PSYC 233 | Sensation \& Perception | 3 |
| PSYC 240 | Human Sexual Behavior | 3 |
| PSYC 244 | Developmental Psychology | 3 |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |
| PSYC 289 | Positive Psychology | 3 |
| PSYC 300 | Psychology of Women, Gender and Culture | 3 |
| PSYC 302 | Psychology of Criminal Behavior | 3 |
| PSYC 303 | Learning | 4 |
| PSYC 304 | Theories of Counseling | 3 |
| PSYC 306 | Introduction to Psychological Testing | 3 |
| PSYC 310 | Introduction to Industrial-Organizational Psychology | 3 |
| PSYC 311 | Introduction to Behavioral Neuroscience | 4 |
| PSYC 315 | Psychology of Sexual and Gender Diversity | 3 |
| PSYC 318 | Psychopathology of Childhood and Adolescence | 3 |
| PSYC 320 | Introduction to Clinical Psychology | 3 |
| PSYC 321 | Drugs and Behavior | 3 |
| PSYC 334 | Health Psychology | 3 |
| PSYC 338 | Cognitive Psychology | 3 |
| PSYC 350 | Contemporary Topics in Psychological Science ${ }^{2}$ | 1 |
| PSYC 360 | History of Psychology | 3 |
| PSYC 364 | Child and Adolescent Development | 3 |
| PSYC 365 | Psychology of Aging | 3 |
| PSYC 375 | Psychopathology of Adulthood | 3 |
| PSYC 377 | Social Psychology | 3 |
| PSYC 392 | Cross Cultural Psychology | 3 |
| PSYC 415 | Multicultural Identity Development | 3 |
| PSYC 428 | Social and Emotional Development Across the Lifespan | 3 |
| PSYC 430 | Research Practicum in Psychology | 3 |
| PSYC 445 | Infant and Child Cognition | 3 |
| PSYC 449 | Seminar in Psychology | 3 |
| PSYC 450 <br> \& PSYC 485 | Field Placement Internship in Psychology and Senior Integration Seminar | 9 |
| PSYC 471 | Psychopharmacology | 3 |
| PSYC 473 | Hormones and Behavior | 3 |
| PSYC 475 | Behavior Modification | 3 |
| PSYC 476 | Clinical Neuroscience | 3 |
| PSYC 477 | Developmental Neuroscience | 3 |
| PSYC 490 | Independent Study | 3 |

1 Courses count for $50 \%$ of Major requirements and Major GPA
2 Course may repeated for a total of 2 credits

## Writing Competency Requirements

| Code Title | Hours |
| :--- | :--- |
| Writing in Psychology \#1 |  |
| Writing in Psychology \#2 |  |

## Writing in Psychology \#3

Professional Competencies Paper

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International Study Programs
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership (Psi Chi, Psychology Club, Reflections Body Image Organization, Nu Rho Psi, Neuro Rocks)
5. Service-learning classes
6. Career education planning (Office of Career Education and Development)
7. Internships
8. Volunteering in local human services and mental health agencies
9. Job shadowing

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
PSYCHOLOGY - BS (6170)
This program is effective as of Fall 2019.
Revised 09.10.20
UCC 02.18.20

## Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall |  |  |
| PSYC 105 | Introduction to Psychology | 3 |
| ENGL 102 | Critical Writing | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Creative and Aesthetic Inquiry Course | 3 |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| LIBR 110 | Introduction to Library \& Information | 1 |
|  | Resources | 1 |
| INDS 101 | FYRST Seminar |  |
|  | Hours | $\mathbf{1 7}$ |
| Spring | Psychological Science I: Research Methods | 3 |
| PSYC 231 | Critical Reading | 3 |
| PSYC Core Elective \#1 | 3 |  |
| ENGL 104 | Science of Life | 3 |



| Free Elective |  | 1 |
| :--- | :--- | ---: |
|  | Hours | 13 |
| Total Hours** | 120 |  |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/ ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UIdNTi4u)to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6170
Revised 09.21.20

## Psychology, Bachelor of Science (BS) - Concentration in Developmental

Students are required to maintain minimum Overall and Psychology GPAs of 2.0 in order to retain the major in Psychology. Students are required to earn a grade of C or higher in Introduction to Psychology (PSYC 105) in order to take all other Psychology courses. Students are required to earn a grade of C or higher in Psychological Science I: Research Methods (PSYC 231) and Psychological Science II: Statistical Applications (PSYC 232) in order to progress in the program. Each course can only be repeated once.

## Program Learning Outcomes

- Understand the biological, psychological, social, and cultural influences on human development.
- Understand, critically evaluate, and apply the major theories of human development.
- Understand and critically evaluate research findings and methods used to study human development.
- Understand the implications of research and theory in developmental psychology for the purpose of providing service to individuals across the lifespan.

Provide the framework to understand and appreciate diversity within the context of life and society.

## Related Links

Psychology - Developmental, BS Program Page (https://www.sru.edu/ academics/majors-and-minors/psychology-developmental/)

Psychology Department Page (https://www.sru.edu/academics/colleges-and-departments/ches/departments/psychology/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

Code Title Hours42
Other Basic Requirements ..... 0-3
Computer Competency ..... 0-3
Major Requirements ..... 54-59
Electives24

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p.1378) |  | 3 |
| Natural Sciences Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Science Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |
| Thematic Thread |  |  |
| Select 12 Credits (p.1378) ${ }^{2}$ |  | 12 |
| Total Hours |  | 42 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | $\mathbf{0 - 3}$ |

## Computer Competency

| Code | Title | Hours |
| :--- | :--- | ---: |
| Demonstrate "computer competency" by one of the following: | $0-3$ |  |
| Pass Computer Competency Exam OR |  |  | | Select one of the following at SRU or another post-secondary |  |
| :--- | :--- |
| institution: |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |
| CPSC 110 | Computer Concepts <br> CPSC 130 |
| Introduction to Computing and <br> Programming | $\mathbf{0 - 3}$ |
| PE 202 | Technology for Wellness |

## Major Requirements

- 28 major credits must be taken at SRU or PASSHE
- 28 major credits must be taken at the 300 level or above
- Overall, 48 credit hours must be completed at the 300 or 400 level
- Students who do not meet minimum standards will be dismissed from, the program. All dismissals are permanent.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses (Grade of 'C' or higher required) |  |  |
| Required Courses may only be repeated once. |  |  |
| PSYC 105 | Introduction to Psychology | 3 |
| PSYC 231 | Psychological Science I: Research Methods <br> 2 | 3 |
| PSYC 232 | Psychological Science II: Statistical <br> Applications | 3 |


| Subtotal |  | 9 |
| :---: | :---: | :---: |
| Core Courses ${ }^{1}$ |  |  |
| PSYC 244 | Developmental Psychology ${ }^{2}$ | 3 |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |
| PSYC 364 or PSYC 365 | Child and Adolescent Development ${ }^{3,4}$ Psychology of Aging | 3 |
| PSYC 375 | Psychopathology of Adulthood | 3 |
| PSYC 475 | Behavior Modification | 3 |
| Subtotal |  | 15 |
| Core Elective ${ }^{1}$ |  |  |
| Select three of the following: |  | 9-11 |
| PSYC 303 | Learning |  |
| PSYC 306 | Introduction to Psychological Testing |  |
| PSYC 311 | Introduction to Behavioral Neuroscience |  |
| PSYC 338 | Cognitive Psychology |  |
| PSYC 360 | History of Psychology |  |
| PSYC 377 | Social Psychology |  |

Subtotal 9-11

## Diversity Elective ${ }^{1}$

Select one of the following:3

| PSYC 240 | Human Sexual Behavior |
| :---: | :--- |
| PSYC 300 | Psychology of Women, Gender and Culture |
| PSYC 315 | Psychology of Sexual and Gender Diversity |
| PSYC 392 | Cross Cultural Psychology |
| Subtotal |  |

Advanced Developmental Courses ${ }^{1}$
Select three of the following:

| PSYC 415 | Multicultural Identity Development |
| :--- | :--- |
| PSYC 428 | Social and Emotional Development Across <br> the Lifespan |
| PSYC 445 | Infant and Child Cognition |
| PSYC 477 | Developmental Neuroscience |

Subtotal 9

Required Professional Competency ${ }^{1}$
Select one of the following: 6-9

| PSYC 450 | Field Placement Internship in Psychology |
| :--- | :--- |
| \& PSYC 485 | and Senior Integration Seminar |
| PSYC 451 | Research Capstone Internship (taken <br> twice) |

Subtotal
Psychology Elective ${ }^{1}$

| Select one from the following: | 3 |
| :--- | :--- |
| Psychology Electives (p. 642) |  |

Total Hours
1 Courses count for 50\% of Major requirements and Major GPA
2 Must earn a Grade of B or higher
3 PSYC 364 required for Child/Adol Focus;
4 PSYC 365 required for Aging Focus

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Psychology Electives ${ }^{1}$

| Code | Title | Hours |
| :--- | :--- | ---: |
| PSYC 205 | Environmental Psychology | 3 |
| PSYC 208 | Personality | 3 |
| PSYC 240 | Human Sexual Behavior | 3 |
| PSYC 289 | Positive Psychology | 3 |
| PSYC 300 | Psychology of Women, Gender and Culture | 3 |
| PSYC 315 | Psychology of Sexual and Gender Diversity | 3 |
| PSYC 318 | Psychopathology of Childhood and | 3 |
| PSYC 321 | Adolescence |  |
| PSYC 334 | Drugs and Behavior | 3 |
| PSYC 364 | Health Psychology | 3 |
| PSYC 365 | Psychold and Adolescent Development Aging | 3 |
| PSYC 392 | Cross Cultural Psychology | 3 |
| PSYC 471 | Psychopharmacology | 3 |
| PSYC 473 | Hormones and Behavior | 3 |
| PSYC 476 | Clinical Neuroscience | 3 |

[^18]
## Electives

Code
PSYC 350

## Title

Contemporary Topics in Psychological Science (Course may be repeated for a total of 2 credits)

## Writing Competency Requirements

Code Title Hours
Writing in Psychology \#1
Writing in Psychology \#2
Writing in Psychology \#3
Professional Competencies Paper

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International Study Programs
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership (Psi Chi, Psychology Club, Reflections Body Image Organization, Nu Rho Psi, Neuro Rocks)
5. Service-learning classes
6. Career education planning (Office of Career Education and Development)
7. Internships
8. Volunteering in local human services and mental health agencies
9. Job shadowing

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
PSYCHOLOGY - BS (6170)
Developmental (DEVE)
This program is effective as of Fall 2019.
Revised 09.10.20
UCC 02.18.20

## Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall | Introduction to Psychology | 3 |
| PSYC 105 | Critical Writing | 3 |
| ENGL 102 | Elementary Statistics I | 3 |


| SCI 101 | Science of Life | 3 |
| :--- | :--- | ---: |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| LIBR 110 | Introduction to Library \& Information |  |
|  | Resources |  |
| INDS 101 | FYRST Seminar ${ }^{*}$ | 1 |
|  | Hours | 1 |
| Spring | Psychological Science I: Research Methods | $\mathbf{1 7}$ |
| PSYC 231 | Developmental Psychology |  |
| PSYC 244 | Critical Reading | 3 |
| ENGL 104 | 3 |  |
| Creative and Aesthetic Inquiry Course | 3 |  |
| Humanities Inquiry Course | Hours | $\mathbf{3}$ |

## Second Year

Fall

| PSYC 232 | Psychological Science II: Statistical <br> Applications | 3 |
| :--- | :--- | :--- |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |
| SCI 102 | Understanding the Physical World | 3 |
| Thematic Thread Requirement | 3 |  |
| Select one of the following: | 3 |  |

PSYC Elective

PSYC Diversity Elective
Declare a Thematic Thread ${ }^{3}$

## Hours

15
Spring
Select one of the following: 3-4
PSYC Developmental Core Course \# 3
PSYC Developmental Core Elective \# 1
Civil Discourse Requirement - select one 3

| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |

Social Science Inquiry Course or Free Elective 3
Thematic Thread Requirement 3
Thematic Thread Requirement 3

## Third Year

Fall
PSYC Developmental Core Course \# 3 or \#4 3
PSYC Developmental Core Elective \# 1 or \#2 3-4
PSYC Advanced Developmental Course \#1 3
Thematic Thread Requirement or Computer Competency (if 3 needed)
Select one of the following: 3

## PSYC Elective

PSYC Diversity Elective

## Spring

Select one of the following: 3-4
PSYC Developmental Core Course \# 4
PSYC Developmental Core Elective \# 2


Students are required to maintain minimum Overall and Psychology GPAs of 2.0 in order to retain the major in Psychology. Students are required to earn a grade of C or higher in Introduction to Psychology (PSYC 105) in order to take all other Psychology courses. Students are required to earn a grade of C or higher in Psychological Science I: Research Methods (PSYC 231) and Psychological Science II: Statistical Applications (PSYC 232) in order to progress in the program. Each course can only be repeated once.

## Program Learning Outcomes

- Scientific Literacy \& Research Foundations: Learn scientific literacy and fundamental and organizing principles in psychology and neuroscience.
- Breadth of Knowledge \& Making Connections: Develop breadth of knowledge about neuroscience from multiple scientific perspectives and learn about the interdisciplinary nature of neuroscience by making connections between the disciplines.
- Depth of Knowledge, Technical Expertise and Advanced Research: Advance depth of knowledge in neuroscience related fields and independent research ability.


## Neuroscience Core Competencies:

- Independent and critical thinkers; self-motivated learners
- Basic knowledge in Neuroscience/Biology/Chemistry/Psychology
- Ability to think creatively and integratively
- Quantitative skills
- Scientific inquiry/analytical skills/research skills
- Communication skills


## Related Links

Psychology - Neuroscience, BS Program Page (https://www.sru.edu/ academics/majors-and-minors/psychology-neuroscience/)

Psychology Department Page (https://www.sru.edu/academics/colleges-and-departments/ches/departments/psychology/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

Code Title Hours
Rock Studies Requirements 44
Other Basic Requirements 0-3
Computer Competency 0-3

Major/Concentration Requirements 56-57
Electives 20-21

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | :--- |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Select one of the following: | 3 |  |
| COMM 200 |  | Civil Discourse: Theory \& Practice |


| PHIL 110 | Ethics and Civil Discourse |
| :---: | :--- |
| POLS 235 | Civil Discourse and Democracy |
| Subtotal |  |


| Subtotal | 15 |
| :--- | :--- |

Integrated Inquiry
Creative and Aesthetic InquiryHumanities InquirySocial Science Inquiry
PSYC 105 Introduction to Psychology 3

| Physical \& Natural Sciences Inquiry |  |
| :--- | :--- |
| BIOL $104 \quad$ Principles of Biology with Lab |  |

CHEM 107 General Chemistry I 4
\& CHEM 111 and General Chemistry I Lab
Subtotal 17

| Thematic Thread |  |
| :--- | :--- |
| Select 12 Credits $\left(\right.$ p. 1378) ${ }^{2}$ | 12 |
| Total Hours |  |

Total Hours ..... 44

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete on | following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrat | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major/Concentration Requirements

- 28 major credits must be taken at SRU or PASSHE
- 28 major credits must be taken at the 300 level or above
- Overall, 48 credit hours must be completed at the 300 or 400 level
- Students who do not meet minimum standards will be dismissed from the program. All dismissals are permanent.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Goal 1: Scientific Literacy \& Foundations ${ }^{1}$ |  |  |
| Must earn a grade of 'C' or higher in PSYC 105, PSYC 231, and PSYC 232. |  |  |
| Must earn a grade of 'B' or higher in PSYC 311. |  |  |
| PSYC 105 | Introduction to Psychology | 3 |
| PSYC 231 | Psychological Science I: Research Methods | 3 |
| PSYC 232 | Psychological Science II: Statistical Applications | 3 |
| PSYC 311 | Introduction to Behavioral Neuroscience | 4 |
| Subtotal |  | 13 |
| Goal 2: Depth of Knowledge \& Making Connections ${ }^{1}$ |  |  |
| Core Courses |  |  |
| PSYC 244 | Developmental Psychology | 3 |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |

Neuroscience Content Courses (select two courses) 6-7

| PSYC 233 | Sensation \& Perception |
| :--- | :--- |
| PSYC 303 | Learning |
| PSYC 321 | Drugs and Behavior |
| PSYC 334 | Health Psychology |
| PSYC 338 | Cognitive Psychology |

Interdisciplinary Core Courses

| BIOL 250 | Genetics with Lab | 4 |
| :--- | :--- | ---: |
| CHEM 201 | Organic Chemistry I | 3 |
| Subtotal |  | $19-20$ |

Goal 3: Depth of Knowledge, Technical Expertise \& Research ${ }^{1}$
Neuroscience Content Courses (select three courses) 9

| PSYC 471 | Psychopharmacology |
| :--- | :--- |
| PSYC 473 | Hormones and Behavior |
| PSYC 476 | Clinical Neuroscience |
| PSYC 477 | Developmental Neuroscience |

Research Capstone
Students must register for two semesters

| PSYC 451 | Research Capstone Internship | 6 |
| :--- | :--- | :--- |
| PSYC 451 | Research Capstone Internship | 6 |

Interdisciplinary Electives
Select one of the following: 3
BIOL 330 Microbiology/Lab

BIOL $335 \quad$ Cell Biology/Lab
BIOL 370 Molecular Biology with Lab

| Subtotal | 24 |
| :--- | ---: |
| Total Hours | $56-57$ |

1 Courses count for 50\% of Major requirements and Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

| Electives |  |  |
| :--- | :--- | ---: |
| Code | Title | Hours |
| CHEM 108 | General Chemistry II |  |
| \& CHEM 112 | and General Chemistry II Lab | 4 |
| STAT 252 | Introduction to Statistical Modeling | 3 |
| PSYC 355 | Topical Seminar in Neuroscience | 1 |
| Writing Competency Requirements | Hours |  |
| Code |  |  |
| Writing in Psychology \#1 |  |  |
| Writing in Psychology \#2 |  |  |
| Writing in Psychology \#3 |  |  |
| Professional Competencies Paper |  |  |

## Elective Recommendations based on Student Goals

Students can choose from many of the following recommended electives to fulfill their requirements for the interdisciplinary elective for the neuroscience concentration and/or for their remaining credits after meeting their rock studies and major requirements.

| Recommended Electives for Psychology (Biology Concentration) |  |  |
| :--- | :--- | ---: |
| Code | Title | Hours |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| BIOL 340 | Vertebrate Anatomy with Lab $^{1}$ | 3 |
| BIOL 330 | Microbiology/Lab $^{2}$ | 3 |
| BIOL 335 | Cell Biology/Lab ${ }^{2}$ | 3 |
| BIOL 325 | Biometry with Lab | 3 |
| BIOL 370 | Molecular Biology with Lab | 3 |
| BIOL 410 | Animal Physiology with Lab ${ }^{3}$ | 3 |
| BIOL 470 | Histology with Lab ${ }^{4}$ | 3 |

1 additional pre-requisite BIOL 212 General Zoology/Lab
2 additional pre-requisite CHEM 201 Organic General Chemistryl
3 additional pre-requisites include BIOL 212 General Zoology/Lab \& CHEM 201 Organic Chemistry I
4
additional pre-requisite includes BIOL 212 General Zoology/Lab)

| Recommended Electives for Psychology (Chemistry Concentration) |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| CHEM 201 <br> \& CHEM 211 | Organic Chemistry I and Organic Chemistry Laboratory I | 4 |
| CHEM 202 <br> \& CHEM 212 | Organic Chemistry II and Organic Chemistry Laboratory II | 4 |
| CHEM 335 <br> \& CHEM 336 | Biochemistry I and Biochemistry Laboratory I | 4 |
| CHEM 337 <br> \& CHEM 338 | Biochemistry II and Biochemistry Laboratory II | 4 |
| Recommended Electives for Psychology (Biostatistics Concentration) |  |  |
| Code | Title | Hours |
| HLTH 312 | Data Management for Health Science | 3 |
| HLTH 313 | Biostatistics | 3 |
| STAT 252 | Introduction to Statistical Modeling | 3 |


| STAT 254 | Nonparametric Statistics | 3 |
| :--- | :--- | :--- |
| STAT 256 | Statistical Computing | 3 |


| Recommended Electives for Pre-Professional Concentration (e.g., |  |  |
| :--- | :--- | ---: |
| pre-med, pre-vet) |  |  |
| Concentration  <br> Code Title | Hours |  |
| PHYS 201 | Elements of Physics I with Lab | 4 |
| PHYS 202 | Elements of Physics II/ Lab | 4 |
| CHEM 201 | Organic Chemistry I <br> \& CHEM 211 | and Organic Chemistry Laboratory I |
| CHEM 202 Organic Chemistry II <br> \& CHEM 212 and Organic Chemistry Laboratory II <br> CHEM 335 Biochemistry I <br> \& CHEM 336 Biochemistry Laboratory I <br> CHEM 337 Biochemistry II <br> \& CHEM 338 and Biochemistry Laboratory II 4 | 4 |  |

Recommended Electives for Physician Assistant Concentration
Code Title Hours

| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| :--- | :--- | :--- |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| BIOL 330 | Microbiology/Lab ${ }^{1}$ | 3 |
| HCAM/ERS 250 | Medical Terminology for Healthcare | 3 |

1 Additional pre-requisite CHEM 201 Organic Chemistry I

| Additional Recommendations for Rock Studies Courses  <br> Code Title | Hours |  |
| :--- | :--- | ---: |
| BIOL 300 | Social and Ethical Issues in Genetics | 3 |
| CDEV 201 | Interpersonal and Group Dynamics | 3 |
| COMM 314 | Interpersonal Communication | 3 |
| INDP 201 | Principles of Sociology | 3 |
| INDP 202 | Introduction to Anthropology | 3 |
| PHIL 123 | Ethics | 3 |
| PHIL 325 | Medical/Health Care Ethics | 3 |

## Co-Curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International Study Programs
2. High-Impact Practice (HIP) designated classes

Student-faculty research
Student leadership (Psi Chi, Psychology Club, Reflections Body Image Organization, Nu Rho Psi, Neuro Rocks)
Service-learning classes
6. Career education planning (Office of Career Education and Development)
7. Internships
8. Volunteering in local human services and mental health agencies
9. Job shadowing

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
PSYCHOLOGY - BS (6170)
Concentration in Neuroscience (NEUR)
This program is effective as of Fall 2019.
Revised 07.02.2021
UCC 02.18.20
Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| PSYC 105 | Introduction to Psychology | 3 |
| ENGL 102 | Critical Writing | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| BIOL 104 | Principles of Biology with Lab | 4 |
| LIBR 110 | Introduction to Library \& Information Resources | 1 |
| INDS 101 | FYRST Seminar* | 1 |
|  | Hours | 15 |
| Spring |  |  |
| PSYC 231 | Psychological Science I: Research Methods | 3 |
| Creative and Aesthetics Inquiry |  | 3 |
| ENGL 104 | Critical Reading | 3 |
| Civil Discourse Requirement - select one |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
|  | Hours | 15 |

## Second Year

Fall

| PSYC 232 | Psychological Science II: Statistical <br>  <br>  <br> Applications | 3 |
| :--- | :--- | :---: |
| CHEM 107 | General Chemistry I <br> \& CHEM 111 | and General Chemistry I Lab |
| PSYC 276 | Introduction to Abnormal Psychology | 4 |
| Humanities Inquiry | 3 |  |
| Free Elective (Neuro Recommended) | 3 |  |
| Declare a Thematic Thread ${ }^{2}$ | 3 |  |
|  | Hours | $\mathbf{1 6}$ |

## Spring

PSYC 311 Introduction to Behavioral Neuroscience

| CHEM 108 General Chemistry II <br> \& CHEM 112 I Lab and General Chemistry LI | 4 |
| :---: | :---: |
| PSYC 244 Developmental Psychology | 3 |
| Free Elective (Neuro Recommended) | 3 |
| Hours | 14 |
| Third Year |  |
| Fall |  |
| Goal 2: Neuroscience Content Course \#1 | 3 |
| CHEM 201 Organic Chemistry I | 3 |
| Thematic Thread Requirement | 3 |
| Free Elective (Neuro Recommended) | 3 |
| Free Elective (Neuro Recommended) | 3 |
| Hours | 15 |
| Spring |  |
| Goal 2: Neuroscience Content Course \#2 | 3 |
| Goal 3: Neuroscience Content Course \#1 | 3 |
| BIOL 250 Genetics with Lab | 4 |
| Thematic Thread Requirement | 3 |
| Free Elective (Neuro Recommended) | 3 |
| Hours | 16 |
| Fourth Year |  |
| Fall |  |
| PSYC 451 Research Capstone Internship | 6 |
| Goal 3: Neuroscience Content Course \#2 | 3 |
| Major Interdisciplinary Elective | 3 |
| Thematic Thread Requirement | 3 |
| Hours | 15 |
| Spring |  |
| PSYC 451 Research Capstone Internship | 6 |
| Goal 3: Psych Neuro Content Course \#3 | 3 |
| Free Elective (Neuro Recommended) | 3 |
| Thematic Thread Requirement | 3 |
| Hours | 15 |
| Total Hours** | 121 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/ ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UIdNTi4u)to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6170
Concentration Code: NEUR
Revised: 09.21.20

## Psychology, Bachelor of Science (BS) - Concentration in Neuroscience / Pre-Physician Assistant (SRU) (Traditional)

## Psychology Program Learning Outcomes

- Theory and Content of Psychology: Students should be familiar with the major theoretical approaches, findings, and historical trends in psychology.
- Methodology: Students should understand and be able to use major research methods in psychology, including design, data analysis, and interpretation.
- Critical Thinking, Logic, and Problem-Solving: Students should use and respect skeptical inquiry, critical thinking, and the scientific approach to understanding behavior.
- Information Competence, Technology, and Computers: Students should demonstrate information competence and the ability to use computers and other technology for multiple purposes.
- Communication Skills: Students should be able to express themselves effectively in written and oral communication.
- Application of Psychology: Students should have an understanding of applications of psychology to personal, social, and organizational issues.


## What are your options?

Pre-Physician Assistant SRU 3+2: Earn a Master of Science degree in Physician Assistant Studies in five years rather than six. In the first three years, you complete your major courses and pre-requisites for the SRU PA program. At the end of your second year, you apply for admission into the SRU PA program. If accepted, your first year in the SRU PA program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

Pre-Physician Assistant (SRU Traditional): Complete the requirements for your major and the pre-requisites for the SRU PA program and apply to the SRU PA program in your senior year.

## Related Links

Psychology - Pre-Physician Assistant, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/psychology-pre-physicianassistant/)

Psychology Department Page (https://www.sru.edu/academics/colleges-and-departments/ches/departments/psychology/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement

[^19]
## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 44 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Writing Competency Requirements | $56-57$ |
| Major Requirements | 20 |
| Electives |  |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| PSYC 105 | Introduction to Psychology | 3 |
| Physical \& Natural Sciences Inquiry |  |  |
| BIOL 104 | Principles of Biology with Lab | 4 |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
| Subtotal |  | 17 |
| Thematic Thread |  |  |
| Select 12 Credi | 378) ${ }^{2}$ | 12 |
| Total Hours |  | 44 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code Title | Hours |
| :--- | ---: |
| Complete one of the following: | $0-3$ |
| Meet required minimum SAT or ACT math score OR |  |


| ESAP 110 | Beginning Algebra |  |
| :---: | :---: | :---: |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major Requirements

- 28 major credits must be taken at SRU or PASSHE
- 28 major credits must be at the 300 level or above

| Code | Title | Hours |
| :--- | :--- | ---: |
| Goal 1: Scientific Literacy \& Foundations ${ }^{1}$ |  |  |
| Must earn a grade of 'C' or higher in PSYC 105, 231, 232. |  |  |
| Must earn a grade of 'B' or higher in PSYC 311. |  |  |
| PSYC 105 | Introduction to Psychology | 3 |
| PSYC 231 | Psychological Science I: Research Methods | 3 |
| PSYC 232 | Psychological Science II: Statistical | 3 |
|  | Applications |  |
| PSYC 311 | Introduction to Behavioral Neuroscience | 4 |
| Subtotal |  | 13 |


| Goal 2: Breadth of Knowledge \& Making Connections ${ }^{1}$ |  |
| :--- | :--- |
| Psychology Core Courses |  |
| PSYC 244 | Developmental Psychology |
| PSYC 276 | Introduction to Abnormal Psychology |


| PSYC 233 | Sensation \& Perception |
| :--- | :--- |
| PSYC 303 | Learning |
| PSYC 321 | Drugs and Behavior |
| PSYC 334 | Health Psychology |
| PSYC 338 | Cognitive Psychology |

Interdisciplinary Core Courses

| BIOL 250 | Genetics with Lab | 4 |
| :--- | :--- | ---: |
| CHEM 201 | Organic Chemistry I | 3 |
| Subtotal |  | 19 |

Goal 3: Depth of Knowledge, Technical Expertise \& Research ${ }^{1}$
Neuroscience Content Courses (select three)

| PSYC 471 | Psychopharmacology |  |
| :--- | :--- | :--- |
| PSYC 473 | Hormones and Behavior |  |
| PSYC 476 | Clinical Neuroscience |  |
| PSYC 477 | Developmental Neuroscience |  |
| Research Capstone |  | 6 |
| PSYC 451 | Research Capstone Internship | 6 |
| PSYC 451 | Research Capstone Internship |  |


| Interdisciplinary Core Course | 3 |  |
| :--- | :--- | :--- |
| BIOL 210 <br> or BIOL 303 | Medical Microbiology with Lab <br> Behavioral Ecology/Lab | 24 |
| Subtotal | 56 |  |
| Total Hours |  |  |
| 1 | Courses count for 50\% of Major requirements and Major GPA |  |

## Writing Competency Requirements

Code Title Hours
Writing in Psychology \#1
Writing in Psychology \#2
Writing in Psychology \#3
Professional Competencies Paper

## Additional Physician Assistant Prerequisite Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| CHEM 108 | General Chemistry II | 3 |
| CHEM 112 | General Chemistry II Lab | 1 |
| ERS/HCAM 250 | Medical Terminology | 3 |
| Total Hours |  | $\mathbf{1 3}$ |

## Co-Curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International Study Programs
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership (Psi Chi, Psychology Club, Reflections Body Image Organization, Nu Rho Psi, Neuro Rocks)
5. Service-learning classes
6. Career education planning (Office of Career Education and Development)
7. Internships
8. Volunteering in local human services and mental health agencies
9. Job shadowing

Physician Assistant Studies (Master of Science in Physician Assistant Studies)

## Prerequisite Admission Requirements

For Application Requirements
Please refer to Slippery Rock University's Physician Assistant Studies (Master of Science in Physician Assistant Studies) website for requirements: http://www.sru.edu/pa (http://www.sru.edu/pa/)

| Liberal Studies and Rock Studies |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| Prerequisite Courses - SRU Physician Assistant |  |  |
| BIOL 104 | Principles of Biology with Lab | 4 |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| BIOL 250 | Genetics with Lab | 4 |
| $\begin{aligned} & \text { BIOL } 210 \\ & \quad \text { or BIOL } 330 \end{aligned}$ | Medical Microbiology with Lab Microbiology/Lab | 3 |
| CHEM 107 \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
| CHEM 108 \& CHEM 112 | General Chemistry II and General Chemistry II Lab | 4 |
| CHEM 201 | Organic Chemistry I | 3 |
| Inferential Statistics Course ${ }^{1}$ |  | 3 |
| PSYC 105 | Introduction to Psychology | 3 |
| ERS 250 <br> or HCAM 250 | Medical Terminology <br> Medical Terminology for Healthcare <br> Administrators | 3 |
| Total Hours |  | 37 |

1 Any statistics course with inferential statistics embedded. See My Rock Audit for specific courses.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University

PASSHE - Pennsylvania State System of Higher Education Institutions
PSYCHOLOGY - BS (6170)
Pre-PA SRU 3+2 (6SPP)
This program is effective as of Fall 2019.
Revised 09.10.20
UCC 02.18.20
Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall |  | 3 |
| PSYC 105 | Introduction to Psychology | 3 |
| ENGL 102 | Critical Writing | 3 |
| STAT 152 | Elementary Statistics I | 4 |
| BIOL 104 | Principles of Biology with Lab | 1 |
| LIBR 110 | Introduction to Library \& Information | 1 |
|  | Resources |  |
| INDS 101 | FYRST Seminar |  |
|  | Hours | 1 |


| Spring |  |  |
| :---: | :---: | :---: |
| PSYC 231 | Psychological Science I: Research Methods | 3 |
| Creative \& Aesthetic Inquiry Requirement |  | 3 |
| ENGL 104 | Critical Reading | 3 |
| Civil Discourse Requirement - select one |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
|  | Hours | 15 |
| Second Year |  |  |
| Fall |  |  |
| PSYC 232 | Psychological Science II: Statistical Applications | 3 |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |
| Humanities Inquiry |  | 3 |
| Free Elective (Neuro Recommended) |  | 3 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 16 |
| Spring |  |  |
| PSYC 311 | Introduction to Behavioral Neuroscience | 4 |
| CHEM 108 <br> \& CHEM 112 | General Chemistry II and General Chemistry II Lab | 4 |
| PSYC 244 | Developmental Psychology | 3 |
| Free Elective (Neuro Recommended) |  | 3 |
|  | Hours | 14 |
| Third Year |  |  |
|  |  |  |
| Goal 2: Neuroscience Content Course \#1 |  | 3 |
| CHEM 201 | Organic Chemistry I | 3 |
| BIOL 250 | Genetics with Lab | 4 |
| Free Elective (Neuro Recommended) |  | 3 |
| Thematic Thread Requirement |  | 3 |
|  | Hours | 16 |
| Spring |  |  |
| Goal 2: Neuroscience Content Course \#2 |  | 3 |
| Goal 3: Neuroscience Content Course \#1 |  | 3 |
| BIOL 210 | Medical Microbiology with Lab | 3 |
| ERS 250 | Medical Terminology | 3 |
| Thematic Thread Requirement |  | 3 |
|  | Hours | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| PSYC 451 | Research Capstone Internship | 6 |
| Goal 3: Neuroscience Content Course \#2 |  | 3 |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| Thematic Thread Requirement |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| PSYC 451 | Research Capstone Internship | 6 |


| Goal 3: Neuroscience Content Course \#3 | 3 |  |
| :--- | ---: | ---: |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| Thematic Thread Requirement | 3 |  |
| Hours | $\mathbf{1 5}$ |  |
| Total Hours** | $\mathbf{1 2 1}$ |  |

1 Course offered in multiple subjects; cannot take course in first major subject.
2
Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/ ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UldNTi4u)to declare a thread.

* Students are encouraged to take INDS 101 as a free elective.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6170/Traditional
Revised 09.21.20

## Psychology, Bachelor of Science (BS) / Counseling Psychology w/Chatham University (MSCP), Accelerated

The accelerated concentration within the Psychology BS will prepare students for the Master of Science in Counseling Psychology (MSCP) at Chatham University. The accelerated concentration is designed to give students an opportunity to enrich their undergraduate education with an intensive program in psychology and facilitate their entry into the M.S. Counseling Psychology at Chatham University. The course work is tailored to meet the needs of the student as both a Psychology major and in a career in counseling psychology.

The following are the Pre-Chatham MSCP accelerated concentration requirements. If any of the following criteria are not satisfied, the concentration designation will be removed from the student's record:

1. A minimum of a grade of $C$ in each psychology course
2. A cumulative GPA of 3.5 or better on a 4.0 scale
3. All Psychology required courses taken through SRU, except Introduction to Psychology
4. Required Professional Competency must be taken at SRU
5. Psychology elective courses may be transferred
6. Recommended that the student meet with a faculty member from Chatham University (either in person, by phone or by email) during their sophomore or junior year

## Program Learning Outcomes

- Theory and Content of Psychology: Students should be familiar with the major theoretical approaches, findings, and historical trends in psychology.
- Methodology: Students should understand and be able to use major research methods in psychology, including design, data analysis, and interpretation.
- Critical Thinking, Logic, and Problem-Solving: Students should use and respect skeptical inquiry, critical thinking, and the scientific approach to understanding behavior.
- Information Competence, Technology, and Computers: Students should demonstrate information competence and the ability to use computers and other technology for multiple purposes.
- Communication Skills: Students should be able to express themselves effectively in written and oral communication.
- Application of Psychology: Students should have an understanding of applications of psychology to personal, social, and organizational issues.


## Related Links

Psychology - Pre-Counseling (MSCP) with Chatham, BS Program Page (https://www.sru.edu/academics/majors-and-minors/psychology-pre-counseling-psychology-(mscp)-with-chatham-university/)

Psychology Department Page (https://www.sru.edu/academics/colleges-and-departments/ches/departments/psychology/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 3.0 or higher
Overall GPA: 3.5 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | $49-50$ |
| Electives | 29 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic | Inquiry |  |


| Select 3 Credits (p. 1378) | 3 |
| :--- | ---: |
| Humanities Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Social Science Inquiry |  |
| PSYC 105 | 3 |
| Natural Sciences Inquiry |  |
| SCI 101 | Science of Life |
| Physical Science Inquiry | 3 |
| SCI 102 |  |
| Subtotal | 3 |
| Thematic Thread | 15 |
| Select 12 Credits (p. 1378) |  |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |

## Total Hours

## Computer Competency

| Code | Title | Hours |
| :--- | :--- | ---: |
| Demonstrate "computer competency" by one of the following: | $0-3$ |  |
| Pass Computer Competency Exam OR |  |  |$\quad$| Select one of the following at SRU or another post-secondary |  |
| :--- | :--- |
| institution: |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |
| CPSC 110 | Computer Concepts <br> CPSC 130 |
| Programming |  |

## Major Requirements

- 25 major credits must be taken at SRU or PASSHE
- 25 major credits must be taken at the 300 level or above
- Overall, 48 credit hours must be completed at the 300 or 400 level
- Students who do not meet minimum standards will be dismissed from, the program. All dismissals are permanent.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses (Grade of 'C' or higher required) ${ }^{1}$ |  |  |
| Required Courses may only be repeated once. |  |  |
| PSYC 105 | Introduction to Psychology | 3 |
| PSYC 231 | Psychological Science I: Research Methods | 3 |


| PSYC 232 | Psychological Science II: Statistical <br> Applications | 3 |
| :--- | :--- | ---: |
| PSYC 244 | Developmental Psychology | 3 |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |
| PSYC 311 | Introduction to Behavioral Neuroscience | 4 |
| PSYC 375 | Psychopathology of Adulthood | 3 |
| Subtotal |  | 22 |

Applied Psychology Electives ${ }^{1}$
Select two of the following:
PSYC $208 \quad$ Personality
PSYC 304 Theories of Counseling
PSYC 306 Introduction to Psychological Testing
PSYC $318 \quad$ Psychopathology of Childhood and Adolescence
PSYC 320 Introduction to Clinical Psychology
PSYC 475 Behavior Modification

## Biobehavioral Elective ${ }^{1}$

Select one of the following: 3-4

| PSYC 233 | Sensation \& Perception |
| :--- | :--- |
| PSYC 289 | Positive Psychology |
| PSYC 303 | Learning |
| PSYC 321 | Drugs and Behavior |
| PSYC 334 | Health Psychology |
| PSYC 338 | Cognitive Psychology |
| PSYC 471 | Psychopharmacology |
| PSYC 473 | Hormones and Behavior |
| PSYC 476 | Clinical Neuroscience |

Developmental Psychology Electives ${ }^{1}$
Select two of the following:
PSYC $364 \quad$ Child and Adolescent Development
PSYC $365 \quad$ Psychology of Aging
PSYC 415 Multicultural Identity Development
PSYC 477 Developmental Neuroscience
Diversity Elective ${ }^{1}$
Select one of the following: 3

| PSYC 240 | Human Sexual Behavior |
| :--- | :--- |
| PSYC 300 | Psychology of Women, Gender and Culture |
| PSYC 315 | Psychology of Sexual and Gender Diversity |
| PSYC 392 | Cross Cultural Psychology |

Required Professional Competency ${ }^{1}$
PSYC $450 \quad$ Field Placement Internship in Psychology 9
\& PSYC 485 and Senior Integration Seminar
Total Hours
49-50
1 Courses count for 50\% of Major requirements and Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Electives

Code
PSYC 350

## Title

Contemporary Topics in Psychological Science (Course may be repeated for a total of 2 credits)

## Writing Competency Requirements

## Code Title <br> Hours

Writing in Psychology \#1
Writing in Psychology \#2
Writing in Psychology \#3
Professional Competencies Paper

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International Study Programs
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership (Psi Chi, Psychology Club, Reflections Body Image Organization, Nu Rho Psi, Neuro Rocks)
5. Service-learning classes
6. Career education planning (Office of Career Education and Development)
7. Internships
8. Volunteering in local human services and mental health agencies
9. Job shadowing

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
PSYCHOLOGY - BS (6170)
Counseling PSYC with Chatham University (MSCP) (617A)
This program is effective as of Fall 2019.
Revised 09.10.20
UCC 02.05.20

## Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall |  |  |
| PSYC 105 | Introduction to Psychology | 3 |
| ENGL 102 | Critical Writing | 3 |
| STAT 152 | Elementary Statistics I | 3 |


| Creative and Aesthetic Inquiry Course |  | 3 |
| :---: | :---: | :---: |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| LIBR 110 | Introduction to Library \& Information Resources | 1 |
| INDS 101 | FYRST Seminar * | 1 |
|  | Hours | 17 |
| Spring |  |  |
| PSYC 231 | Psychological Science I: Research Methods | 3 |
| ENGL 104 | Critical Reading | 3 |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |
| Humanities Inquiry Course |  | 3 |
| SCI 101 | Science of Life | 3 |
|  | Hours | 15 |

## Second Year

Fall

| PSYC 232 | Psychological Science II: Statistical <br>  <br>  <br> Applications | 3 |
| :--- | :--- | :--- |
| PSYC 244 | Developmental Psychology | 3 |
| PSYC Elective \#1 |  | 3 |
| SCI 102 | Understanding the Physical World | 3 |
| Civil Discourse Requirement - select one | 3 |  |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy $^{2}$ |  |
| Declare a Thematic Thread |  |  |

Hours ..... 15
Spring
PSYC Elective \#2 ..... 3
PSYC Elective \#3 ..... 3
PSYC Elective \#4 ..... 3
Thematic Thread Requirement ..... 3
Thematic Thread Requirement ..... 3
Third Year

Fall
PSYC 311 Introduction to Behavioral Neuroscience ..... 4
PSYC Elective \#5 ..... 3
PSYC Elective \#6 ..... 3
Thematic Thread Requirement ..... 3
Thematic Thread Requirement ..... 3

|  | Hours | $\mathbf{1 6}$ |
| :--- | :--- | ---: |
| Spring |  |  |
| PSYC 450 | Field Placement Internship in Psychology | 6 |
| PSYC 485 | Senior Integration Seminar | 3 |
| PSYC 375 | Psychopathology of Adulthood | 3 |
| Free Elective |  | $\mathbf{3}$ |
|  | Hours | $\mathbf{1 5}$ |
|  | Total Hours** | $\mathbf{9 3}$ |

1 Course offered in multiple subjects; cannot take course in first major subject.

2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/ ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UIdNTi4u)to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6170
Concentration Code: MSCP (617A)
Revised: 09.21.20

## Psychology, Bachelor of Science (BS) / Pre-Counseling (SRU) (3+3)

The Psychology program offers a Pre-Counseling 3+3 option for students interested in a career in Mental Health Counseling. Undergraduate students work with their academic adviser to complete courses needed to fulfill the requirements for both a Bachelor of Science degree and the entrance requirements for either of two Master of Arts programs: Clinical Mental Health Counseling or Student Affairs in Higher Education with College Counseling. Graduate study in both of these programs prepares students for licensure as a Professional Counselor. The Psychology program prepares students for graduate study by providing a strong basis in the biopsychosocial processes of human functioning. The first year of the Master of Arts program meets the requirements for the fourth year of the Bachelor of Science degree.

## Psychology (BS) - 3+3 Pre-Counseling

$3+3$ Pre-Counseling program requirements:

- Students are required to maintain minimum Overall and Psychology GPAs of 3.0 in order to retain the major in Psychology. Students are required to earn a grade of C or higher in Introduction to Psychology (PSYC 105) in order to take all other Psychology courses. Students are required to earn a grade of C or higher in Psychological Science I: Research Methods (PSYC 231) and Psychological Science II: Statistical Applications (PSYC 232) in order to progress in the program. Each course can only be repeated once.


## Program Learning Outcomes

- Theory and Content of Psychology: Students should be familiar with the major theoretical approaches, findings, and historical trends in psychology.
- Methodology: Students should understand and be able to use major research methods in psychology, including design, data analysis, and interpretation.
- Critical Thinking, Logic, and Problem-Solving: Students should use and respect skeptical inquiry, critical thinking, and the scientific approach to understanding behavior.
- Information Competence, Technology, and Computers: Students should demonstrate information competence and the ability to use computers and other technology for multiple purposes.
- Communication Skills: Students should be able to express themselves effectively in written and oral communication.
- Application of Psychology: Students should have an understanding of applications of psychology to personal, social, and organizational issues.


## Related Links

Psychology - Pre-Counseling, BS Program Page (https://www.sru.edu/ academics/majors-and-minors/psychology-pre-counseling-33/)

Psychology Department Page (https://www.sru.edu/academics/colleges-and-departments/ches/departments/psychology/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 3.0 or higher
Overall GPA: 3.0 or higher

## Summary*

Code Title Hours
Rock Studies Requirements 42
Other Basic Requirements 0-3
Computer Competency 0-3
Major Requirements 42-44
Electives

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the $1^{\text {st }}$ year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.


## Rock Studies Requirements



| SCI 101 | Science of Life | 3 |
| :--- | ---: | ---: |
| Physical Science Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal | 15 |  |
| Thematic Thread |  |  |
| Select 12 Credits (p. 1378) |  |  |
| Total Hours | 12 |  |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major Requirements

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above
- Overall, 48 credit hours must be completed at the 300 or 400 level
- Students who do not meet minimum standards will be dismissed from, the program. All dismissals are permanent.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses (Grade of 'C' or higher required) ${ }^{1}$ |  |  |
| Required Courses may only be repeated once. |  |  |
| PSYC 105 | Introduction to Psychology | 3 |
| PSYC 231 | Psychological Science I: Research Methods | 3 |
| PSYC 232 | Psychological Science II: Statistical Applications | 3 |
| PSYC 244 | Developmental Psychology | 3 |
| PSYC 276 | Introduction to Abnormal Psychology ${ }^{2}$ | 3 |
| PSYC 375 | Psychopathology of Adulthood | 3 |
| Subtotal |  | 18 |


| Applied Psychology Electives ${ }^{1}$ |  |  |
| :---: | :---: | :---: |
| Select two of the following: |  | 6 |
| PSYC 208 | Personality |  |
| PSYC 304 | Theories of Counseling |  |
| PSYC 306 | Introduction to Psychological Testing |  |
| PSYC 318 | Psychopathology of Childhood and Adolescence |  |
| PSYC 320 | Introduction to Clinical Psychology |  |
| PSYC 475 | Behavior Modification |  |
| Subtotal |  | 6 |
| Biobehavioral Elective ${ }^{1}$ |  |  |
| Select two of the following: |  | 6-8 |
| PSYC 233 | Sensation \& Perception |  |
| PSYC 289 | Positive Psychology |  |
| PSYC 303 | Learning |  |
| PSYC 311 | Introduction to Behavioral Neuroscience |  |
| PSYC 321 | Drugs and Behavior |  |
| PSYC 334 | Health Psychology |  |
| PSYC 338 | Cognitive Psychology |  |
| PSYC 471 | Psychopharmacology |  |
| PSYC 473 | Hormones and Behavior |  |
| PSYC 476 | Clinical Neuroscience |  |
| Subtotal |  | 6-8 |
| Developmental Psychology Electives ${ }^{1}$ |  |  |
| Select two of the following: |  | 6 |
| PSYC 364 | Child and Adolescent Development |  |
| PSYC 365 | Psychology of Aging |  |
| PSYC 415 | Multicultural Identity Development |  |
| PSYC 428 | Social and Emotional Development Across the Lifespan |  |
| PSYC 445 | Infant and Child Cognition |  |
| PSYC 477 | Developmental Neuroscience |  |
| Subtotal |  | 6 |
| Diversity Elective ${ }^{1}$ |  |  |
| Select one of the following: |  | 3 |
| PSYC 240 | Human Sexual Behavior |  |
| PSYC 300 | Psychology of Women, Gender and Culture |  |
| PSYC 315 | Psychology of Sexual and Gender Diversity |  |
| PSYC 392 | Cross Cultural Psychology |  |
| Subtotal |  | 3 |
| Required Professional Competency |  | 1 |
| PSYC 420 | Community Service Practicum in Psychology | 3 |
| or PSYC 430 | Research Practicum in Psychology |  |

## Total Hours

1 Courses count for $50 \%$ of Major requirements and Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

| Electives |  |
| :--- | :--- |
| Code | Title |
| PSYC 350 | Contemporary Topics in Psychological <br>  <br>  <br>  <br> Science (Course may be repeated for a <br> total of 2 credits) |

Hours

## Writing Competency Requirements

## Code Title

Writing in Psychology \#1
Writing in Psychology \#2
Writing in Psychology \#3

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International Study Programs
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership (Psi Chi, Psychology Club, Reflections Body Image Organization, Nu Rho Psi, Neuro Rocks)
5. Service-learning classes
6. Career education planning (Office of Career Education and Development)
7. Internships
8. Volunteering in local human services and mental health agencies
9. Job shadowing Volunteering

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
PSYCHOLOGY - BS (6170)
Pre-Counseling 3+3 (617C)
This program is effective as of Fall 2019.
Revised 09.15.20
UCC 02.18.20

## Recommended Three-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall |  | 3 |
| PSYC 105 | Introduction to Psychology | 3 |
| ENGL 102 | Critical Writing | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Creative and Aesthetic Inquiry Course |  |  |


| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| LIBR 110 | Introduction to Library \& Information Resources | 1 |
| INDS 101 | FYRST Seminar* | 1 |
|  | Hours | 17 |
| Spring |  |  |
| PSYC 231 | Psychological Science I: Research Methods | 3 |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |
| ENGL 104 | Critical Reading | 3 |
| SCI 101 | Science of Life | 3 |
| Humanities Inquiry Course |  | 3 |
| Free Elective |  | 3 |
|  | Hours | 18 |
| Second Year |  |  |
| Fall |  |  |
| PSYC 232 | Psychological Science II: Statistical Applications | 3 |
| PSYC 244 | Developmental Psychology | 3 |
| PSYC Elective \#1 |  | 3 |
| Civil Discourse Requirement - select one |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| SCI 102 | Understanding the Physical World | 3 |
| Thematic Thread Requirement |  | 3 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
| Hours |  | 18 |
| Spring |  |  |
| PSYC Elective \#2 |  | 3-4 |
| PSYC Elective \#3 |  | 3-4 |
| PSYC Elective \#4 |  | 3 |
| Thematic Thread Requirement |  | 3 |
| Thematic Thread Requirement |  | 3 |
| Social Science Inquiry or Free Elective (if all other courses are 3 credits) |  | 3 |
|  | Hours | 18-20 |
| Third Year |  |  |
| Fall |  |  |
| PSYC 375 | Psychopathology of Adulthood | 3 |
| PSYC Elective \#5 |  | 3 |
| PSYC Elective \#6 |  | 3 |
| PSYC Elective \#7 |  | 3 |
| Thematic Thread Requirement |  | 3 |
| Free Elective (if needed) |  | 3 |
|  | Hours | 18 |
| Spring |  |  |
| PSYC 420 <br> or PSYC 430 | Community Service Practicum in Psychology or Research Practicum in Psychology | 3 |
| Free Elective |  | 3 |
| Free Elective |  | 3 |


| Free Elective |  | 3 |
| :--- | :--- | ---: |
|  | Hours | $\mathbf{1 2}$ |
|  | Total Hours** | $101-103$ |

1 Course offered in multiple subjects; cannot take course in first major subject.
2
Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/ ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UIdNTi4u)to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6170
Concentration Code: 617C
Revised: 09.21.20

## Psychology, Bachelor of Science (BS) / Pre-Occupational Therapy (SRU) (3+3)

## Psychology Program Learning Outcomes

- Theory and Content of Psychology: Students should be familiar with the major theoretical approaches, findings, and historical trends in psychology.
- Methodology: Students should understand and be able to use major research methods in psychology, including design, data analysis, and interpretation.
- Critical Thinking, Logic, and Problem-Solving: Students should use and respect skeptical inquiry, critical thinking, and the scientific approach to understanding behavior.
- Information Competence, Technology, and Computers: Students should demonstrate information competence and the ability to use computers and other technology for multiple purposes.
- Communication Skills: Students should be able to express themselves effectively in written and oral communication.
- Application of Psychology: Students should have an understanding of applications of psychology to personal, social, and organizational issues.


## What are your options?

Pre-Occupational Therapy SRU 3+3: Earn a Doctor of Occupational Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU OTD program. At the end of your second year, you apply for admission into the SRU OTD program. If accepted, your first year in the SRU OTD program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can
reapply to the program. The accelerated option is for incoming freshmen only.

Pre-Occupational Therapy (SRU Traditional): Complete the requirements for your major and the pre-requisites for the SRU OTD program and apply to the SRU OTD program in your senior year.

## Related Links

Psychology - Pre-Occupational Therapy, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/psychology-pre-occupational-therapy/)

Psychology Department Page (https://www.sru.edu/academics/colleges-and-departments/ches/departments/psychology/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

$1^{\text {st }}$ Major. Psychology

- Overall GPA: 2.00 or higher
- Major GPA (only includes Psychology courses): 2.50 or higher
$2^{\text {nd }}$ Major. Pre-OT SRU 3+3 Psychology
- Overall GPA: 3.00 or higher


## Summary*

Code Title

Hours
Other Basic Requirements ..... 0-3
Computer Competency ..... 0-3Writing Competency Requirements
Major Requirements ..... 34-35
Electives ..... 42* All undergraduate degree programs require a minimum of 120 credits.Some courses meet multiple requirements, but are only counted oncetoward the 120 credit total required to graduate. However, because thisis a pre-professional program, credits taken during the $1^{\text {st }}$ year of thegraduate program are applied toward the undergraduate credit hours tomeet the 120 credits required for your undergraduate degree.

## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  | 3 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Select one of the following: |  |  |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |


| Creative and Aesthetic Inquiry |  |
| :--- | :---: |
| Select 3 Credits (p. 1378) | 3 |
| Humanities Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Social Science Inquiry |  |
| PSYC 105 | 3 |
| Natural Sciences Inquiry |  |
| BIOL 216 | 3 |
| Physical Science Inquiry | 4 |
| PHYS 201 Elements of Physics I with Lab | 16 |
| Subtotal |  |
| Thematic Thread | 12 |
| Select 12 Credits (p. 1378) ${ }^{2}$ | 43 |



## Hours

sychology Elective Applied ${ }^{1}$

Select one of the following:

| PSYC 304 | Theories of Counseling |
| :--- | :--- |
| PSYC 306 | Introduction to Psychological Testing |
| PSYC 318 | Psychopathology of Childhood and <br> Adolescence |
| PSYC 320 | Introduction to Clinical Psychology |
| PSYC 375 | Psychopathology of Adulthood |
| PSYC 475 | Behavior Modification |

## Psychology Elective Biobehavioral ${ }^{1}$

Select one of the following: 3-4

| PSYC 233 | Sensation \& Perception |
| :--- | :--- |
| PSYC 289 | Positive Psychology |
| PSYC 303 | Learning |
| PSYC 321 | Drugs and Behavior |
| PSYC 334 | Health Psychology |
| PSYC 338 | Cognitive Psychology |
| PSYC 471 | Psychopharmacology |
| PSYC 473 | Hormones and Behavior |
| PSYC 476 | Clinical Neuroscience |

Psychology Elective Development ${ }^{1}$
Select one of the following:

| PSYC 364 | Child and Adolescent Development |
| :--- | :--- |
| PSYC 365 | Psychology of Aging |
| PSYC 415 | Multicultural Identity Development |
| PSYC 428 | Social and Emotional Development Across <br> the Lifespan |
| PSYC 445 | Infant and Child Cognition |
| PSYC 477 | Developmental Neuroscience |

Required Professional Competency ${ }^{1}$

| PSYC 420 | Community Service Practicum in <br> Psychology | 3 |
| :--- | :--- | :--- |

Total Hours 34-35

1 Courses count for $50 \%$ of Major requirements and Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

| Writing Competency Requirements |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| Writing in Psychology \#1 |  |  |
| Writing in Psychology \#2 |  |  |
| Writing in Psychology \#3 |  |  |
| Writing in Psychology \#4 |  |  |
| Additional Occupational Therapy Prerequisite Courses |  |  |
| Code | Title | Hours |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| Select one of the following: 3 |  |  |
| INDP 106 | Race and Ethnic Diversity in the USA |  |
| INDP 202 | Introduction to Anthropology |  |
| INDP 310 | Cultural Area Studies |  |
| INDP 321 | Minority Groups |  |
| SOWK 105 | Human Diversity |  |
| ERS/HCAM 250 | Medical Terminology | 3 |
| Total Hours |  | 9 |

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International Study Programs
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership (Psi Chi, Psychology Club, Reflections Body Image Organization, Nu Rho Psi, Neuro Rocks)
5. Service-learning classes
6. Career education planning (Office of Career Education and Development)
7. Internships
8. Volunteering in local human services and mental health agencies
9. Job shadowing Volunteering

## Doctor of Occupational Therapy (OTD)

Prerequisite Admission Requirements - Pre-
Occupational Therapy SRU

## For Application Requirements

Please refer to Slippery Rock University's Occupational Therapy Studies (Master of Science in Occupational Therapy Studies) website for requirements: http://www.sru.edu/OT (http://www.sru.edu/OT/)

## Rock Studies

| Code | Title | Hours |
| :--- | :--- | ---: |
| Prerequisite Courses | SRU Occupational Therapy |  |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| ERS 250 | Medical Terminology <br> or HCAM 250 | Medical Terminology for Healthcare <br> Administrators |
| PHYS 201 | Elements of Physics I with Lab <br> or PE 364 | Biomechanics of Individuals with Disabilities |


| STAT 152 | Elementary Statistics I | 3 |
| :--- | :--- | ---: |
| Research Methods |  | 3 |
| PSYC 105 | Introduction to Psychology | 3 |
| PSYC 244 | Developmental Psychology | 3 |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |
| Anthropology or Sociology ${ }^{1}$ | 3 |  |
| Total Hours | $\mathbf{3 1}$ |  |

Select one course. See My Rock Audit for specific courses.

## Pre-Occupational Therapy SRU 3+3

If any of these requirements are not met, the $3+3$ designation will be removed from the student's record:

1. A 3.0 or higher overall GPA must be maintained by the student.
2. The student can only be enrolled in the Pre-Occupational Therapy SRU $3+3$ program for a maximum of three (3) years, full-time continuous enrollment (fall/spring).

## Provision

Should a Pre-Occupational Therapy SRU 3+3 student be unsuccessful in completing the $1^{\text {st }}$ two semesters (summer or fall) of the Occupational Therapy Program and wants to complete the original undergraduate degree, it is solely up to the discretion of the undergraduate program Department Chair to determine which, if any, Occupational Therapy courses will count toward the completion of his/her undergraduate degree. In addition, students must complete any unfulfilled requirements of their undergraduate major. Students may still apply to the Doctor of Occupational Therapy Program with an earned Bachelor's degree.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
PSYCHOLOGY - BS (6170)
Pre-OT SRU 3+3 (6PSO)
This program is effective as of Fall 2019.
Revised 09.10.20
UCC 02.18.20

## Recommended Three-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall |  |  |
| PSYC 105 | Introduction to Psychology | 3 |
| ENGL 102 | Critical Writing | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Creative and Aesthetic Inquiry Course | 3 |  |
| SUBJ 139 | University Seminar $^{1}$ | 3 |


| LIBR 110 | Introduction to Library \& Information Resources | 1 |
| :---: | :---: | :---: |
| INDS 101 | FYRST Seminar * | 1 |
|  | Hours | 17 |
| Spring |  |  |
| Humanities Inquiry |  | 3 |
| Civil Discourse Requirement - select one |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| ENGL 104 | Critical Reading | 3 |
| PSYC 231 | Psychological Science I: Research Methods | 3 |
| PSYC 244 | Developmental Psychology | 3 |
|  | Hours | 15 |
| Second Year |  |  |
| Fall |  |  |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| PSYC 232 | Psychological Science II: Statistical Applications | 3 |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |
| Select one of the foll | wing: | 3 |


| INDP 202 | Introduction to Anthropology |  |
| :--- | :--- | :--- |
| SOWK 105 | Human Diversity |  |
| INDP 106 | Race and Ethnic Diversity in the USA |  |
| INDP 310 | Cultural Area Studies |  |
| INDP 321 | Minority Groups | 3 |
| Thematic Thread Requirement |  |  |
| Declare a Thematic Thread |  |  |
| Hours | $\mathbf{1 5}$ |  |


| Spring |  |  |  |  |
| :--- | :--- | ---: | :---: | :---: |
| PSYC 311 | Introduction to Behavioral Neuroscience | 4 |  |  |
| PSYC Elective \#1 | Anatomy and Physiology II with Lab | 3 |  |  |
| BIOL 217 | $\mathbf{3}$ |  |  |  |
| Thematic Thread Requirement | 3 |  |  |  |
| Thematic Thread Requirement | $\mathbf{3}$ |  |  |  |
| Hours |  |  |  | $\mathbf{1 6}$ |

Third Year
Fall
PSYC Elective \#2 3
PSYC Elective \#3 3
PHYS 201 Elements of Physics I with Lab 4
Thematic Thread Requirement 3

| Upper-Division Elective | 3 |
| :--- | ---: |


| Spring |  |  |
| :--- | :---: | :---: |
| PSYC 420 | Community Service Practicum in <br> Psychology | 3 |
| PSYC Elective \#4 (Developmental) | 3 |  |
| ERS 250 | Medical Terminology | 3 |
| Upper-Division Elective | 3 |  |


| Upper-Division Elective | 3 |
| :--- | ---: |
| Hours | $\mathbf{1 5}$ |
| Total Hours** | $\mathbf{9 4}$ |

1 Course offered in multiple subjects; cannot take course in first major subject.
2
Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/ ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UIdNTi4u)to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6170
Concentration Code: 6PS0
Revised 09.21.20

## Psychology, Bachelor of Science (BS) / Pre-Occupational Therapy (SRU) (Traditional)

## Psychology Program Learning Outcomes

Theory and Content of Psychology: Students should be familiar with the major theoretical approaches, findings, and historical trends in psychology.

- Methodology: Students should understand and be able to use major research methods in psychology, including design, data analysis, and interpretation.
- Critical Thinking, Logic, and Problem-Solving: Students should use and respect skeptical inquiry, critical thinking, and the scientific approach to understanding behavior.
- Information Competence, Technology, and Computers: Students should demonstrate information competence and the ability to use computers and other technology for multiple purposes.
- Communication Skills: Students should be able to express themselves effectively in written and oral communication.
- Application of Psychology: Students should have an understanding of applications of psychology to personal, social, and organizational issues.


## What are your options?

Pre-Occupational Therapy SRU 3+3: Earn a Doctor of Occupational Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU OTD program. At the end of your second year, you apply for admission into the SRU OTD program. If accepted, your first year in the SRU OTD program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can
reapply to the program. The accelerated option is for incoming freshmen only.

Pre-Occupational Therapy (SRU Traditional): Complete the requirements for your major and the pre-requisites for the SRU OTD program and apply to the SRU OTD program in your senior year.

## Related Links

Psychology - Pre-Occupational Therapy, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/psychology-pre-occupational-therapy/)

Psychology Department Page (https://www.sru.edu/academics/colleges-and-departments/ches/departments/psychology/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

- Overall GPA: 2.00 or higher
- Major GPA (only includes Psychology courses): 2.50 or higher


## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 43 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Writing Competency Requirements | $49-50$ |
| Major Requirements | $28-29$ |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.
Rock Studies Requirements
Code Title Hours

| The Rock |  |  |
| :--- | :--- | :--- |
| SUBJ 139 | University Seminar $^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :--- | :--- | ---: |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  |  |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) | 3 |  |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) | 3 |  |
| Social Science Inquiry | Introduction to Psychology |  |
| PSYC 105 |  |  |
| Natural Sciences Inquiry |  |  |


| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| :--- | ---: | ---: |
| Physical Science Inquiry |  |  |
| PHYS 201 | Elements of Physics I with Lab | 4 |
| Subtotal | 16 |  |
| Thematic Thread | 12 |  |
| Select 12 Credits (p. 1378) |  |  |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title |
| :--- | ---: |
| Complete one of the following: | Hours |
| $0-3$ |  |

Meet required minimum SAT or ACT math score OR
ESAP $110 \quad$ Beginning Algebra

Total Hours 0-3

## Computer Competency

Code Title Hours

Demonstrate "computer competency" by one of the following: 0-3
Pass Computer Competency Exam OR
Select one of the following at SRU or another post-secondary institution:

| CPSC 100 | Introduction to Computing for Liberal Arts |
| :--- | :--- |
| CPSC 110 | Computer Concepts |
| CPSC 130 | Introduction to Computing and |
|  | Programming |

PE 202 Technology for Wellness
Total Hours

## Major Requirements

- All Psychology Required courses, except PSYC 105, and Professional Competency must be taken at SRU.
- If Psychology Electives are transferred in, only grades of $A$ and $B$ will transfer

| Code | Title | Hours |
| :---: | :---: | :---: |
| Psychology Required Courses (Grade of A or B required) ${ }^{1}$ |  |  |
| PSYC 105 | Introduction to Psychology | 3 |
| PSYC 231 | Psychological Science I: Research Methods | 3 |
| PSYC 232 | Psychological Science II: Statistical Applications | 3 |
| PSYC 244 | Developmental Psychology | 3 |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |
| PSYC 311 | Introduction to Behavioral Neuroscience | 4 |
| Subtotal |  | 19 |
| Subtotal |  | 0 |
| Psychology Elective Diversity ${ }^{1}$ |  |  |

Select one from the following:

| PSYC 300 | Psychology of Women, Gender and Culture |
| :--- | :--- |
| PSYC 315 | Psychology of Sexual and Gender Diversity |
| PSYC 392 | Cross Cultural Psychology |

Psychology Elective Applied ${ }^{1}$
Select two from the following:

| PSYC 304 | Theories of Counseling |
| :--- | :--- |
| PSYC 306 | Introduction to Psychological Testing |
| PSYC 318 | Psychopathology of Childhood and <br>  <br> Adolescence |
| PSYC 320 | Introduction to Clinical Psychology |
| PSYC 475 | Psychopathology of Adulthood |

Psychology Elective Biobehavioral ${ }^{1}$
Select two from the following:

| PSYC 233 | Sensation \& Perception |
| :--- | :--- |
| PSYC 289 | Positive Psychology |
| PSYC 303 | Learning |
| PSYC 321 | Drugs and Behavior |
| PSYC 334 | Health Psychology |
| PSYC 338 | Cognitive Psychology |
| PSYC 471 | Psychopharmacology |
| PSYC 473 | Hormones and Behavior |
| PSYC 476 | Clinical Neuroscience |

Psychology Elective Development ${ }^{1}$
Select two from the following:

| PSYC 364 | Child and Adolescent Development |
| :--- | :--- |
| PSYC 365 | Psychology of Aging |
| PSYC 415 | Multicultural Identity Development |
| PSYC 428 | Social and Emotional Development Across <br> the Lifespan |
| PSYC 445 | Infant and Child Cognition |
| PSYC 477 | Developmental Neuroscience |
| Required Professional Competency ${ }^{\mathbf{1}}$ |  |
| PSYC 450 | Field Placement Internship in Psychology |
| PSYC 485 | Senior Integration Seminar |

1 Courses count for 50\% of Major requirements and Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Writing Competency Requirements

## Code <br> Title

## Hours

Writing in Psychology \#1
Writing in Psychology \#2
Writing in Psychology \#3
Professional Competencies Paper

# Additional Occupational Therapy Prerequisite Courses 

| Code | Title | Hours |
| :--- | :--- | ---: |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| Select one of the following: |  | 3 |
| INDP 106 | Race and Ethnic Diversity in the USA |  |
| INDP 202 | Introduction to Anthropology |  |
| INDP 310 | Cultural Area Studies |  |
| INDP 321 | Minority Groups |  |
| SOWK 105 | Human Diversity |  |
| ERS 250 | Medical Terminology <br> or HCAM 250 | Medical Terminology for Healthcare <br> Administrators |

Total Hours
6 Doctor of Occupational Therapy (OTD) Prerequisite Admission Requirements

## For Application Requirements

Please refer to Slippery Rock University's Occupational Therapy Studies (Master of Science in Occupational Therapy Studies) website for requirements: http://www.sru.edu/OT (http://www.sru.edu/OT/)

## Rock Studies

| Code | Title | Hours |
| :---: | :---: | :---: |
| Prerequisite Courses - SRU Occupational Therapy |  |  |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| ERS 250 or HCAM 250 | Medical Terminology <br> Medical Terminology for Healthcare <br> Administrators | 3 |
| $\begin{aligned} & \text { PHYS } 201 \\ & \quad \text { or PE } 364 \end{aligned}$ | Elements of Physics I with Lab <br> Biomechanics of Individuals with Disabilities | 4 |
| STAT 152 | Elementary Statistics I | 3 |
| Research Methods ${ }^{1}$ |  | 3 |
| PSYC 105 | Introduction to Psychology | 3 |
| PSYC 244 | Developmental Psychology | 3 |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |
| Anthropology or Sociology ${ }^{1}$ |  | 3 |
| Total Hours |  | 31 |

1 Select one course. See My Rock Audit for specific courses.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
PSYCHOLOGY - BS (6170)
Pre-OT 4+3 (PX)
This program is effective as of Fall 2019.

Revised 09.10.20
UCC 02.18.20
Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| PSYC 105 | Introduction to Psychology | 3 |
| ENGL 102 | Critical Writing | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Creative and Aesthetic Inquiry Course |  | 3 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| LIBR 110 | Introduction to Library \& Information Resources | 1 |
| INDS 101 | FYRST Seminar * | 1 |
|  | Hours | 17 |
| Spring |  |  |
| PSYC 231 | Psychological Science I: Research Methods | 3 |
| PSYC 244 | Developmental Psychology | 3 |
| ENGL 104 | Critical Reading | 3 |
| Civil Discourse Requirement - select one |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Humanities Inquiry |  | 3 |
|  | Hours | 15 |

## Second Year

Fall

| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| :--- | :--- | :--- |
| PSYC 232 | Psychological Science II: Statistical <br>  | Applications |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |

Select one of the following: 3

| INDP 202 | Introduction to Anthropology |
| :--- | :--- |
| SOWK 105 | Human Diversity |
| INDP 106 | Race and Ethnic Diversity in the USA |
| INDP 310 | Cultural Area Studies |
| INDP 321 | Minority Groups |
| Thematic Thread Requirement | 3 |
| Declare a Thematic Thread |  |


| Spring |  |  |
| :--- | :--- | :--- |
| PSYC 311 | Introduction to Behavioral Neuroscience | 4 |

PSYC Elective \#1 3

Thematic Thread Requirement 3
Thematic Thread Requirement 3

| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| :--- | :--- | ---: |
|  | Hours | $\mathbf{1 6}$ |

## Third Year

Fall
PSYC Elective \#2 3

PSYC Elective \#3

| PSYC Elective \#4 |  | 3 |
| :---: | :---: | :---: |
| Thematic Thread Requirement |  | 3 |
| Upper-Division Elective |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| PSYC Elective \#5 |  | 3 |
| PSYC Elective \#6 |  | 3 |
| PHYS 201 or PE 364 | Elements of Physics I with Lab or Biomechanics of Individuals with Disabilities | 4 |
| Free Elective |  | 3 |
| Free Elective |  | 3 |
|  | Hours | 16 |
| Fourth Year |  |  |
| Fall |  |  |
| PSYC Elective \#7 |  | 3 |
| Free Elective |  | 3 |
| Free Elective |  | 3 |
| Free Elective |  | 3 |
| Free Elective |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| PSYC 450 | Field Placement Internship in Psychology | 6 |
| PSYC 485 | Senior Integration Seminar | 3 |
| ERS 250 | Medical Terminology | 3 |
|  | Hours | 12 |
|  | Total Hours** | 121 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/
ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UIdNTi4u)to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6170
Revised 09.15.20

## Psychology, Bachelor of Science (BS) / Pre-Physician Assistant (SRU) (3+2)

## Psychology Program Learning Outcomes

- Theory and Content of Psychology: Students should be familiar with the major theoretical approaches, findings, and historical trends in psychology.
- Methodology: Students should understand and be able to use major research methods in psychology, including design, data analysis, and interpretation.
- Critical Thinking, Logic, and Problem-Solving: Students should use and respect skeptical inquiry, critical thinking, and the scientific approach to understanding behavior.
- Information Competence, Technology, and Computers: Students should demonstrate information competence and the ability to use computers and other technology for multiple purposes.
- Communication Skills: Students should be able to express themselves effectively in written and oral communication.
- Application of Psychology: Students should have an understanding of applications of psychology to personal, social, and organizational issues.


## What are your options?

Pre-Physician Assistant SRU 3+2: Earn a Master of Science degree in Physician Assistant Studies in five years rather than six. In the first three years, you complete your major courses and pre-requisites for the SRU PA program. At the end of your second year, you apply for admission into the SRU PA program. If accepted, your first year in the SRU PA program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

Pre-Physician Assistant (SRU Traditional): Complete the requirements for your major and the pre-requisites for the SRU PA program and apply to the SRU PA program in your senior year.

## Related Links

Psychology - Pre-Physician Assistant, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/psychology-pre-physicianassistant/)

Psychology Department Page (https://www.sru.edu/academics/colleges-and-departments/ches/departments/psychology/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
$1^{\text {st }}$ Major. Psychology

- Overall GPA: 2.00 or higher
- Major GPA (only includes Psychology courses): 2.50 or higher
$2^{\text {nd }}$ Major: Pre-PA SRU 3+2 Psychology
- Overall GPA: 3.00 or higher (before Fall 2018)
- Overall GPA: 3.25 or higher (Fall 2018 and after)


## Summary*

Code Title Hours

Rock Studies Requirements 44
Other Basic Requirements 0-3
Computer Competency 0-3
Writing Competency Requirements
Major Requirements 34-35
Electives 41

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the $1^{\text {st }}$ year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.


## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| PSYC 105 | Introduction to Psychology | 3 |
| Physical \& Natural Sciences Inquiry |  |  |
| BIOL 104 | Principles of Biology with Lab | 4 |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
| Subtotal |  | 17 |
| Thematic Thread |  |  |
| Select 12 Credit | 1378) ${ }^{2}$ | 12 |
| Total Hours |  | 44 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one | following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal A |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major Requirements

- All Psychology Required courses, except PSYC 105, and Professional Competency must be taken at SRU.
- If Psychology Electives are transferred in, only grades of $A$ and $B$ will transfer
- If you choose to pursue Pre-Physician Assistant SRU 3+2 Psychology and are not accepted into the PA program, then additional coursework is required to complete a first major of Psychology. Please refer to the Psychology BS Curriculum Guide


## Code Title Hours

Psychology Required Courses (Grade of A or B required) ${ }^{1}$

| PSYC 105 | Introduction to Psychology | 3 |
| :--- | :--- | ---: |
| PSYC 231 | Psychological Science I: Research Methods | 3 |
| PSYC 232 | Psychological Science II: Statistical | 3 |
|  | Applications | 3 |
| PSYC 244 | Developmental Psychology | 3 |
| PSYC 276 | Introduction to Abnormal Psychology | 4 |
| PSYC 311 | Introduction to Behavioral Neuroscience | 4 |
| Subtotal |  | 19 |

## Psychology Elective Diversity ${ }^{1}$

Select one of the following:

| PSYC 300 | Psychology of Women, Gender and Culture |
| :--- | :--- |
| PSYC 315 | Psychology of Sexual and Gender Diversity |
| PSYC 392 | Cross Cultural Psychology |

Psychology Elective Applied ${ }^{1}$
Select one of the following:
PSYC $304 \quad$ Theories of Counseling
PSYC 306 Introduction to Psychological Testing
PSYC 318 Psychopathology of Childhood and
Adolescence

| PSYC 320 | Introduction to Clinical Psychology |
| :--- | :--- |
| PSYC 375 | Psychopathology of Adulthood |
| PSYC 475 | Behavior Modification |

Psychology Elective Biobehavioral ${ }^{1}$
Select one of the following: 3-4

| PSYC 233 | Sensation \& Perception |
| :--- | :--- |
| PSYC 289 | Positive Psychology |
| PSYC 303 | Learning |
| PSYC 321 | Drugs and Behavior |
| PSYC 334 | Health Psychology |
| PSYC 338 | Cognitive Psychology |
| PSYC 471 | Psychopharmacology |
| PSYC 473 | Hormones and Behavior |
| PSYC 476 | Clinical Neuroscience |

Psychology Elective Development ${ }^{1}$
Select one of the following: 3

| PSYC 364 | Child and Adolescent Development |
| :--- | :--- |
| PSYC 365 | Psychology of Aging |
| PSYC 415 | Multicultural Identity Development |
| PSYC 428 | Social and Emotional Development Across <br> the Lifespan |
| PSYC 445 | Infant and Child Cognition |
| PSYC 477 | Developmental Neuroscience |

Required Professional Competency ${ }^{1}$

| PSYC 420 | Community Service Practicum in <br> Psychology | 3 |
| :--- | :--- | ---: |
| Total Hours |  | $\mathbf{3 4 - 3 5}$ |

1 Courses count for 50\% of Major requirements and Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Writing Competency Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Writing in Psychology \#1 |  |  |
| Writing in Psychology \#2 |  |  |
| Writing in Psychology \#3 |  |  |
| Writing in Psychology \#4 |  |  |
| Additional Physician Assistant Prerequisite Courses |  |  |
| Code | Title | Hours |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| BIOL 250 | Genetics with Lab | 4 |
| BIOL 210 | Medical Microbiology with Lab | 3 |
| or BIOL 330 | Microbiology/Lab |  |
| CHEM 108 | General Chemistry II |  |
| \& CHEM 112 | and General Chemistry II Lab | 4 |
| CHEM 201 | Organic Chemistry I | 3 |
| ERS/HCAM 250 | Medical Terminology | 3 |
| Total Hours |  | 23 |

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International Study Programs
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership (Psi Chi, Psychology Club, Reflections Body Image Organization, Nu Rho Psi, Neuro Rocks)
5. Service-learning classes
6. Career education planning (Office of Career Education and Development)
7. Internships
8. Volunteering in local human services and mental health agencies
9. Job shadowing

## Physician Assistant Studies (Master of Science in Physician Assistant Studies) <br> Prerequisite Admission Requirements - Pre- Physician Assistant 3+2

## For Application Requirements

Please refer to Slippery Rock University's Physician Assistant Studies (Master of Science in Physician Assistant Studies) website for requirements:http://www.sru.edu/pa (http://www.sru.edu/pa/)

| Liberal Studies and Rock Studies |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| Prerequisite Courses - SRU Physician Assistant |  |  |
| BIOL 104 | Principles of Biology with Lab | 4 |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| BIOL 250 | Genetics with Lab | 4 |
| $\begin{aligned} & \text { BIOL } 210 \\ & \text { or BIOL } 330 \end{aligned}$ | Medical Microbiology with Lab Microbiology/Lab | 3 |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
| CHEM 108 \& CHEM 112 | General Chemistry II and General Chemistry II Lab | 4 |
| CHEM 201 | Organic Chemistry I | 3 |
| Inferential Statistics Course ${ }^{1}$ |  | 3 |
| PSYC 105 | Introduction to Psychology | 3 |
| ERS 250 <br> or HCAM 250 | Medical Terminology <br> Medical Terminology for Healthcare Administrators | 3 |

## Total Hours

1 Any statistics course with inferential statistics embedded. See My Rock Audit for specific courses.

## Pre-Physician Assistant SRU 3+2 Requirements

If any of these requirements are not met, the $3+2$ designation will be removed from the student's record:

1. A 3.25 or higher overall GPA must be maintained by the student.
2. The student can only be enrolled in the Pre-Physician Assistant SRU $3+2$ program for a maximum of three (3) years, full-time continuous enrollment (fall/spring).

## Provision

Should a Pre-Physician Assistant SRU 3+2 student be unsuccessful in completing the $1^{\text {st }}$ two semesters (summer or fall) of the Physician Assistant Program and wants to complete the original undergraduate degree, it is solely up to the discretion of the undergraduate program Department Chair to determine which, if any, Physician Assistant courses will count toward the completion of his/her undergraduate degree. In addition, students must complete any unfulfilled requirements of their undergraduate major. Students may still apply to the Physician Assistant Studies Program with an earned Bachelor's degree.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
PSYCHOLOGY - BS (6170)
Pre-PA SRU 3+2 (6SPP)
This program is effective as of Fall 2019.
Revised 09.10.20
UCC 02.18.20

## Recommended Three-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall |  |  |
| PSYC 105 | Introduction to Psychology | 3 |
| ENGL 102 | Critical Writing | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| BIOL 104 | Principles of Biology with Lab | 4 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| LIBR 110 | Introduction to Library \& Information | 1 |
|  | Resources |  |
| INDS 101 | FYRST Seminar ${ }^{*}$ | $\mathbf{1}$ |
|  | Hours | $\mathbf{1 8}$ |


| Spring |  |  |
| :--- | :--- | ---: |
| PSYC 231 | Psychological Science I: Research Methods | 3 |
| ENGL 104 | Critical Reading | 3 |
| PSYC 244 | Developmental Psychology | 3 |
| BIOL 250 | Genetics with Lab | $\mathbf{4}$ |
| Creative and Aesthetic Inquiry Course | 3 |  |
| Hours | $\mathbf{1 6}$ |  |

## Second Year

Fall
PSYC 276
Introduction to Abnormal Psychology

| PSYC 232 | Psychological Science II: Statistical Applications | 3 |
| :---: | :---: | :---: |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| Humanities Inquiry Course |  | 3 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 16 |
| Spring |  |  |
| PSYC 311 | Introduction to Behavioral Neuroscience | 4 |
| PSYC Elective \#1 |  | 3 |
| CHEM 108 <br> \& CHEM 112 | General Chemistry II and General Chemistry II Lab | 4 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| Civil Discourse Requirement - select one |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
|  | Hours | 17 |
| Third Year |  |  |
| Fall |  |  |
| PSYC Elective \#2 |  | 3 |
| PSYC Elective \#3 |  | 3 |
| CHEM 201 | Organic Chemistry I | 3 |
| Thematic Thread Requirement |  | 3 |
| Thematic Thread Requirement |  | 3 |
| Thematic Thread Requirement |  | 3 |
|  | Hours | 18 |
| Spring |  |  |
| PSYC 420 | Community Service Practicum in Psychology | 3 |
| PSYC Elective \#4 |  | 3 |
| $\begin{aligned} & \text { BIOL } 210 \\ & \text { or BIOL } 330 \end{aligned}$ | Medical Microbiology with Lab or Microbiology/Lab | 3 |
| ERS 250 | Medical Terminology | 3 |
| Thematic Thread Requirement |  | 3 |
|  | Hours | 15 |
|  | Total Hours** | 100 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/ ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UldNTi4u)to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6170
Concentration Code: 6SPP
Revised 09.21.20

## Psychology, Bachelor of Science (BS) / Pre-Student Affairs (SRU) (3+2)

The Psychology program offers a Pre-Student Affairs 3+2 option for students interested in a career in Student Affairs. Undergraduate students work with their academic adviser to complete courses needed to fulfill the requirements for both a Bachelor of Science degree and the entrance requirements for the Master of Arts in Student Affairs program. Careers in Student Affairs involve counseling-focused positions at colleges and universities, including mental health counseling as well as those in housing and residence life, career services, student activities, multicultural services, academic advising, etc. It is a specialized program that prepares students for graduate study by providing a strong basis in the biopsychosocial processes of human functioning. The first year of the Master of Arts in Student Affairs program meets the requirements for the fourth year of the Bachelor of Science degree.

## Psychology (BS) - 3+2 Pre-Student Affairs

3+2 Pre-Student Affairs program requirements:

- Students are required to maintain minimum Overall and Psychology GPAs of 3.0 in order to retain the major in Psychology. Students are required to earn a grade of $C$ or higher in Introduction to Psychology (PSYC 105) in order to take all other Psychology courses. Students are required to earn a grade of C or higher in Psychological Science I: Research Methods (PSYC 231) and Psychological Science II: Statistical Applications (PSYC 232) in order to progress in the program. Each course can only be repeated once.


## Program Learning Outcomes

- Theory and Content of Psychology: Students should be familiar with the major theoretical approaches, findings, and historical trends in psychology.
- Methodology: Students should understand and be able to use major research methods in psychology, including design, data analysis, and interpretation.
- Critical Thinking, Logic, and Problem-Solving: Students should use and respect skeptical inquiry, critical thinking, and the scientific approach to understanding behavior.
- Information Competence, Technology, and Computers: Students should demonstrate information competence and the ability to use computers and other technology for multiple purposes.
- Communication Skills: Students should be able to express themselves effectively in written and oral communication.
- Application of Psychology: Students should have an understanding of applications of psychology to personal, social, and organizational issues.


## Related Links

Psychology - Pre-Student Affairs, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/psychology-pre-student-affairs-32/)

Psychology Department Page (https://www.sru.edu/academics/colleges-and-departments/ches/departments/psychology/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 3.0 or higher
Overall GPA: 3.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | $42-44$ |
| Electives | 36 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the $1^{\text {st }}$ year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.

| Rock Studies Requirements |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Select one | wing: | 3 |


| COMM 200 | Civil Discourse: Theory \& Practice |
| :---: | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |
| Subtotal |  |


| Integrated Inquiry |  |
| :--- | ---: |
| Creative and Aesthetic Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Humanities Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Social Science Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Natural Sciences Inquiry |  |
| SCl 101 | Science of Life |
| Physical Science Inquiry | 3 |
| SCl 102 Understanding the Physical World |  |
| Subtotal | 15 |

Thematic Thread
Select 12 Credits (p. 1378) ${ }^{2} \quad 12$

Total Hours 42
1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major Requirements

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above
- Overall, 48 credit hours must be completed at the 300 or 400 level
- Students who do not meet minimum standards will be dismissed from, the program. All dismissals are permanent.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses (Grade of 'C' or higher required) ${ }^{1}$ |  |  |
| Required Courses may only be repeated once. |  |  |
| PSYC 105 | Introduction to Psychology | 3 |
| PSYC 231 | Psychological Science I: Research Methods | 3 |
| PSYC 232 | Psychological Science II: Statistical Applications | 3 |
| PSYC 244 | Developmental Psychology | 3 |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |
| PSYC 375 | Psychopathology of Adulthood | 3 |
| Subtotal |  | 18 |
| Applied Psychology Electives ${ }^{1}$ |  |  |
| Select two of | wing: | 6 |
| PSYC 208 | Personality |  |
| PSYC 304 | Theories of Counseling |  |




| Second Year <br> Fall |  |  |
| :--- | :--- | ---: |
| PSYC 232 | Psychological Science II: Statistical <br>  <br> Applications | 3 |
| PSYC 244 | Developmental Psychology | 3 |
| PSYC Elective \#1 |  | 3 |
| Civil Discourse Requirement - select one | 3 |  |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| SCI 102 | Understanding the Physical World | 3 |
| Thematic Thread Requirement | 3 |  |
| Declare a Thematic Thread ${ }^{2}$ |  |  |

## Spring

| PSYC Elective \#2 | 3-4 |
| :---: | :---: |
| PSYC Elective \#3 | 3-4 |
| PSYC Elective \#4 | 3 |
| Thematic Thread Requirement | 3 |
| Thematic Thread Requirement | 3 |
| Social Science Inquiry or Free Elective (if all other courses are 3 credits) | 3 |
| Hours | 18-20 |

## Third Year

Fall

| PSYC 375 | Psychopathology of Adulthood | 3 |
| :--- | ---: | ---: |
| PSYC Elective \#5 | 3 |  |
| PSYC Elective \#6 | 3 |  |
| PSYC Elective \#7 | 3 |  |
| Thematic Thread Requirement | 3 |  |
| Free Elective (if needed) | 3 |  |
| Hours | $\mathbf{1 8}$ |  |

Spring
PSYC 420

or PSYC 430 $\quad$| Community Service Practicum in |
| :--- |
| Psychology |
| or Research Practicum in Psychology |

Free Elective
Free Elective


## Psychology, Bachelor of Science (BS) / Psychology w/ Chatham University (MAP), Accelerated

The accelerated concentration within the Psychology (BS) will prepare students for the Master of Arts in Psychology (MAP) at Chatham University. The accelerated concentration is designed to give students an opportunity to enrich their undergraduate education with an intensive program in psychology and facilitate their entry into the M.A. in Psychology at Chatham University. The course work is tailored to meet the needs of the student as both a Psychology major and in deepening their understanding of psychological science and theories.

The following are Psychology Chatham MAP accelerated requirements. If any of the following criteria are not satisfied, the concentration designation will be removed from the student's record:

1. A minimum of a grade of $C$ in each psychology course
2. A cumulative GPA of 3.5 or better on a 4.0 scale
3. All Psychology required courses taken through SRU, except Introduction to Psychology
4. Required Professional Competency must be taken through SRU
5. Psychology elective courses may be transferred
6. Recommended that the student meet with a faculty member from Chatham University (either in person, by phone or by email) during their sophomore or junior year

## Program Learning Outcomes

- Theory and Content of Psychology: Students should be familiar with the major theoretical approaches, findings, and historical trends in psychology.
- Methodology: Students should understand and be able to use major research methods in psychology, including design, data analysis, and interpretation.
- Critical Thinking, Logic, and Problem-Solving: Students should use and respect skeptical inquiry, critical thinking, and the scientific approach to understanding behavior.
- Information Competence, Technology, and Computers: Students should demonstrate information competence and the ability to use computers and other technology for multiple purposes.
- Communication Skills: Students should be able to express themselves effectively in written and oral communication.
- Application of Psychology: Students should have an understanding of applications of psychology to personal, social, and organizational issues.


## Related Links

Psychology - Chatham MAP Accelerated, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/psychology-pre-psychology-(map)-with-chatham-university/)

Psychology Department Page (https://www.sru.edu/academics/colleges-and-departments/ches/departments/psychology/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide GPA Requirement <br> Major GPA: 3.0 or higher Overall GPA: 3.5 or higher <br> Summary* <br> | Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Writing Competency Requirements |  |
| Major Requirements | $49-50$ |
| Electives | 28 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

Rock Studies Requirements
Code Title Hours

The Rock

| SUBJ 139 | University Seminar $^{1}$ | 3 |
| :--- | :--- | :--- |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |
| Subtotal |  |

Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378) 3

Select 3 Credits (p. 1378)


## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | $\mathbf{0 - 3}$ |

## Computer Competency

| Code | Title | Hours |
| :--- | :--- | ---: |
| Demonstrate "computer competency" by one of the following: | $0-3$ |  |
| Pass Computer Competency Exam OR |  |  |

PE 202 Technology for Wellness
Total Hours

## Major Requirements

- 25 major credits must be taken at SRU or PASSHE
- 25 major credits must be at the 300 level or above
- Overall, 48 credit hours must be completed at the 300 or 400 level
- Students who do not meet minimum standards will be dismissed from the program. All dismissals are permanent


| PSYC 232 | Psychological Science II: Statistical <br> Applications | 3 |
| :--- | :--- | ---: |
| PSYC 244 | Developmental Psychology | 3 |
| PSYC 276 | Introduction to Abnormal Psychology ${ }^{2}$ | 3 |
| PSYC 311 | Introduction to Behavioral Neuroscience | 4 |
| PSYC 375 | Psychopathology of Adulthood | 3 |
| Subtotal |  | 22 |

## Applied Psychology Electives ${ }^{1}$

Select two of the following: 6

| PSYC 208 | Personality |
| :--- | :--- |
| PSYC 304 | Theories of Counseling |
| PSYC 306 | Introduction to Psychological Testing |
| PSYC 318 | Psychopathology of Childhood and <br> Adolescence |
| PSYC 320 | Introduction to Clinical Psychology |
| PSYC 475 | Behavior Modification |
| Behavioral Elective |  |

Select one of the following: 3-4

| PSYC 233 | Sensation \& Perception |
| :--- | :--- |
| PSYC 289 | Positive Psychology |
| PSYC 303 | Learning |
| PSYC 321 | Drugs and Behavior |
| PSYC 334 | Health Psychology |
| PSYC 338 | Cognitive Psychology |
| PSYC 471 | Psychopharmacology |
| PSYC 473 | Hormones and Behavior |
| PSYC 476 | Clinical Neuroscience |

## Developmental Psychology Electives ${ }^{1}$

Select two of the following:

| PSYC 364 | Child and Adolescent Development |
| :--- | :--- |
| PSYC 365 | Psychology of Aging |
| PSYC 415 | Multicultural Identity Development |
| PSYC 477 | Developmental Neuroscience |

Diversity Electives ${ }^{1}$
Select one of the following:

| PSYC 240 | Human Sexual Behavior |  |
| :---: | :--- | ---: |
| PSYC 300 | Psychology of Women, Gender and Culture |  |
| PSYC 315 | Psychology of Sexual and Gender Diversity |  |
| PSYC 392 | Cross Cultural Psychology |  |
| Required Professional Competency ${ }^{1}$ |  |  |
| PSYC 450 | Field Placement Internship in Psychology | 6 |
| PSYC 485 | Senior Integration Seminar | 3 |
| Total Hours |  | $\mathbf{4 9 - 5 0}$ |

1 Courses count for $50 \%$ of Major requirements and Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

3 Electives

```
Code
PSYC 350
```

Title Hours
Contemporary Topics in Psychological
1 Science (Course may be repeated for a total of 2 credits)

## Writing Competency Requirements

Code Title Hours
Writing in Psychology \#1
Writing in Psychology \#2
Writing in Psychology \#3
Professional Competencies Paper

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International Study Programs
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership (Psi Chi, Psychology Club, Reflections Body Image Organization, Nu Rho Psi, Neuro Rocks)
5. Service-learning classes
6. Career education planning (Office of Career Education and Development)
7. Internships
8. Volunteering in local human services and mental health agencies
9. Job shadowing Volunteering

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
PSYCHOLOGY - BS (6170)
Psychology with Chatham (MAP) (617B)
This program is effective as of Fall 2019.
Revised 09.10.20
UCC 02.18.20

## Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall |  |  |
| PSYC 105 | Introduction to Psychology | 3 |
| ENGL 102 | Critical Writing | 3 |
| STAT 152 | Elementary Statistics I | 3 |



1 Course offered in multiple subjects; cannot take course in first major subject.

2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/ ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UIdNTi4u)to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6170
Concentration Code: MAP (617B)
Revised: 09.21.20

## Psychology, Minor

Admission to the minor is based on availability of seats and students must declare the minor by the 1st semester of their Junior year. A grade of $B$ or higher in Introduction to Psychology is required to declare and/or maintain the Minor.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Psychology, Minor Program Page (https://www.sru.edu/academics/ majors-and-minors/psychology/)

Psychology Department Page (https://www.sru.edu/academics/colleges-and-departments/ches/departments/psychology/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.0 or higher

## Admissions Requirements

Admission to the Psychology Minor is by application and approval only.

- Must apply by Junior I status
- Must complete Introduction to Psychology with a grade of a " B " or higher to apply.
- Must submit the Psychology Minor Application form to the Psychology Department chair.
- Qualified students are admitted to the minor only as slots become available.


## Minor Requirements

- Students must complete at least 9 credit hours in their minor from SRU
- A minimum of 9 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits
- Student must maintain a Psychology GPA of 2.0 at all times
- Students who do not meet minimum standards will be dismissed from the program. All dismissals are permanent

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| PSYC 105 | Introduction to Psychology ${ }^{1}$ | 3 |
| Core Electives |  |  |
| Select five co | ne credits at 300 level or higher: | 15 |
| PSYC 205 | Environmental Psychology |  |
| PSYC 208 | Personality |  |
| PSYC 233 | Sensation \& Perception |  |
| PSYC 240 | Human Sexual Behavior |  |
| PSYC 244 | Developmental Psychology |  |
| PSYC 276 | Introduction to Abnormal Psychology |  |
| PSYC 300 | Psychology of Women, Gender and Culture |  |
| PSYC 302 | Psychology of Criminal Behavior |  |
| PSYC 310 | Introduction to Industrial-Organizational Psychology |  |
| PSYC 315 | Psychology of Sexual and Gender Diversity |  |
| PSYC 321 | Drugs and Behavior |  |
| PSYC 360 | History of Psychology |  |
| PSYC 364 | Child and Adolescent Development |  |
| PSYC 377 | Social Psychology |  |
| PSYC 475 | Behavior Modification |  |

1 Students must earn a grade of "B" or higher in Introduction to Psychology to be admitted into the program. The course can only be repeated once.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN PSYCHOLOGY (70A)
This program is effective as of Fall 2017.
UCC 03.05.20
Revised 10.28.2021

## Public Health and Social Work

| Chair | Secretary | Location | Department <br> Phone |
| :--- | :--- | :--- | :--- |
| Dr. Adelle | Michelle McFeely | 111 Dinger | 724-738-2705 |
| Williams |  | Building |  |

Public Health Department Web Site URL (https://www.sru.edu/ academics/colleges-and-departments/ches/departments/public-health/) Public Health Fact Sheet URL (https://www.sru.edu/documents/ programs/factsheets/undergraduate/publichealth-fs.pdf)

Social Work Department Web Site URL (https://www.sru.edu/academics/ colleges-and-departments/ches/departments/social-work/)
Social Work Fact Sheet URL (https://www.sru.edu/documents/programs/ factsheets/undergraduate/socialwork-fs.pdf)

## Faculty

Kristie Abbs
Instructor
Public Health \& Social Work
D.S.W., Capella University
M.Ed., Slippery Rock University
M.S.W., Ohio State University
B.S., Radford University

## Nikhil Ahuja

Assistant Professor
Public Health \& Social Work
M.D.S., Rajiv Gandhi University
B.D.S., Maharashtra University

## Adaeze Aroh

Assistant Professor
Public Health \& Social Work

## Thomas Bechard

Assistant Professor
Public Health \& Social Work
D.S.W., Adelphia University
M.S.W., Barry University
B.A., University of Maine
B.A., Hubertus College

## Krisztina Beni

Instructor
Public Health \& Social Work

## Yvonne Eaton-Stull

Associate Professor
Public Health \& Social Work
D.S.W., Capella University
M.S.W., Boston College
B.A., Clarion University

Tarek Eshak
Assistant Professor
Public Health \& Social Work

## Kimberly Forrest

Assistant Professor
Public Health \& Social Work
Ph.D., University of Pittsburgh
M.P.H., University of Pittsburgh
M.S., Slippery Rock University
B.P.N., Medical School of Shanghai

## Denna Hays

Assistant Professor
Public Health \& Social Work

## Marcy Leeds

Professor
Public Health \& Social Work
Ph.D., Rutgers University
M.S., Case Western Reserve University
R.D., American Dietetic Association
B.S., Montclair State University

## Tracy Leet

Instructor
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M.S.W., Edinboro University
B.S.Ed., Slippery Rock University

## Bonnie Marsh

Assistant Professor
Public Health \& Social Work
D.S.W., Kutztown University
M.S.W., University of Pittsburgh
B.S.W., Penn State University

Tami Micsky
Assistant Professor
Public Health \& Social Work
D.S.W., Millersville University
M.S.S.A., Case Western Reserve University
B.S., Edinboro University

## Brittany Nwachuku

Assistant Professor
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M.S.W., University of Louisville
B.S., University of Louisville

## Joseph Robare

Associate Professor
Public Health \& Social Work
D.P.H., University of Pittsburgh
M.S., Indiana University of Pennsylvania
B.S., University of Massachusetts

## Alexander Ufelle

Associate Professor
Public Health \& Social Work
Ph.D., University of Pittsburgh
M.P.H., Western Kentucky University
M.B.B.S., Nnamdi Azikiew University

## Christophas Walker

Associate Professor
Public Health \& Social Work
Ph.D., University of Pittsburgh
M.Ed., University of Pittsburgh
B.A., University of Pittsburgh

## Adelle Williams

Professor
Public Health \& Social Work
Ph.D., University of Pittsburgh
M.Ed., University of Pittsburgh
B.A., University of Pittsburgh

## Programs

All first-year students who enter SRU in the Summer and Fall terms of 2019 and after will follow Rock Studies. Students who entered SRU before Spring 2019 will follow Liberal Studies. All new transfer students beginning Summer 2019 and after will follow Liberal Studies. We anticipate that transfer students will begin to enter under Rock Studies during the Summer/Fall term of 2021.

## Majors

- Health Science - Public Health, Bachelor of Science (BS) (p. 684)
- Health Science - Public Health, Bachelor of Science (BS) / PreOccupational Therapy (SRU) (3+3) (p. 687)
- Health Science - Public Health, Bachelor of Science (BS) / PreOccupational Therapy (SRU) (Traditional) (p. 690)
- Health Science - Public Health, Bachelor of Science (BS) / PrePhysical Therapy (SRU) (3+3) (p. 693)
- Health Science - Public Health, Bachelor of Science (BS) / PrePhysical Therapy (SRU) (Traditional) (p. 697)
- Health Science - Public Health, Bachelor of Science (BS) / PrePhysician Assistant (SRU) (3+2) (p. 700)
- Health Science - Public Health, Bachelor of Science (BS) / PrePhysician Assistant (SRU) (Traditional) (p. 703)
- Social Work, Bachelor of Science (BS) (p. 707)


## Minors

- Gerontology, Minor (p. 683)
- Public Health, Minor (p. 707)
- Social Work, Minor (p. 710)


## Courses

## GERO Courses

## GERO 139-University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## GERO 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## GERO 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## GERO 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## GERO 265 - Aging and the Older Person

Introduction to the interdisciplinary study of gerontology as a social, behavioral and biological science. A prerequisite to courses in gerontology and aging. Women and Aging examines the effects of women growing older in a changing society. Social, psychological, physical, economic, cultural, and political implications will be discussed, including health concerns, changing roles, and discrimination.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): 21 st Century Healthcare, Transfer Thread
Completion Course
Students with a semester level of Freshman 1 may not enroll.

## GERO 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1 may not enroll.

## GERO 295-Workbook

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1 may not enroll.

## GERO 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1 may not enroll.

## GERO 390-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GERO 395-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## GERO 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GERO 414 - Death and Dying

This course is an introduction to the study of death, dying and bereavement which utilizes a multidisciplinary approach. This course is aimed at sensitizing students to the subject of dying, death and bereavement, aiding students in adjusting to the death of a significant other, helping students examine their feeling and reactions to death and grieving and introducing students to diverse perspectives.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GERO 425 - Women and Aging

Examines the effects of women growing older in a changing society.
Social, psychological, physical, economic, cultural, and political
implications will be discussed, including health concerns, changing roles, and discrimination.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Gender and Diversity, Transfer Thread Completion

## Course

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## GERO 450-Gerontology Internship

Individually designed experiential learning intended to provide the student with an opportunity for observation and participation in a wide range of gerontological activities in an approved institution or agency setting.

Credits: 3-12
Term(s) Typically Offered: Offered Every Term
Students with a semester level of Freshman 1, Freshman 2, Junior 1, Sophomore 1 or Sophomore 2 may not enroll.

## GERO 465 - Seminar in Gerontology

An interdisciplinary investigation of selected facets of gerontology Course content is drawn from the biological, behavioral, and social sciences, and it will include a consideration of current issues in such areas as mental health, housing, economics, transportation, preventive health program, long-term care, and leisure work activities.

Prerequisite: GERO $265^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1
or Sophomore 2 may not enroll.

## GERO 490 - Independent Study

A rigorous investigation of a topic of relevance to gerontology not covered in detail in existing courses. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## GERO 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## GERO 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## HLTH Courses

HLTH 100 - Introduction to Health Careers
Provides students with an understanding of various career opportunities in health and safety occupations and the opportunity to determine
whether their needs, interests, abilities, and values are suited to careers in theis area.

Credits: 3

## HLTH 101-Personal Health

Addresses concerns pertaining to college living and life-long health.
Emphasizes wellness with its emotional, physical, and social components

Credits: 3
Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): Body and Self, Transfer Thread Completion Course

## HLTH 102 - Health Appraisal and Promotion

Discusses the role of wellness in health promotion. Identifies major health risks and examines primary prevention strategies utilizing select health appraisal instruments for the promotion of optimal individual and community health. Exposes students to agencies, which serve as resources for health information.

## Credits: 3

## HLTH 103 - Health and Behavior Change

Examines the major health problems and health risks to determine feasible secondary and tertiary intervention strategies to maintain, promote and manage the highest possible level of individual and community health. Explores behaviors and circumstances that are barriers to seeking and/or adhering to medical advice.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Enrollment is limited to students with a program in Public Health, Health Science - Public Health or Hlth Sci-P HIth-Pre PT-SRU 3+3.

## HLTH 139-University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## HLTH 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
HLTH 195 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## HLTH 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## HLTH 203 - Public Health and Physical Activity

This course will focus on introducing public health students to the benefits of physical activity (PA), how to safely engage in PA and how to apply PA to the public health model.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment is limited to students with a program in Public Health or Health Science - Public Health.

## HLTH 210-Introduction to Public Health

Provides a broad foundation of information related to the structure and functioning of the community health system including the identification and examination of programs, providers, and current problems associated with the delivery of health services.

## Credits: 3

Term(s) Typically Offered: Offered Fall, Winter, \& Spring
Enrollment is limited to students with a program in Public Health, Health Science - Public Health or HIth Sci-P Hlth-Pre PT-SRU 3+3.

## HLTH 211 - Women's Health Issues

Examines the role of women as consumers and as both formal and informal providers of health services.

Credits: 3
Term(s) Typically Offered: Offered Summer Terms

## HLTH 262 - Health Foundations

Identifies and examines the major health problems at the individual and community level. Emphasizes health information and resources that can be used to deliver developmentally appropriate primary, secondary and tertiary education and/or interventions among diverse populations.

Credits: 3
Enrollment is limited to students with a program in Exploratory Physical Educ, School Wellness Education, Health-Physical Educ Teaching, Public Health, Health Science - Public Health or HIth Sci-P Hlth-Pre PT-SRU 3+3.

## HLTH 290-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## HLTH 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## HLTH 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## HLTH 301 - Introduction to Health Education

Examines the knowledge and skills necessary to function effectively as a community, school, or worksite health educator. Emphasizes the responsibilities and competencies of the Certified Health Education Specialist.

Prerequisites: HLTH $103^{\text {D }}$ and HLTH $210^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Public Health, Health Science - Public Health or HIth Sci-P HIth-Pre PT-SRU 3+3.

## HLTH 309- Introduction to the Study of Disease

Provides a broad foundation of information related to the etiology, pathophysiological mechanisms, signs and symptoms, outcomes and current therapies for selected communicable, genetic, and chronic diseases.

Prerequisite: BIOL $216^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Winter Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Public Health, Health Science - Public Health or HIth Sci-P HIth-Pre PT-SRU $3+3$.

## HLTH 310 - Environmental Health

Explores the ecologic, economic, ethical, toxicologic and epidemiologic bases for environmental health both globally and within the community setting. Emphasizes the relationship between biological, physical and chemical agents and disease/injury causation and the role of government.
Prerequisites: CHEM $104^{\mathrm{D}}$ or CHEM $107^{\mathrm{D}}$ or BIOL $210^{\mathrm{D}}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Term(s) Typically Offered: Offered Spring \& Summer Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Public Health, Health Science - Public Health or HIth Sci-P HIth-Pre PT-SRU 3+3.

## HLTH 311 - International Health

Examines significant health problems affecting populations in various areas of the world. Provides opportunities to understand approaches to health from different cultural perspectives and focuses on the integration of disease patterns in peoples within specific geographic areas.
Emphasizes interdisciplinary perspectives on how cultural diversity relates to us and the world community.

Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): 21 st Century Healthcare, Healthy Body, Mind \& Environment, Sustainable International Development, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HLTH 312 - Data Management for Health Science

Explores methods of data collection, manipulation and reporting for health science. Includes computer applications

Prerequisites: MATH $152^{\mathrm{D}}$ or STAT $152^{\mathrm{D}}$ or MATH $114^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Public Health, Health
Science - Public Health or Hlth Sci-P Hlth-Pre PT-SRU 3+3.

## HLTH 313 - Biostatistics

Provides a broad foundation of knowledge related to data analysis in health science. Emphasizes the interpretation of health data and the computer skills for common statistical methods.

Prerequisites: HSAF $312^{\text {D }}$ or HLTH $312^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Public Health, Exercise Science, Exercise Sci- Pre PT-SRU 3+3, Health Science - Public Health or HIth Sci-P Hlth-Pre PT-SRU 3+3.

## HLTH 314 - Nutrition and Health

Examines basic scientific principles of nutrition, specifically all major nutrient classes in terms of functions, food sources, and adequate intakes along with sensitivity to diverse needs throughout the life cycle. Emphasizes interdisciplinary perspectives on how cultural diversity relates to food choices and how unique ethnic health challenges influence dietary needs.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Winter Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Public Health, Health Science - Public Health or Hlth Sci-P Hlth-Pre PT-SRU 3+3.

## HLTH 316 - Human Sexuality

Surveys a broad range of information about human sexuality
from biological, psychological, sociological, religious, and medical perspectives.

Credits: 3
Term(s) Typically Offered: Offered Every Term
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HLTH 390-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HLTH 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HLTH 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HLTH 406 - Program Planning and Evaluation

Provides basic proficiency in quantitative and qualitative approaches to health education and health promotion program measurement and evaluation. Current trends and issues in community, school and worksite health promotion are brought to bear on the problems of implementing and interpreting the results of formative and summative evaluation.

Prerequisite: HLTH $301{ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Public Health, Health Science - Public Health or Hlth Sci-P Hlth-Pre PT-SRU 3+3

## HLTH 408 - Public Health Administration

his course is designed to give an overview of the context, infrastructure and core functions of public health systems and related administration. It focuses on the administrative aspects for carrying out the public health functions, and the legal, ethical, economic, management, leadership, and regulatory dimensions of public health systems. This course also addresses performance measures, strategic planning, information systems, and current issues or trends in public health.

Prerequisite: HLTH $210^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Public Health or Health Science - Public Health.

## HLTH 410 - Epidemiology

Introduces the study of population-based research and statistical methods of inquiry regarding distribution and determination of disease in human populations. Emphasizes appropriate study design and investigative techniques and interpretation of findings related to community health. Prerequisites: HLTH 313 Biostatistics or taking HLTH 313 Biostatistics concurrently.

Prerequisite: HLTH 313 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring \& Summer Terms
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Public Health, Health Science - Public Health or HIth Sci-P HIth-Pre PT-SRU 3+3.

## HLTH 424 - Nutrition and Exercise

This course provides an understanding of the dietary standards that dictate nutritional requirements for apparently healthy adults. Emphasis is placed on the evaluation of an recommendations for macronutrients, micronutrients, and hydration status for health, physical activity, and human performance.

Prerequisites: (HLTH $314^{\mathrm{D}}$ or ERS $300^{\mathrm{D}}$ ) and ERS $301^{\mathrm{D}}$ and ERS $302^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Exercise Science, Exercise Sci- Pre PT-SRU $3+3$ or Athletic Training.
Enrollment limited to students in the BS 6149 or BS 6204 programs.

## HLTH 440-Public Health Seminar

This course is designed to provide a critical analysis of the major contemporary public health problems facing persons and communities. Content will also address professionalism and career advancement in the public health professions.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Public Health, Health Science - Public Health or Hlth Sci-P Hlth-Pre PT-SRU 3+3.
HLTH 450 - Internship
Provides opportunity to apply theory and develop competencies through a work-related experience in an appropriate cooperating enterprise.
Summers only.
Credits: 1-12
Term(s) Typically Offered: Offered Fall, Spring, \& Summer
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a major in Health Science - Public Health or HIth Sci-P HIth-Pre PT-SRU 3+3.

## HLTH 455-Student Teaching - Health Science

Under the guidance of a cooperating teacher and university supervisor, students engage in two, eight week assignments on a full-time basis in specified school districts and attend scheduled seminars. Supervisors assign additional requirements.

Credits: 3-12
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HLTH 490 - Independent Study

Students study under the supervision of a professor on a specific and significant topic. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HLTH 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HLTH 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SOWK Courses

## SOWK 105-Human Diversity

An orientation to living and working with diverse populations within modern American society, including examination of the strengths and stresses associated with diversities.

Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): 21 st Century Healthcare, Education, Transfer Thread Completion Course

## SOWK 107-Cultural Competency and Human Services

This course is designed for Social Work and Criminology/Criminal Justice majors to develop their understanding of how cultural differences among client populations require differential applications generic (professional) skills.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## SOWK 139-University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## SOWK 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## SOWK 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## SOWK 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## SOWK 200 - Introduction to Child Welfare

Provides an overview of the child welfare system in the United States, including the history of the development of child welfare policies, programs, and services; exploring best practices in child welfare; and examining current and future issues and problems in this field.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Transfer Thread Completion Course, Well-Being of Children and Youth

## SOWK 230-Social Justice and Equality

This course provides an overview of Frederick Douglass' perspectives on injustice and racial prejudice, which will be examined from his life experiences as a former slave who became the pre-eminent voice of the liberation struggle. The historical context of Douglass' life will be compared and contrasted to contemporary issues of race, ethnicity, freedom and diversity awareness.

Credits: 3
Term(s) Typically Offered: Offered Winter, Spring\&Summer Thematic Thread(s): African-American Studies, Transfer Thread
Completion Course

## SOWK 251 - Introduction to Social Work

An orientation to the field of social work and social work activities in the community. Includes service learning.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## SOWK 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## SOWK 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## SOWK 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## SOWK 300-Crisis Intervention

This course focuses on practice skills to effectively recognize and intervene in crises. This course examines factors influencing the development of crises, identification of potential crises and use of deescalation skills. This course will focus on developing effective crisis intervention skills and techniques for a variety of crisis situations.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Building a Healthy Society, Transfer Thread Completion Course
Students with a semester level of Freshman 1 or Freshman 2 may not enroll.

## SOWK 310 - Animal Assisted Interventions

This course is designed to provide students with an understanding of the human-animal bond and how this relationship can foster interventions in the human service and health care fields. Students will learn several animal-assisted interventions, beneficial effects and how they are implemented with diverse groups in various practice settings.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1 or Freshman 2 may not enroll.

## SOWK 311 - Clinical and Academic Documentation for Social Work

This course will assist students in developing strong clinical documentation skills for social work practice. Students will be exposed and practice various types of clinical documentation. Additionally, students will enhance their clinical and academic writing by creating a portfolio of various documents.

Credits: 3
Term(s) Typically Offered: Offered Summer Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SOWK 318 - Research Methods

Major methods and procedures used in social work and sociological research.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Social Work.
SOWK 319 - Statistical Methods
Introduction to basic statistical concepts and research techniques used in social research. Also listed as PROF 317

Prerequisite: SOWK $318^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment is limited to students with a program in Social Work.
SOWK 321 - Forensic Social Work
This course applies social work principles to various aspects of the legal system. Students will address legal rights, policies and practice in various forensic settings and with clients involved with the law and legal system.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SOWK 328 - Human Behavior and the Social Environment

Covers the biophysical, psychological, and social dimensions assessing social functioning during pregnancy, birth, newborn, infancy, and early childhood, middle childhood and adolescence, young and late adulthood.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Social Work or Social Work.

## SOWK 334 - Clinical Perspectives on DSM Diagnoses

Course content related to taxonomy, etiology, and diagnostic impressions of psychiatric disorders will be presented. Social Work services will be analyzed in relation to the disorders.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Criminology \& Criminal Justice or Social Work.

## SOWK 340-Social Welfare Institutions

An introductory analysis of social welfare policies, issues, and institutions.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Social Work.

SOWK 355-Social Work Practice with Individuals
Principles and practice of interviewing processes as applied to casework methods. Grade of C or better is required in this course.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Social Work.
SOWK 356 - Social work Practice with Groups \& Families
Expands knowledge and skills base to include social work practice with family and group systems. Grade of C or better is required in this course.

Prerequisite: SOWK $355^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Social Work.
SOWK 357 - Social Work Practice with Organizations and Communities Expands knowledge and skills base to include social work practice in communities and larger social systems. Grade of C or better is required in this course.

Prerequisites: SOWK $340^{\text {D }}$ and SOWK $356^{\text {C }}$
Requires minimum grade of $D$.
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Social Work.
sOWK 390 - Experimental
A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## SOWK 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## SOWK 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## SOWK 407 - Social Policy Issues

Problems and issues associated with social policy including the politics of welfare policy.

Prerequisites: SOWK $251^{\mathrm{D}}$ and SOWK $340^{* D}$ (may be taken concurrently).
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Social Work.
SOWK 450 - SOWK Internship
A Social Work Internship.
Corequisite(s): SOWK 460
Credits: 1-12
Term(s) Typically Offered: Offered Spring \& Summer Terms
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a major in Social Work.
SOWK 460 - Social Work Integrative Seminar
This senior level course integrates a four year social work curriculum with emphasis on knowledge base and skill acquisition for working in micro, mezzo, macro and research practice. This course will be a corequisite with SOWK 450 (Internship)

Corequisite(s): SOWK 450
Credits: 3
Term(s) Typically Offered: Offered Spring \& Summer Terms
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a major in Social Work.

## SOWK 490 - Independent Study

Independent research under the guidance of a faculty member.
Prerequisite: Permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. (repeatable up to 6 credits) Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## SOWK 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## SOWK 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

# Gerontology, Minor 

To access Minor Requirements, please view the Curriculum Guide tab.

## Coordinator <br> Adelle Williams

Gerontology is an interdisciplinary specialization that focuses on aging and the aging process. This specialization is designed to enhance the understanding of aging and enrich interactions among generations. It is a valuable adjunct for those preparing to work directly with, or indirectly for, older persons. Employment opportunities for students who have academic preparation in gerontology are available in community agencies, long term care facilities, hospitals, assisted living facilities, hospices, retirement villages, senior centers, and mental health facilities among others. The program is open to students in any major.

Students conduct an internship in an organization which provides services to older adults and students actively participate in a service learning project. Opportunities to participate in campus and community activities are available.

Sigma Phi Omega, the national gerontology honorary society recognized students' exemplary scholastic accomplishments in the field of aging. Undergraduate and graduate students are eligible to apply. The Anne Bicknell Scholarship is offered (based upon available funding) and an application, essay and references are required.

## Advisement

Students planning to complete the program in gerontology will declare a major within a department. Major responsibility for advisement will rest within this department. However, the coordinator will assist students in the selection of gerontology courses and internship sites to fulfill the requirements for the minor in gerontology. Students must assume responsibility for fulfilling all requirements for graduation.

## Related Links

Gerontology, Minor Program Page (https://www.sru.edu/academics/ majors-and-minors/gerontology-minor/)

Public Health Department Page (https://www.sru.edu/academics/ colleges-and-departments/ches/departments/public-health/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.


1 Prerequisite - must have 9 hours of GERO courses

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN GERONTOLOGY (98A)
This program is effective as of Summer 2013.
Revised 10.28.2021

## Health Science - Public Health, Bachelor of Science (BS)

Public Health is a discipline in which professionals deliver health information and health programs for health promotion and disease prevention to populations. Graduates of this program have a broad based background in the field of public health that prepares them for entry level positions in such areas as health promotion, health education, and health data management, along with graduate study in a health-related field.

The Public Health program is very dynamic. Coursework involves service learning experiences within a wide variety of settings. Public Health faculty members conduct on-going research projects in which advanced level students can become involved. Students help professors analyze data and prepare professional conference presentations, which the students actually present under the mentorship of faculty members. Other student activities include the Pennsylvania Public Health Association Collegiate Chapter and the peer health education program run by Slippery Rock University's Student Health Services.

Students are encouraged to take additional coursework or minors in complementary areas of study such as gerontology, information systems, or psychology. The program culminates in a 12-credit internship, which provides hands-on experiences and further insight into career opportunities in public health. Students may select their own internship site or may choose from a database of previously identified sites. Often it is through this internship experience that students discover the branch of public health in which they would like to practice. Students are required to select a major project for their internship experience that demonstrates mastery of entry-level professional skills. Frequently interns remain at their sites as employees following their internships.

Recent graduates have entered positions in state and local health departments, community-based wellness programs, voluntary health agencies such as the American Heart Association or American Cancer Society, federal government health programs, and health insurance companies. Graduates also enter graduate programs in a variety of areas. Many continue their studies to become physician assistants, occupational or physical therapists, nutritionists, and nurses. Others choose to earn a graduate degree in public health.

Upon completion of the Public Health program, students are eligible to sit for the Certified Health Education Specialist (CHES) examination, which is a national credentialing examination for people who wish to practice health education in a community setting. Today, the CHES credential is often preferred or even required for many community health education positions. Graduates who complete our Public Health program successfully pass the CHES examination at a rate well above the national average.

## Program Learning Outcomes

- Effective Professional Communication: Communicate with clients in an individual or group setting and with health professionals in a variety of health settings using a combination of communication skills for a clear exchange of ideas and information, listening and comprehending the viewpoints of others, effectively presenting information in oral and written formats and integrating media/ technology.
- Professional Competency: Use reasoned judgment drawing upon a broad knowledge base from social, behavioral and natural science, education and health to assess, plan, implement, evaluate and coordinate health promotion for individuals and communities.
- Professional Ethics: Apply high ethical standards to public health practice with a sensitivity to multicultural traditions, legal issues, and adherence to a code of ethics of professional health organizations.
- Continual Professional and Personal Development: Continue personal and professional development in holistic health, including the components of physical, emotional, spiritual, social, environmental and vocational health, through continuing education, advanced study, and participation in professional health organizations


## Related Links

Public Health, BS Program Page (https://www.sru.edu/academics/ majors-and-minors/public-health/)

Public Health Department Page (https://www.sru.edu/academics/ colleges-and-departments/ches/departments/public-health/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 60 |
| Natural Science and Math College-Wide Requirements | 12 |
| Electives | 17 |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics | 3 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :---: | :---: | :---: |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Sciences Inquiry |  |  |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| Physical Sciences Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |

## Thematic Thread

| Select 12 Credits $(\mathrm{p} .1378)^{2}$ | 12 |
| :--- | :--- |
| Total Hours | 42 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required | minimum SAT or ACT math score OR |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | $\mathbf{0 - 3}$ |

## Computer Competency

Code Title Hours

Demonstrate "computer competency" by one of the following: 0-3
Pass Computer Competency Exam OR
Select one of the following at SRU or another post-secondary institution:

| CPSC 100 | Introduction to Computing for Liberal Arts |
| :--- | :--- |
| CPSC 110 | Computer Concepts |
| CPSC 130 | Introduction to Computing and |
|  | Programming |
| PE 202 | Technes |

PE 202 Technology for Wellness
Total Hours

## Major Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses in Public Health |  |  |
| HLTH 103 | Health and Behavior Change ${ }^{1}$ | 3 |
| HLTH 210 | Introduction to Public Health ${ }^{1}$ | 3 |
| HLTH 301 | Introduction to Health Education ${ }^{1}$ | 3 |
| HLTH 309 | Introduction to the Study of Disease ${ }^{1}$ | 3 |
| HLTH 310 | Environmental Health ${ }^{1}$ | 3 |
| HLTH 311 | International Health ${ }^{1}$ | 3 |
| HLTH 312 | Data Management for Health Science ${ }^{1}$ | 3 |
| HLTH 313 | Biostatistics ${ }^{1}$ | 3 |
| HLTH 314 | Nutrition and Health ${ }^{1}$ | 3 |
| HLTH 406 | Program Planning and Evaluation ${ }^{1}$ | 3 |
| HLTH 410 | Epidemiology ${ }^{1}$ | 3 |
| HLTH 440 | Public Health Seminar ${ }^{1}$ | 3 |
| Subtotal |  | 36 |
| Required Internship |  |  |
| HLTH 450 | Internship 1,2 | 12 |
| Subtotal |  | 12 |

Required Course outside of Major Department

| BIOL 210 | Medical Microbiology with Lab ${ }^{3}$ | 3 |
| :---: | :---: | :---: |
| Subtotal |  | 3 |
| Supporting Coursework: |  |  |
| Select three courses from the list below: |  | 9 |
| GERO 265 | Aging and the Older Person ${ }^{3}$ |  |
| GERO 414 | Death and Dying ${ }^{3}$ |  |
| HCAM 230 | US Healthcare Systems ${ }^{3}$ |  |
| HLTH 203 | Public Health and Physical Activity ${ }^{3}$ |  |
| HLTH 211 | Women's Health Issues ${ }^{3}$ |  |
| HLTH 316 | Human Sexuality ${ }^{3}$ |  |
| HLTH 408 | Public Health Administration |  |
| Subtotal |  | 9 |
| Total Hours |  | 60 |


|  |  |  |
| :---: | :---: | :---: |
| 2.50 or higher GPA in the major to be eligible for internship |  |  |
| Course counts for $50 \%$ of Major requirements but not for Major GPA |  |  |
| Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course. |  |  |
| Natural Science and Math College-Wide Requirements |  |  |
| Code | Title | Hours |
| Must complete 9 CHEM 107): | redits (CHEM 111 is required if com |  |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 3-4 |
| or CHEM 104 | Introduction Chemistry I |  |
| STAT 152 | Elementary Statistics I | 3 |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Conference attendance
2. Service-Learning
3. Internships
4. Career Education
5. Peer Education Opportunities

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
HEALTH SCIENCE - PUBLIC HEALTH (6266)

This program is effective as of Fall 2019.
Revised 02.10.2022
UCC 02.01.2022

## Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall | Health and Behavior Change |  |
| HLTH 103 | Introduction Chemistry I | 3 |
| CHEM 104 | Critical Writing | 3 |
| ENGL 102 | FYRST Seminar | 3 |
| INDS 101 | University Seminar | 1 |
| SUBJ 139 | Hours | 3 |
|  |  | 13 |
| Spring | Critical Reading | 3 |
| ENGL 104 | Understanding the Physical World | 3 |
| SCI 102 | Elementary Statistics I | 3 |
| STAT 152 | Heative \& Aesthetic Inquiry (p. 1378) | 3 |
| Humanities Inquiry $(p .1378)$ | 3 |  |
|  | Hours | $\mathbf{1 5}$ |

## Second Year

Fall

| HLTH 210 | Introduction to Public Health | 3 |
| :--- | :--- | :--- |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| Social Science Inquiry (p. 1378) | 3 |  |
| Thematic Thread Requirement (p. 1378) $^{\text {Declare a Thematic Thread }}{ }^{2}$ | 3 |  |


|  | Hours | 12 |
| :--- | :--- | :--- |
| Spring |  |  |
| HLTH 301 | Introduction to Health Education | 3 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :---: | :--- | ---: |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| Hours | $\mathbf{1 5}$ |  |

Third Year
Fall

| HLTH 309 | Introduction to the Study of Disease | 3 |
| :--- | :--- | ---: |
| HLTH 312 | Data Management for Health Science | 3 |
| HLTH 314 | Nutrition and Health | $\mathbf{3}$ |
| BIOL 210 | Medical Microbiology with Lab | $\mathbf{3}$ |
|  | Hours | $\mathbf{1 2}$ |
| Spring |  |  |
| HLTH 310 | Environmental Health | $\mathbf{3}$ |
| HLTH 311 | International Health | $\mathbf{3}$ |
| HLTH 313 | Biostatistics | $\mathbf{3}$ |
| Public Health Elective | $\mathbf{3}$ |  |
|  | Hours | $\mathbf{1 2}$ |

## Fourth Year

Fall

| HLTH 406 | Program Planning and Evaluation | 3 |
| :--- | ---: | ---: |
| Public Health Elective | 3 |  |
| Free Electives | $\mathbf{9}$ |  |
|  | $\mathbf{1 5}$ |  |

## Winter

Potential On-line Winter Courses
International Health

|  | Hours | $\mathbf{0}$ |
| :--- | :--- | ---: |
| Spring |  |  |
| HLTH 410 | Epidemiology | 3 |
| HLTH 440 | Public Health Seminar | 3 |
| Public Health Supporting Coursework | 3 |  |
| Free Electives |  | 5 |
|  | Hours | $\mathbf{1 4}$ |

Summer
HLTH $450 \quad$ Internship 12

Potential On-line Summer Courses
International Health/Women's Health Issues

| Hours | 12 |
| :--- | ---: |
| Total Hours** | 120 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6266
Revised: 07.02.2021

## Health Science - Public Health, Bachelor of Science (BS) / PreOccupational Therapy (SRU) (3+3) Public Health Program Learning Outcomes

- Effective Professional Communication: Communicate with clients in an individual or group setting and with health professionals in a variety of health settings using a combination of communication skills for a clear exchange of ideas and information, listening and comprehending the viewpoints of others, effectively presenting information in oral and written formats and integrating media/ technology.
- Professional Competency: Use reasoned judgment drawing upon a broad knowledge base from social, behavioral and natural science,
education and health to assess, plan, implement, evaluate and coordinate health promotion for individuals and communities.
- Professional Ethics: Apply high ethical standards to public health practice with a sensitivity to multicultural traditions, legal issues, and adherence to a code of ethics of professional health organizations.
- Continual Professional and Personal Development: Continue personal and professional development in holistic health, including the components of physical, emotional, spiritual, social, environmental and vocational health, through continuing education, advanced study, and participation in professional health organizations


## What are your options?

Pre-Occupational Therapy SRU 3+3: Earn a Doctor of Occupational Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU OTD program. At the end of your second year, you apply for admission into the SRU OTD program. If accepted, your first year in the SRU OTD program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

Pre-Occupational Therapy (SRU Traditional): Complete the requirements for your major and the pre-requisites for the SRU OTD program and apply to the SRU OTD program in your senior year.

## Related Links

Public Health - Pre-Occupational Therapy, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/public-health-pre-occupational-therapy/)

Public Health Department Page (https://www.sru.edu/academics/ colleges-and-departments/ches/departments/public-health/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

$1^{\text {st }}$ Major. Public Health

- Overall GPA: 2.0 or higher
- Major GPA (only includes Health courses): 2.0 or higher
$2^{\text {nd }}$ Major: Pre-OT SRU 3+3 Public Health
- Overall GPA: 3.00 or higher


## Summary*

Code Title Hours
Rock Studies Requirements ..... 42
Other Basic Requirements ..... 0-3
Computer Competency ..... 0-3
Major Requirements ..... 30
Natural Science and Math College-Wide Requirements ..... 17
Electives ..... 48

* All undergraduate degree programs require a minimum of 120 credits.Some courses meet multiple requirements, but are only counted oncetoward the 120 credit total required to graduate. However, because this
is a pre-professional program, credits taken during the $1^{\text {st }}$ year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.

Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics |  |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |
| Subtotal |  |

Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378)
Humanities Inquiry
Select 3 Credits (p. 1378) 3

Social Science Inquiry
Select 3 Credits (p. 1378) 3

Natural Sciences Inquiry
BIOL 216 Anatomy and Physiology I with Lab 3
Physical Sciences Inquiry
SCI $102 \quad$ Understanding the Physical World
Subtotal 15

## Thematic Thread

| Select 12 Credits $(\mathrm{p} .1378)^{2}$ | 12 |
| :--- | :--- |
| Total Hours | $\mathbf{4 2}$ |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 Categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code Title | Hours |
| :---: | :---: |
| Complete one of the following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |
| ESAP 110 Beginning Algebra |  |
| Total Hours | 0-3 |
| Computer Competency |  |
| Code Title | Hours |
| Demonstrate "computer competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |
| Select one of the following at SRU or another post-secondary institution: |  |
| CPSC 100 Introduction to Computing for Liberal Arts |  |


| CPSC 110 | Computer Concepts <br> CPSC 13troduction to Computing and <br> Programming |
| :---: | :--- |
| PE 202 | Technology for Wellness |
| Total Hours | $\mathbf{0 - 3}$ |
| Major Requirements |  |
| - If you choose to pursue Pre-Occupational Therapy SRU 3+3 Public |  |
| Health and are not accepted into the OTD program, then additional |  |
| coursework is required to complete a first major of Public Health. |  |
| Please refer to Public Health Curriculum Guide. |  |


| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses in Public Health |  |  |
| HLTH 103 | Health and Behavior Change | 3 |
| HLTH 210 | Introduction to Public Health | 3 |
| HLTH 301 | Introduction to Health Education | 3 |
| HLTH 310 | Environmental Health | 3 |
| HLTH 311 | International Health | 3 |
| HLTH 312 | Data Management for Health Science | 3 |
| HLTH 313 | Biostatistics | 3 |
| HLTH 314 | Nutrition and Health | 3 |
| HLTH 406 | Program Planning and Evaluation | 3 |
| HLTH 410 | Epidemiology | 3 |
| Total Hours |  | $\mathbf{3 0}$ |
| * |  |  |


| Natural Science and Math College-Wide Requirements |  |  |
| :--- | :--- | ---: |
| Code | Title | Hours |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| CHEM 104 | Introduction Chemistry I | 3 |
| PHYS 201 | Elements of Physics I with Lab | 4 |
| STAT 152 | Elementary Statistics I | 3 |
| Total Hours |  | $\mathbf{1 6}$ |

## Additional Occupational Therapy Prerequisite Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| PSYC 244 | Developmental Psychology | 3 |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |
| ERS 250 | Medical Terminology | 3 |
| or HCAM 250 | Medical Terminology for Healthcare <br>  <br> Administrators |  |
| INDP 318 | Research Methods in Interdisciplinary <br> or SOWK 318 | $\mathbf{l}$ Studies |
| Research Methods |  |  |
| Total Hours |  | $\mathbf{1 2}$ |

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student
success and participation in the following types of programs and activities:

1. Conference attendance
2. Service-Learning
3. Internships
4. Career Education
5. Peer Education Opportunities

Doctor of Occupational Therapy (OTD) Prerequisite Admission Requirements - PreOccupational Therapy SRU

## For Application Requirements

Please refer to Slippery Rock University's Occupational Therapy Studies (Master of Science in Occupational Therapy Studies) website for requirements: http://www.sru.edu/OT (http://www.sru.edu/OT/)

## Rock Studies

| Code | Title | Hours |
| :---: | :---: | :---: |
| Prerequisite Courses - SRU Occupational Therapy |  |  |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| ERS 250 or HCAM 250 | Medical Terminology <br> Medical Terminology for Healthcare <br> Administrators | 3 |
| $\begin{aligned} & \text { PHYS } 201 \\ & \quad \text { or PE } 364 \end{aligned}$ | Elements of Physics I with Lab <br> Biomechanics of Individuals with Disabilities | 4 |
| STAT 152 | Elementary Statistics I | 3 |
| Research Methods ${ }^{1}$ |  | 3 |
| PSYC 105 | Introduction to Psychology | 3 |
| PSYC 244 | Developmental Psychology | 3 |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |
| Anthropology or Sociology ${ }^{1}$ |  | 3 |

1 Select one course. See My Rock Audit for specific courses.

## Pre-Occupational Therapy SRU 3+3

If any of these requirements are not met, the $3+3$ designation will be removed from the student's record:

1. A 3.0 or higher overall GPA must be maintained by the student.
2. The student can only be enrolled in the Pre-Occupational Therapy SRU $3+3$ program for a maximum of three (3) years, full-time continuous enrollment (fall/spring).

## Provision

Should a Pre-Occupational Therapy SRU $3+3$ student be unsuccessful in completing the $1^{\text {st }}$ two semesters (summer or fall) of the Occupational Therapy Program and wants to complete the original undergraduate degree, it is solely up to the discretion of the undergraduate program Department Chair to determine which, if any, Occupational Therapy courses will count toward the completion of his/her undergraduate degree. In addition, students must complete any unfulfilled requirements of their undergraduate major. Students may still apply to the Doctor of Occupational Therapy Program with an earned Bachelor's degree.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
HEALTH SCIENCE PUBLIC HEALTH - BS (6266)
PRE-OT SRU $3+3$ (6PHO)
This program is effective as of Fall 2019.
Revised 07.30.2021
UCC 2.5.2019
Recommended Three-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall |  |  |
| HLTH 103 | Health and Behavior Change | 3 |
| CHEM 104 | Introduction Chemistry I | 3 |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar | 1 |
| SUBJ 139 | University Seminar | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) | 3 |  |
|  | Hours | $\mathbf{1 6}$ |
| Spring |  |  |
| ENGL 104 | Critical Reading | 3 |
| PSYC 105 | Introduction to Psychology | 3 |
| SCI 102 | Understanding the Physical World | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Humanities Inquiry (p. 1378) | Hours | 3 |
|  |  | $\mathbf{1 5}$ |

## Second Year

Fall

| HLTH 210 | Introduction to Public Health | 3 |
| :---: | :---: | :---: |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| INDP 202 or SOWK 105 | Introduction to Anthropology or Human Diversity | 3 |
| PSYC 244 | Developmental Psychology | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 18 |


| Spring |  |  |
| :--- | :--- | ---: |
| HLTH 301 | Introduction to Health Education | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| ERS 250 | Medical Terminology <br> or HCAM 250 <br> or Medical Terminology for Healthcare <br> Administrators | 3 |
|  | Ad |  |


| Select one of the following: |  | 3 |
| :---: | :---: | :---: |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| HLTH 312 | Data Management for Health Science | 3 |
| HLTH 314 | Nutrition and Health | 3 |
| HLTH 406 | Program Planning and Evaluation | 3 |
| $\begin{aligned} & \text { INDP } 318 \\ & \text { or SOWK } 318 \end{aligned}$ | Research Methods in Interdisciplinary Studies or Research Methods | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 18 |
| Winter |  |  |
| Potential On-line Winter Courses |  |  |
| International Health |  |  |
| ERS 250 | Medical Terminology (Rock Studies) |  |
|  | Hours | 0 |
| Spring |  |  |
| HLTH 310 | Environmental Health | 3 |
| HLTH 311 | International Health | 3 |
| HLTH 313 | Biostatistics | 3 |
| HLTH 410 | Epidemiology | 3 |
| $\begin{aligned} & \text { PHYS } 201 \\ & \text { or PE } 364 \end{aligned}$ | Elements of Physics I with Lab or Biomechanics of Individuals with Disabilities | 3-4 |
|  | Hours | 15-16 |
| Summer |  |  |
| Potential On-line Summer Courses |  |  |
| international Health |  |  |
| ERS 250 | Medical Terminology (Rock Studies) |  |
|  | Hours | 0 |
| Fourth Year |  |  |
| Fall |  |  |
| If not admitted to SRU OTD Program |  |  |
| HLTH 309 | Introduction to the Study of Disease | 3 |
| BIOL 210 | Medical Microbiology with Lab | 3 |
| 3 Public Health Supporting Coursework courses |  | 9 |
|  | Hours | 15 |
| Spring |  |  |
| If not admitted to SRU OTD Program |  |  |
| HLTH 440 | Public Health Seminar | 3 |
| HLTH 450 | Internship (or summer after senior year) | 12 |
|  | Hours | 15 |
|  | Total Hours** | 127-128 |
| 1 Course offere subject. | multiple subjects; cannot take course in fir | st major |

2
ork with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6266
Concentration Code: 6HPO
Revised 07.14.2021

## Health Science - Public Health, Bachelor of Science (BS) / PreOccupational Therapy (SRU) (Traditional)

## Public Health Program Learning Outcomes

Effective Professional Communication: Communicate with clients in an individual or group setting and with health professionals in a variety of health settings using a combination of communication skills for a clear exchange of ideas and information, listening and comprehending the viewpoints of others, effectively presenting information in oral and written formats and integrating media/ technology.

- Professional Competency: Use reasoned judgment drawing upon a broad knowledge base from social, behavioral and natural science, education and health to assess, plan, implement, evaluate and coordinate health promotion for individuals and communities.
- Professional Ethics: Apply high ethical standards to public health practice with a sensitivity to multicultural traditions, legal issues, and adherence to a code of ethics of professional health organizations.
- Continual Professional and Personal Development: Continue personal and professional development in holistic health, including the components of physical, emotional, spiritual, social, environmental and vocational health, through continuing education, advanced study, and participation in professional health organizations


## What are your options?

Pre-Occupational Therapy SRU 3+3: Earn a Doctor of Occupational Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU OTD program. At the end of your second year, you apply for admission into the SRU OTD program. If accepted, your first year in the SRU OTD program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

Pre-Occupational Therapy (SRU Traditional): Complete the requirements for your major and the pre-requisites for the SRU OTD program and apply to the SRU OTD program in your senior year.

## Related Links

Public Health - Pre-Occupational Therapy, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/public-health-pre-occupational-therapy/)

Public Health Department Page (https://www.sru.edu/academics/ colleges-and-departments/ches/departments/public-health/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher
Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 60 |
| Natural Science and Math College-Wide Requirements | 12 |
| Electives | 17 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.
Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Sem |  |  |

Select one of the following: 3

| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :---: | :---: | :---: |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Sciences Inquiry |  |  |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| Physical Sciences Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |

## Thematic Thread

Select 12 Credits (p. 1378) ${ }^{2}$

## Total Hours

Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete on | following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal A |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above
Code Title Hours


## Required Courses in Public Health

| HLTH 103 | Health and Behavior Change ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| HLTH 210 | Introduction to Public Health ${ }^{1}$ | 3 |
| HLTH 301 | Introduction to Health Education ${ }^{1}$ | 3 |
| HLTH 309 | Introduction to the Study of Disease ${ }^{1}$ | 3 |
| HLTH 310 | Environmental Health ${ }^{1}$ | 3 |
| HLTH 311 | International Health ${ }^{1}$ | 3 |
| HLTH 312 | Data Management for Health Science ${ }^{1}$ | 3 |
| HLTH 313 | Biostatistics ${ }^{1}$ | 3 |
| HLTH 314 | Nutrition and Health ${ }^{1}$ | 3 |
| HLTH 406 | Program Planning and Evaluation ${ }^{1}$ | 3 |
| HLTH 410 | Epidemiology ${ }^{1}$ | 3 |
| HLTH 440 | Public Health Seminar ${ }^{1}$ | 3 |
| Subtotal |  | 36 |
| Required Internship |  |  |
| HLTH 450 | Internship 1,2 | 12 |
| Subtotal |  | 12 |

Required Course outside of Major Department

| BIOL 210 | Medical Microbiology with Lab ${ }^{3}$ | 3 |
| :---: | :---: | :---: |
| Subtotal |  | 3 |
| Supporting Coursework: |  |  |
| Select three courses from the list below: |  | 9 |
| GERO 265 | Aging and the Older Person ${ }^{3}$ |  |
| GERO 414 | Death and Dying ${ }^{3}$ |  |
| HCAM 230 | US Healthcare Systems ${ }^{3}$ |  |
| HLTH 203 | Public Health and Physical Activity ${ }^{3}$ |  |
| HLTH 211 | Women's Health Issues ${ }^{3}$ |  |
| HLTH 316 | Human Sexuality ${ }^{3}$ |  |
| HLTH 408 | Public Health Administration |  |
| HLTH 424 | Nutrition and Exercise ${ }^{3}$ |  |
| Subtotal |  | 9 |
| Total Hours |  | 60 |

Course counts for 50\% of Major requirements and Major GPA
22.50 or higher GPA in the major to be eligible for internship

3 Course counts for $50 \%$ of Major requirements but not for Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

| Natural Science and Math College-Wide Requirements |  |  |
| :--- | :--- | ---: |
| Code | Title | Hours |
| CHEM 104 | Introduction Chemistry I | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |

## Additional Pre-OT Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| PHYS 201 | Elements of Physics I with Lab | 4 |
| PSYC 244 | Developmental Psychology | 3 |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |
| ERS 250 | Medical Terminology | 3 |
| or HCAM 250 | Medical Terminology for Healthcare <br> Administrators |  |
| INDP 318 | Research Methods in Interdisciplinary <br> Studies | 3 |
| or SOWK 318 | Research Methods |  |

## Co-Curricular and Experiential LEarning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Conference attendance
2. Service-Learning
3. Internships
4. Career Education
5. Peer Education Opportunities

## Doctor of Occupational Therapy (OTD) Prerequisite Admission Requirements

## For Application Requirements

Please refer to Slippery Rock University's Occupational Therapy Studies (Master of Science in Occupational Therapy Studies) website for requirements: http://www.sru.edu/OT (http://www.sru.edu/OT/)

## Rock Studies

| Code | Title | Hours |
| :---: | :---: | :---: |
| Prerequisite Courses - SRU Occupational Therapy |  |  |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| $\begin{aligned} & \text { ERS } 250 \\ & \text { or HCAM } 250 \end{aligned}$ | Medical Terminology <br> Medical Terminology for Healthcare <br> Administrators | 3 |
| $\begin{aligned} & \text { PHYS } 201 \\ & \text { or PE } 364 \end{aligned}$ | Elements of Physics I with Lab <br> Biomechanics of Individuals with Disabilities | 4 |
| STAT 152 | Elementary Statistics I | 3 |
| Research Methods ${ }^{1}$ |  | 3 |
| PSYC 105 | Introduction to Psychology | 3 |
| PSYC 244 | Developmental Psychology | 3 |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |
| Anthropology or Sociology ${ }^{1}$ |  | 3 |
| Total Hours |  | 31 |

1 Select one course. See My Rock Audit for specific courses.
HEALTH SCIENCE - PUBLIC HEALTH (6266)
PRE OT (SRU Traditional)
Effective Fall 2016
Revised 07.14.2021
UCC 03.05.20

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall |  |  |
| HLTH 103 | Health and Behavior Change | 3 |
| CHEM 104 | Introduction Chemistry I | 3 |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar | $\mathbf{1}$ |
| SUBJ 139 | University Seminar |  |
| Creative \& Aesthetic | Inquiry (p. 1378) | 3 |
|  | Hours | 3 |
|  |  | $\mathbf{1 6}$ |


| Spring |  |  |
| :---: | :---: | :---: |
| ENGL 104 | Critical Reading | 3 |
| PSYC 105 | Introduction to Psychology | 3 |
| SCI 102 | Understanding the Physical World | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
|  | Hours | 15 |
| Second Year |  |  |
| Fall |  |  |
| HLTH 210 | Introduction to Public Health | 3 |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| INDP 202 or SOWK 105 | Introduction to Anthropology or Human Diversity | 3 |
| PSYC 244 | Developmental Psychology | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 18 |
| Spring |  |  |
| HLTH 301 | Introduction to Health Education | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| $\begin{aligned} & \text { ERS } 250 \\ & \text { or HCAM } 250 \end{aligned}$ | Medical Terminology <br> or Medical Terminology for Healthcare <br> Administrators | 3 |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| HLTH 312 | Data Management for Health Science | 3 |
| HLTH 314 | Nutrition and Health | 3 |
| HLTH 406 | Program Planning and Evaluation | 3 |
| Public Health Supporting Coursework |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 18 |
| Spring |  |  |
| HLTH 310 | Environmental Health | 3 |
| HLTH 311 | International Health | 3 |
| HLTH 313 | Biostatistics | 3 |
| HLTH 410 | Epidemiology | 3 |
| $\begin{aligned} & \text { PHYS } 201 \\ & \quad \text { or PE } 364 \end{aligned}$ | Elements of Physics I with Lab or Biomechanics of Individuals with Disabilities | 3-4 |


|  | Hours | 15-16 |
| :--- | :--- | ---: |
| Summer |  | 0 |
| HLTH 450 | Internship (unless taken in spring semester <br> of senior year) | $\mathbf{0}$ |
|  | Hours | $\mathbf{0}$ |


| Fourth Year |  |  |
| :---: | :---: | :---: |
| Fall |  |  |
| HLTH 309 | Introduction to the Study of Disease | 3 |
| BIOL 210 | Medical Microbiology with Lab | 3 |
| INDP 318 or SOWK 318 | Research Methods in Interdisciplinary Studies or Research Methods | 3 |
| Public Health Supporting Coursework |  | 6 |
|  | Hours | 15 |
| Winter |  |  |
| Potential On-line Winter Courses |  | 0 |
| International Health |  |  |
|  | Hours | 0 |
| Spring |  |  |
| HLTH 440 | Public Health Seminar | 3 |
| Internship (unless taken prior to senior year) |  | 12 |
|  | Hours | 15 |
| Summer |  |  |
| Potential On-line Summer Courses |  | 0 |
| International Health/Women's Health Issues |  |  |
|  | Hours | 0 |
|  | Total Hours** |  |
| 1 Course offered in multiple subjects; cannot take course in first major subject. |  |  |
| 2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here $t$ declare a thread. |  |  |
| * Students are encouraged to take INDS 101 as a Free Elective. |  |  |
| ** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year. |  |  |
| Major Code: 6266 <br> Concentration Co <br> Revised: 07.14.2 | SRU Traditional |  |

## Health Science - Public Health, Bachelor of Science (BS) / PrePhysical Therapy (SRU) (3+3) Public Health Program Learning Outcomes

- Effective Professional Communication: Communicate with clients in an individual or group setting and with health professionals in a variety of health settings using a combination of communication skills for a clear exchange of ideas and information, listening and comprehending the viewpoints of others, effectively presenting information in oral and written formats and integrating media/ technology.
- Professional Competency: Use reasoned judgment drawing upon a broad knowledge base from social, behavioral and natural science, education and health to assess, plan, implement, evaluate and coordinate health promotion for individuals and communities.
- Professional Ethics: Apply high ethical standards to public health practice with a sensitivity to multicultural traditions, legal issues, and adherence to a code of ethics of professional health organizations.
- Continual Professional and Personal Development: Continue personal and professional development in holistic health, including the components of physical, emotional, spiritual, social, environmental and vocational health, through continuing education, advanced study, and participation in professional health organizations


## What are your options?

Pre-Physical Therapy SRU 3+3: Earn a Doctor of Physical Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU DPT program. During your third undergraduate year, you apply for admission into the SRU DPT program. If accepted, your first year in the SRU DPT program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

Pre-Physical Therapy (SRU Traditional): Complete the requirements for your major and the pre-requisites for the SRU DPT program and apply to the SRU DPT program in your senior year.

## Related Links

Public Health - Pre-Physical Therapy, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/public-health-pre-physicaltherapy/)

Public Health Department Page (https://www.sru.edu/academics/ colleges-and-departments/ches/departments/public-health/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA REQUIREMENT
$1^{\text {st }}$ Major. Public Health

- Overall GPA: 2.00 or higher
- Major GPA (includes Major Requirements and College Wide Requirements): 2.00 or higher
$2^{\text {nd }}$ Major: Pre-PT SRU 3+3 Public Health
- Overall GPA: 3.00 or higher


## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 43 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 51 |
| Natural Science and Math College-Wide Requirements | 12 |
| Electives | 25 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the $1^{\text {st }}$ year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.


## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Physical \& Natural Sciences Inquiry |  |  |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
| Subtotal |  | 16 |
| Thematic Thread |  |  |
| Select 12 Credits (p.1378) ${ }^{2}$ |  | 12 |
| Total Hours |  | 43 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code Title | Hours |
| :---: | :---: |
| Complete one of the following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |
| ESAP $110 \quad$ Beginning Algebra |  |
| Total Hours | 0-3 |
| Computer Competency |  |
| Code Title | Hours |
| Demonstrate "computer competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |

Select one of the following at SRU or another post-secondary institution:
CPSC 100
CPSC 110
CPSC 130

PE 202
Introduction to Computing for Liberal Arts
Computer Concepts
Introduction to Computing and Programming
Technology for Wellness
Total Hours

## Major Requirements

- If you choose to pursue Public Health 3+3 and are not accepted into the DPT program, then additional coursework is required to complete a first major of Public Health. Please refer to Public Health Curriculum Guide.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses in Public Health |  |  |
| HLTH 103 | Health and Behavior Change | 3 |
| HLTH 210 | Introduction to Public Health | 3 |
| HLTH 301 | Introduction to Health Education | 3 |
| HLTH 309 | Introduction to the Study of Disease | 3 |
| HLTH 310 | Environmental Health | 3 |
| HLTH 311 | International Health | 3 |
| HLTH 312 | Data Management for Health Science | 3 |
| HLTH 313 | Biostatistics | 3 |
| HLTH 314 | Nutrition and Health | 3 |
| HLTH 406 | Program Planning and Evaluation | 3 |
| HLTH 410 | Epidemiology | 3 |
| Subtotal |  | 33 |

Science, Technology \& Math Courses

| CHEM 108 | General Chemistry II | 3 |
| :--- | :--- | ---: |
| CHEM 112 | General Chemistry II Lab | 1 |
| PHYS 201 | Elements of Physics I with Lab |  |
| PHYS 202 | Elements of Physics II/ Lab ${ }^{1}$ | 4 |
| Subtotal |  | 4 |


| Human Institutions \& Interpersonal Relations Courses |  |  |
| :--- | :--- | :--- |
| PSYC 105 | Introduction to Psychology ${ }^{1}$ | 3 |
| Sect | 3 |  |

Select one of the following: 3

| PSYC 240 | Human Sexual Behavior |
| :--- | :--- |
| PSYC 244 | Developmental Psychology |
| PSYC 300 | Psychology of Women, Gender and Culture |
| PSYC 338 | Cognitive Psychology |
| PSYC 377 | Social Psychology |

## Total Hours

1 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.
Natural Science and Math College Wide Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| CHEM 107 | General Chemistry I |  |
| CHEM 111 | General Chemistry I Lab | 3 |


| STAT 152 | Elementary Statistics I ${ }^{1}$ | 3 |
| :--- | :--- | ---: |
| BIOL 216 | Anatomy and Physiology I with Lab ${ }^{1}$ | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| Total Hours |  | $\mathbf{1 3}$ |

1 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.

## Physical Therapy Prerequisite Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | $\mathbf{1}$ |
| CHEM 108 | General Chemistry II | 3 |
| CHEM 112 | General Chemistry II Lab | $\mathbf{1}$ |
| PHYS 202 | Elements of Physics II/ Lab | 4 |
| Total Hours |  | $\mathbf{1 2}$ |

## 3+3 Requirements for all Majors

1. A 3.0 or higher GPA is required to remain in the $3+3$ program.
2. You may not have more than one " $W$ " in a required course.
3. You can only be in the $3+3$ program for maximum of three (3) years full-time continuous enrollment. If any of these requirements are not met, the $3+3$ designation will be removed from your record.
4. Should 3+3 Physical Therapy students be unsuccessful in completing the 1 st year (either Fall and/or Spring semesters) of the DPT program and want to complete their original undergraduate degree, it is solely up to the discretion of their undergraduate program coordinator to determine which, if any, physical therapy courses will count toward the completion of their undergraduate degree. In addition,students must complete any unfulfilled requirements of his/her undergraduate major.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Conference attendance
2. Service-Learning
3. Internships
4. Career Education
5. Peer Education Opportunities

## Doctor of Physical Therapy (DPT)

## Prerequisite Admission Requirements - Pre-Physical

 Therapy SRU 3+3
## For Application Requirements

Please refer to Slippery Rock University's Physical Therapy (Doctor of Physical Therapy) website for requirements: www.sru.edu/PT (http:// www.sru.edu/PT/)

| Liberal Studies and Rock Studies <br> Title | Hours |
| :--- | ---: |
| Code |  |
| Prerequisite Courses - SRU Physical Therapy | 6 |
| Select one of the following: |  |



## Requirements for Pre-Physical Therapy SRU 3+3

If any of these requirements are not met, the $3+3$ designation will be removed from the student's record:

1. A 3.0 or higher overall GPA must be maintained by the student.
2. The student can only be enrolled in the Pre-Physical Therapy SRU $3+3$ program for a maximum of three (3) years, full-time continuous enrollment (fall/spring).

## Provision

Should a Pre-Physical Therapy SRU 3+3 student be unsuccessful in completing the 1st two semesters (fall or spring) of the Doctor of Physical Therapy Program and wants to complete the original undergraduate degree, it is solely up to the discretion of the undergraduate program Department Chair to determine which, if any, Physical Therapy courses will count toward the completion of his/ her undergraduate degree. In addition, students must complete any unfulfilled requirements of their undergraduate major. Students may still apply to the Doctor of Physical Therapy Program with an earned Bachelor's degree.

HEALTH SCIENCE PUBLIC HEALTH - BS (6266)
3+3 PRE PT (62P5)
This program is effective as of Fall 2019.
Revised 07.30.2021
UCC 2.5.2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

Recommended Three-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| HLTH 103 | Health and Behavior Change | 3 |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar | 1 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
|  | Hours | 17 |
| Spring |  |  |
| CHEM 108 | General Chemistry II | 4 |
| \& CHEM 112 | and General Chemistry II Lab |  |
| ENGL 104 | Critical Reading | 3 |
| PSYC 105 | Introduction to Psychology | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
|  | Hours | 16 |

## Second Year

Fall
HLTH 210 Introduction to Public Health 3

BIOL 216 Anatomy and Physiology I with Lab 3
Additional PSYC course 3
Thematic Thread Requirement (p. 1378) 3
Thematic Thread Requirement (p. 1378) 3
Declare a Thematic Thread ${ }^{2}$

|  | Hours | 15 |
| :---: | :---: | :---: |
| Spring |  |  |
| HLTH 301 | Introduction to Health Education | 3 |
| HLTH 311 | International Health | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| HLTH 309 | Introduction to the Study of Disease | 3 |
| HLTH 312 | Data Management for Health Science | 3 |
| HLTH 314 | Nutrition and Health | 3 |
| HLTH 406 | Program Planning and Evaluation | 3 |
| PHYS 201 | Elements of Physics I with Lab | 4 |
|  | Hours | 16 |

Winter
Potential On-line Winter Courses
International Health
Hours
0

| Spring |  |  |
| :--- | :--- | ---: |
| HLTH 310 | Environmental Health | 3 |
| HLTH 313 | Biostatistics | 3 |
| HLTH 410 | Epidemiology | 3 |
| PHYS 202 | Elements of Physics II/ Lab | 4 |
| Thematic Thread Requirement (p. 1378) | 3 |  |
|  | Hours | $\mathbf{1 6}$ |

## Summer

Potential On-line Summer Courses

| International Health |  |
| :--- | :--- |
| Hours |  |

## Fourth Year

Fall

| Senior Year -Semester 1 |  |
| :--- | ---: |
| If not admitted to SRU DPT Program |  |
| Public Health Supporting Coursework - select three | $\mathbf{9}$ |
| BIOL 210 | Medical Microbiology with Lab |
|  | Hours |

## Spring

Senior Year -Semester 2
If not admitted to SRU DPT Program

| HLTH 440 | Public Health Seminar | 3 |
| :--- | :--- | ---: |
| HLTH 450 | Internship (or summer after senior year) | 12 |
|  | Hours | $\mathbf{1 5}$ |
|  | Total Hours** | $\mathbf{1 2 2}$ |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6266
Concentration Code: 62P5
Revised 07.02.2021

## Health Science - Public Health, Bachelor of Science (BS) / PrePhysical Therapy (SRU) (Traditional) Public Health Program Learning Outcomes

- Effective Professional Communication: Communicate with clients in an individual or group setting and with health professionals in a variety of health settings using a combination of communication skills for a clear exchange of ideas and information, listening and
comprehending the viewpoints of others, effectively presenting information in oral and written formats and integrating media/ technology.
- Professional Competency: Use reasoned judgment drawing upon a broad knowledge base from social, behavioral and natural science, education and health to assess, plan, implement, evaluate and coordinate health promotion for individuals and communities.
- Professional Ethics: Apply high ethical standards to public health practice with a sensitivity to multicultural traditions, legal issues, and adherence to a code of ethics of professional health organizations.
- Continual Professional and Personal Development: Continue personal and professional development in holistic health, including the components of physical, emotional, spiritual, social, environmental and vocational health, through continuing education, advanced study, and participation in professional health organizations


## What are your options?

Pre-Physical Therapy SRU 3+3: Earn a Doctor of Physical Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU DPT program. During your third undergraduate year, you apply for admission into the SRU DPT program. If accepted, your first year in the SRU DPT program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

Pre-Physical Therapy (SRU Traditional): Complete the requirements for your major and the pre-requisites for the SRU DPT program and apply to the SRU DPT program in your senior year.

## Related Links

Public Health - Pre-Physical Therapy, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/public-health-pre-physicaltherapy/)

Public Health Department Page (https://www.sru.edu/academics/ colleges-and-departments/ches/departments/public-health/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

Code Title Hours
Rock Studies Requirements 43
Other Basic Requirements 0-3
Computer Competency 0-3
Major Requirements 60
Natural Science and Math College-Wide Requirements 12
Electives 17

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

| Rock Studies Requirements <br> Code <br> Title | Hours |  |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics | 3 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |
| :---: | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |
| Subtotal |  |

Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378)
Humanities Inquiry
Select 3 Credits (p. 1378) 3
Social Science Inquiry
Select 3 Credits (p. 1378) 3
Physical \& Natural Sciences Inquiry
BIOL $216 \quad$ Anatomy and Physiology I with Lab
CHEM 107 General Chemistry I 4
\& CHEM 111 and General Chemistry I Lab 16

## Thematic Thread

| Select 12 Credits (p. 1378) ${ }^{2}$ | 12 |
| :--- | :--- |

## Total Hours

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |

PE 202
Technology for Wellness
Total Hours

## Major Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above
Code Title Hours

| Required Courses in | Public Health |  |
| :---: | :---: | :---: |
| HLTH 103 | Health and Behavior Change ${ }^{1}$ | 3 |
| HLTH 210 | Introduction to Public Health ${ }^{1}$ | 3 |
| HLTH 301 | Introduction to Health Education ${ }^{1}$ | 3 |
| HLTH 309 | Introduction to the Study of Disease ${ }^{1}$ | 3 |
| HLTH 310 | Environmental Health ${ }^{1}$ | 3 |
| HLTH 311 | International Health ${ }^{1}$ | 3 |
| HLTH 312 | Data Management for Health Science ${ }^{1}$ | 3 |
| HLTH 313 | Biostatistics ${ }^{1}$ | 3 |
| HLTH 314 | Nutrition and Health ${ }^{1}$ | 3 |
| HLTH 406 | Program Planning and Evaluation ${ }^{1}$ | 3 |
| HLTH 410 | Epidemiology ${ }^{1}$ | 3 |
| HLTH 440 | Public Health Seminar ${ }^{1}$ | 3 |
| Subtotal |  | 36 |
| Required Internship |  |  |
| HLTH 450 | Internship 1,2 | 12 |
| Subtotal |  | 12 |

Required Course outside of Major Department
BIOL 210 Medical Microbiology with Lab ${ }^{3} 3$
Subtotal 3

Supporting Coursework:
Select three courses from the list below: 9

| GERO 265 | Aging and the Older Person $^{3}$ |
| :--- | :--- |
| GERO 414 | Death and Dying ${ }^{3}$ |
| HCAM 230 | US Healthcare Systems $^{3}$ |
| HLTH 203 | Public Health and Physical Activity ${ }^{3}$ |
| HLTH 211 | Women's Health Issues $^{3}$ |
| HLTH 316 | Human Sexuality $^{3}$ |
| HLTH 408 | Public Health Administration |
| HLTH 424 | Nutrition and Exercise $^{3}$ |
| Subtotal |  |
| Total Hours |  |

1 Course counts for $50 \%$ of Major requirements and Major GPA
22.50 or higher GPA in the major to be eligible for internship

3 Course counts for $50 \%$ of Major requirements but not for Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Natural Science and Math College-Wide Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| STAT 152 | Elementary Statistics I | 3 |


| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| :--- | :--- | ---: |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| Additional |  |  |
| Code | Title | Hours |
| CHEM 108 | General Chemistry II | 3 |
| CHEM 112 | General Chemistry II Lab | 1 |
| PHYS 201 | Elements of Physics I with Lab | 4 |
| PHYS 202 | Elements of Physics II/ Lab | 4 |

## Co-Curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Conference attendance
2. Service-Learning
3. Internships
4. Career Education
5. Peer Education Opportunities

## Doctor of Physical Therapy (DPT) <br> Prerequisite Admission Requirements

## For Application Requirements

Please refer to Slippery Rock University's Physical Therapy (Doctor of Physical Therapy) website for requirements: www.sru.edu/PT (http:// www.sru.edu/PT/)

| Liberal Studies and Rock Studies <br> Title <br> Code <br> Prerequisite Courses - SRU Physical Therapy | Hours |
| :--- | ---: |
| Select one of the following: | 6 |


| BIOL 216 <br> \& BIOL 217 | Anatomy and Physiology I with Lab and Anatomy and Physiology II with Lab |  |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { BIOL } 340 \\ & \& \text { BIOL } 410 \end{aligned}$ | Vertebrate Anatomy with Lab and Animal Physiology with Lab |  |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
| CHEM 108 <br> \& CHEM 112 | General Chemistry II and General Chemistry II Lab | 4 |
| Select one of the following: |  | 8 |
| PHYS 201 <br> \& PHYS 202 | Elements of Physics I with Lab and Elements of Physics II/ Lab |  |
| PHYS 211 <br> \& PHYS 213 | General Physics I with Lab and General Physics III/ Lab |  |
| STAT 152 or BIOL 325 | Elementary Statistics I Biometry with Lab | 3 |
| PSYC 105 | Introduction to Psychology | 3 |
| Additional Psychology Course ${ }^{1}$ |  | 3 |
| Total Hours |  | 31 |

1 See My Rock Audit for specific courses.
HEALTH SCIENCE - PUBLIC HEALTH (6266)
PRE PT (SRU Traditional)
Effective Fall 2016

Revised 02.10.2022
UCC 02.01.2022

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| HLTH 103 | Health and Behavior Change | 3 |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar | 1 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
|  | Hours | 13 |
| Spring |  |  |
| ENGL 104 | Critical Reading | 3 |
| PSYC 105 | Introduction to Psychology | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
|  | Hours | 12 |
| Second Year |  |  |
| Fall |  |  |
| HLTH 210 | Introduction to Public Health | 3 |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| Additional PSYC Course |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 15 |
| Spring |  |  |
| HLTH 301 | Introduction to Health Education | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| Select one of the following: |  | 3 |
| COMM | Civil Discourse: Theory \& Practice |  |
| PHIL 11 | Ethics and Civil Discourse |  |
| POLS 2 | Civil Discourse and Democracy |  |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| HLTH 312 | Data Management for Health Science | 3 |


| HLTH 314 | Nutrition and Health | 3 |
| :--- | :--- | ---: |
| HLTH 406 | Program Planning and Evaluation | 3 |
| BIOL 210 | Medical Microbiology with Lab |  |
| CHEM 107 | General Chemistry I |  |
| \& CHEM 111 | and General Chemistry I Lab | 3 |
|  | Hours | 4 |
| Spring | Environmental Health | $\mathbf{1 6}$ |
| HLTH 310 | International Health | 3 |
| HLTH 311 | Biostatistics | 3 |
| HLTH 313 | Epidemiology | 3 |
| HLTH 410 | General Chemistry II |  |
| CHEM 108 | and General Chemistry II Lab | 3 |
| \& CHEM 112 | Hours | 4 |
| Summer | Internship | $\mathbf{1 6}$ |
| HLTH 450 | Hours | $\mathbf{1 2}$ |

## Fourth Year

Fall

| HLTH 309 | Introduction to the Study of Disease | 3 |
| :--- | :--- | :--- |
| PHYS 201 | Elements of Physics I with Lab | 4 |

Public Health Supporting Coursework 3

## Winter

Potential On-line Winter Courses
International Health

|  | Hours | $\mathbf{0}$ |  |  |
| :--- | :--- | ---: | :---: | :---: |
| Spring |  |  |  |  |
| HLTH 440 | Public Health Seminar | 3 |  |  |
| PHYS 202 | Elements of Physics II/ Lab | 4 |  |  |
| Public Health Supporting Coursework | 3 |  |  |  |
| Public Health Supporting Coursework | 3 |  |  |  |
| Hours |  |  |  | $\mathbf{1 3}$ |

## Summer

Potential On-line Summer Courses
International Health/Women's Health Issues

| Hours | 0 |
| :--- | ---: | ---: |
| Total Hours** | 122 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.


## Major Code: 6266

Concentration Code: SRU Traditional

## Revised: 07.14.2021

## Health Science - Public Health, Bachelor of Science (BS) / PrePhysician Assistant (SRU) (3+2) Public Health Program Learning Outcomes

- Effective Professional Communication: Communicate with clients in an individual or group setting and with health professionals in a variety of health settings using a combination of communication skills for a clear exchange of ideas and information, listening and comprehending the viewpoints of others, effectively presenting information in oral and written formats and integrating media/ technology.
- Professional Competency: Use reasoned judgment drawing upon a broad knowledge base from social, behavioral and natural science, education and health to assess, plan, implement, evaluate and coordinate health promotion for individuals and communities.
- Professional Ethics: Apply high ethical standards to public health practice with a sensitivity to multicultural traditions, legal issues, and adherence to a code of ethics of professional health organizations.
- Continual Professional and Personal Development: Continue personal and professional development in holistic health, including the components of physical, emotional, spiritual, social, environmental and vocational health, through continuing education, advanced study, and participation in professional health organizations


## What are your options?

Pre-Physician Assistant SRU 3+2: Earn a Master of Science degree in Physician Assistant Studies in five years rather than six. In the first three years, you complete your major courses and pre-requisites for the SRU PA program. At the end of your second year, you apply for admission into the SRU PA program. If accepted, your first year in the SRU PA program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

Pre-Physician Assistant (SRU Traditional): Complete the requirements for your major and the pre-requisites for the SRU PA program and apply to the SRU PA program in your senior year.

## Related Links

Public Health - Pre-Physician Assistant, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/public-health-pre-physicianassistant/)

Public Health Department Page (https://www.sru.edu/academics/ colleges-and-departments/ches/departments/public-health/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

$1^{\text {st }}$ Major. Public Health

- Overall GPA: 2.00 or higher
- Major GPA (only includes Health courses): 2.00 or higher
$2^{\text {nd }}$ Major: Pre-PA SRU 3+2 Public Health
- Overall GPA: 3.00 or higher
- Overall GPA: 3.25 or higher (Fall 2018 and after)

| Summary* |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| Rock Studie | ments | 43 |
| Other Basic | ents | 0-3 |
| Computer C |  | 0-3 |
| Major Requ |  | 39 |
| Natural Scie | Math College-Wide Requirements | 12 |
| Electives |  | 37 |
| * All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the $1^{\text {st }}$ year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree. |  |  |
| Rock Studies Requirements |  |  |
| Code | Title | Hours |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Select one of the following: 3 |  |  |

Select one of the following: 3

| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |

$\begin{array}{ll}\text { Subtotal } & 15\end{array}$
Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378)

| Humanities Inquiry |  |
| :--- | :--- |
| Select 3 Credits (p. 1378) |  |

Social Science Inquiry
Select 3 Credits (p. 1378) 3

Physical \& Natural Sciences Inquiry

| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| :--- | :--- | ---: |
| CHEM 107 | General Chemistry I | 4 |
| \& CHEM 111 | and General Chemistry I Lab |  |
| Subtotal |  | 16 |

## Thematic Thread

| Select 12 Credits $(\mathrm{p} .1378)^{2}$ | 12 |
| :--- | :--- |
| Total Hours | 43 |

[^20]2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be $300-$ level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one | following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 Beginning Algebra |  |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Ar |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |
| Major Requirements |  |  |
| - If you choose to pursue Pre-Physician Assistant SRU 3+2 Public Health and are not accepted into the PA program, then additional coursework is required to complete a first major of Public Health. Please refer to Public Health Curriculum Guide. |  |  |


| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses in Public Health |  |  |
| HLTH 103 | Health and Behavior Change | 3 |
| HLTH 210 | Introduction to Public Health | 3 |
| HLTH 301 | Introduction to Health Education | 3 |
| HLTH 309 | Introduction to the Study of Disease | 3 |
| HLTH 310 | Environmental Health | 3 |
| HLTH 311 | International Health | 3 |
| HLTH 312 | Data Management for Health Science | 3 |
| HLTH 313 | Biostatistics | 3 |
| HLTH 314 | Nutrition and Health | 3 |
| HLTH 406 | Program Planning and Evaluation | 3 |
| HLTH 410 | Epidemiology | 3 |
| Subtotal |  | 33 |
| Required Courses from other Departments |  |  |
| PSYC 105 | Introduction to Psychology | 3 |
| BIOL 210 | Medical Microbiology with Lab | 3 |
| Subtotal |  | 6 |
| Total Hours |  | 39 |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

| Natural Science and Math College-Wide Requirements |  |  |
| :--- | :--- | ---: |
| Code | Title | Hours |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| STAT 152 | Elementary Statistics I | 3 |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| Total Hours |  | $\mathbf{1 3}$ |

## Additional Physician Assistant Prerequisite Courses

| Code | Title | Hours |
| :---: | :---: | :---: |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
| CHEM 108 \& CHEM 112 | General Chemistry II and General Chemistry II Lab | 4 |
| CHEM 201 | Organic Chemistry I | 3 |
| BIOL 104 | Principles of Biology with Lab | 4 |
| BIOL 250 | Genetics with Lab | 4 |
| ERS 250 or HCAM 250 | Medical Terminology <br> Medical Terminology for Healthcare <br> Administrators | 3 |
| Total Hours |  | 22 |

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Conference attendance
2. Service-Learning
3. Internships
4. Career Education
5. Peer Education Opportunities

## Physician Assistant Studies (Master of Science in Physician Assistant Studies) <br> Prerequisite Admission Requirements - Pre- Physician Assistant 3+2

## For Application Requirements

Please refer to Slippery Rock University's Physician Assistant Studies (Master of Science in Physician Assistant Studies) website for requirements:http://www.sru.edu/pa (http://www.sru.edu/pa/)

| Liberal Studies and Rock Studies  <br> Code Title | Hours |
| :--- | :--- | ---: |
| Prerequisite Courses SRU Physician Assistant 4 <br> BIOL 104 Principles of Biology with Lab 3 <br> BIOL 216 Anatomy and Physiology I with Lab 3 <br> BIOL 217 Anatomy and Physiology II with Lab 4 <br> BIOL 250 Genetics with Lab 3 <br> BIOL 210 Medical Microbiology with Lab 4 |  |


| or BIOL 330 | Microbiology/Lab |  |
| :---: | :---: | :---: |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
| CHEM 108 \& CHEM 112 | General Chemistry II and General Chemistry II Lab | 4 |
| CHEM 201 | Organic Chemistry I | 3 |
| Inferential Statistics Course ${ }^{1}$ |  | 3 |
| PSYC 105 | Introduction to Psychology | 3 |
| ERS 250 or HCAM 250 | Medical Terminology <br> Medical Terminology for Healthcare <br> Administrators | 3 |
| Total Hours |  | 37 |

1 Any statistics course with inferential statistics embedded. See My Rock Audit for specific courses.

## Pre-Physician Assistant SRU 3+2 Requirements

If any of these requirements are not met, the $3+2$ designation will be removed from the student's record:

1. A 3.25 or higher overall GPA must be maintained by the student.
2. The student can only be enrolled in the Pre-Physician Assistant SRU $3+2$ program for a maximum of three (3) years, full-time continuous enrollment (fall/spring).

## Provision

Should a Pre-Physician Assistant SRU 3+2 student be unsuccessful in completing the $1^{\text {st }}$ two semesters (summer or fall) of the Physician Assistant Program and wants to complete the original undergraduate degree, it is solely up to the discretion of the undergraduate program Department Chair to determine which, if any, Physician Assistant courses will count toward the completion of his/her undergraduate degree. In addition, students must complete any unfulfilled requirements of their undergraduate major. Students may still apply to the Physician Assistant Studies Program with an earned Bachelor's degree.

HEALTH SCIENCE - PUBLIC HEALTH - BS (6266)
PRE-PA RSU 3+2 (6SPH)
This program is effective as of Fall 2019.
Revised 8-2019
UCC 2.5.2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Three-Year Plan

| BIOL 104 | Principles of Biology with Lab | 4 |
| :---: | :---: | :---: |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar * | 1 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
|  | Hours | 17 |


| Spring |  |  |
| :--- | :--- | ---: |
| BIOL 210 | Medical Microbiology with Lab | 3 |
| ENGL 104 | Critical Reading | 3 |
| PSYC 105 | Introduction to Psychology | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Humanities Inquiry (p. 1378) | 3 |  |
|  | Hours | $\mathbf{1 5}$ |

## Second Year

Fall

| HLTH 210 | Introduction to Public Health | 3 |
| :---: | :---: | :---: |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
| ERS 250 | Medical Terminology | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 19 |


| Spring |  | 3 |
| :--- | :--- | :--- |
| HLTH 301 | Introduction to Health Education | 3 |

BIOL 217 Anatomy and Physiology II with Lab 3
CHEM 108 General Chemistry II 4
\& CHEM 112 and General Chemistry II Lab
Select one of the following: 3

| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |
|  | Hours |

Third Year

## Fall

| HLTH 309 | Introduction to the Study of Disease | 3 |
| :--- | :--- | :--- |
| HLTH 312 | Data Management for Health Science | 3 |
| HLTH 314 | Nutrition and Health | 3 |
| HLTH 406 | Program Planning and Evaluation | 3 |
| CHEM 201 | Organic Chemistry I | 3 |


| Thematic Thread Requirement (p. 1378) | 3 |
| :---: | ---: |
| Hours | $\mathbf{1 8}$ |

## Winter

## Potential On-line Winter Courses

| HLTH 311 | International Health |  |
| :--- | :--- | :--- |
| Rock Studies |  | $\mathbf{0}$ |


| Spring |  | 3 |
| :--- | :--- | :--- |
| HLTH 410 | Epidemiology | 3 |
| HLTH 313 | Biostatistics | 3 |


| HLTH 310 | Environmental Health | 3 |
| :---: | :---: | :---: |
| BIOL 250 | Genetics with Lab | 4 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 16 |
| Summer |  |  |
| Potential On-line Summer Courses |  |  |
| HLTH 311 | International Health |  |
| ERS 250 | Medical Terminology (Rock Studies) |  |
|  | Hours | 0 |
| Fourth Year |  |  |
|  |  |  |
| If not admitted to SRU PA Program |  |  |
| Public Health Supporting Coursework - select three |  | 9 |
|  | Hours | 9 |
| Spring <br> If not admitted to SRU PA Program |  |  |
|  |  |  |
| HLTH 440 | Public Health Seminar | 3 |
| HLTH 450 | Internship (or summer after senior year) | 12 |
|  | Hours | 15 |
|  | Total Hours** | 125 |
| 1 Course offered in multiple subjects; cannot take course in first major subject. |  |  |
| 2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread. |  |  |
| * Students are encouraged to take INDS 101 as a Free Elective. |  |  |
| Major Code: 6266 |  |  |
| Concentration: 6SPH |  |  |
| Revised: 07.02.2021 |  |  |
| ** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year. |  |  |

## Health Science - Public Health, Bachelor of Science (BS) / PrePhysician Assistant (SRU) (Traditional) <br> Public Health Program Learning Outcomes

- Effective Professional Communication: Communicate with clients in an individual or group setting and with health professionals in a variety of health settings using a combination of communication skills for a clear exchange of ideas and information, listening and comprehending the viewpoints of others, effectively presenting information in oral and written formats and integrating media/ technology.
- Professional Competency: Use reasoned judgment drawing upon a broad knowledge base from social, behavioral and natural science, education and health to assess, plan, implement, evaluate and coordinate health promotion for individuals and communities.
- Professional Ethics: Apply high ethical standards to public health practice with a sensitivity to multicultural traditions, legal issues, and adherence to a code of ethics of professional health organizations.
- Continual Professional and Personal Development: Continue personal and professional development in holistic health, including the components of physical, emotional, spiritual, social, environmental and vocational health, through continuing education, advanced study, and participation in professional health organizations


## What are your options?

Pre-Physician Assistant SRU 3+2: Earn a Master of Science degree in Physician Assistant Studies in five years rather than six. In the first three years, you complete your major courses and pre-requisites for the SRU PA program. At the end of your second year, you apply for admission into the SRU PA program. If accepted, your first year in the SRU PA program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

Pre-Physician Assistant (SRU Traditional): Complete the requirements for your major and the pre-requisites for the SRU PA program and apply to the SRU PA program in your senior year.

## Related Links

Public Health - Pre-Physician Assistant, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/public-health-pre-physicianassistant/)

Public Health Department Page (https://www.sru.edu/academics/ colleges-and-departments/ches/departments/public-health/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Overall GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 43 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 60 |
| Natural Science and Math College-Wide Requirements | 12 |
| Electives | 17 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Physical \& Natural Sciences Inquiry |  |  |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
| Subtotal |  | 16 |
| Thematic Thread |  |  |
| Select 12 Credits (p.1378) ${ }^{2}$ |  | 12 |
| Total Hours |  | 43 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one | following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Ar |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |

PE 202
Technology for Wellness

## Total Hours

## Major Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above
- Students may choose to earn a BS in Health Science - Public Health as preparation for graduate studies in many health care related fields. In this case, the student should learn what prerequisites are required for his/her intended graduate program and take those courses as electives while completing the Public Health program.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses in Public Health |  |  |
| HLTH 103 | Health and Behavior Change | 3 |
| HLTH 210 | Introduction to Public Health | 3 |
| HLTH 301 | Introduction to Health Education | 3 |
| HLTH 309 | Introduction to the Study of Disease | 3 |
| HLTH 310 | Environmental Health | 3 |
| HLTH 311 | International Health | 3 |
| HLTH 312 | Data Management for Health Science | 3 |
| HLTH 313 | Biostatistics | 3 |
| HLTH 314 | Nutrition and Health | 3 |
| HLTH 406 | Program Planning and Evaluation | 3 |
| HLTH 410 | Epidemiology | 3 |
| HLTH 440 | Public Health Seminar | 3 |
| Subtotal |  | 36 |

Required Internship

| HLTH 450 | Internship ${ }^{1}$ | 12 |
| :--- | :--- | :--- |
| Subtotal | 12 |  |


| Required Course outside of Major Department |  |
| :--- | :--- |
| BIOL 210 | Medical Microbiology with Lab |

Subtotal 3

Required Coursework:
Select three courses from the list below:

| HLTH 203 | Public Health and Physical Activity |
| :--- | :--- |
| HLTH 211 | Women's Health Issues |
| HLTH 316 | Human Sexuality |
| HLTH 408 | Public Health Administration |
| HLTH 424 | Nutrition and Exercise |
| GERO 265 | Aging and the Older Person |
| GERO 414 | Death and Dying |
| HCAM 230 | US Healthcare Systems |


| Subtotal | 9 |
| :--- | ---: |
| Total Hours | 60 |

12.50 or higher GPA in the major to be eligible for internship

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

| Natural Science and Math College-Wide Requirements |  |  |
| :--- | :--- | ---: |
| Code | Title | Hours |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| STAT 152 | Elementary Statistics I | 3 |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |

## Additional Physician Assistant Prerequisite Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| BIOL 104 | Principles of Biology with Lab | 4 |
| BIOL 210 | Medical Microbiology with Lab | 3 |
| BIOL 250 | Genetics with Lab | 4 |
| CHEM 107 | General Chemistry I | 3 |
| CHEM 108 | General Chemistry II | 3 |
| CHEM 111 | General Chemistry I Lab | 1 |
| CHEM 112 | General Chemistry II Lab | 1 |
| CHEM 201 | Organic Chemistry I | 3 |
| ERS 250 | Medical Terminology | 3 |
| or HCAM 250 | Medical Terminology for Healthcare |  |
|  | Administrators |  |

## Co-Curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Conference attendance
2. Service-Learning
3. Internships
4. Career Education
5. Peer Education Opportunities

## Physician Assistant Studies (Master of Science in <br> Physician Assistant Studies) <br> Prerequisite Admission Requirements

## For Application Requirements

Please refer to Slippery Rock University's Physician Assistant Studies (Master of Science in Physician Assistant Studies) website for requirements: http://www.sru.edu/pa (http://www.sru.edu/pa/)

| Liberal Studies and Rock Studies |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| Prerequisite Courses - SRU Physician Assistant |  |  |
| BIOL 104 | Principles of Biology with Lab | 4 |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| BIOL 250 | Genetics with Lab | 4 |
| $\begin{aligned} & \text { BIOL } 210 \\ & \quad \text { or BIOL } 330 \end{aligned}$ | Medical Microbiology with Lab Microbiology/Lab | 3 |
| CHEM 107 <br> \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
| CHEM 108 <br> \& CHEM 112 | General Chemistry II and General Chemistry II Lab | 4 |


| CHEM 201 | Organic Chemistry I | 3 |
| :--- | :--- | :---: |
| Inferential Statistics Course 1 | 3 |  |
| PSYC 105 | Introduction to Psychology | 3 |
| ERS 250 | Medical Terminology |  |
| or HCAM 250 Medical Terminology for Healthcare | Administrators | 3 |
| Total Hours |  | $\mathbf{3 7}$ |

1 Any statistics course with inferential statistics embedded. See My Rock Audit for specific courses.

HEALTH SCIENCE - PUBLIC HEALTH (6266)
PRE-PA (SRU Traditional)
Effective Fall 2016
Revised 02.10.2022
UCC 02.01.2022

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall |  |  |
| HLTH 103 | Health and Behavior Change | 3 |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar | 1 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| Creative \& Aesthetic | Inquiry (p. 1378) | 3 |
|  | Hours | $\mathbf{1 3}$ |
| Spring |  | 3 |
| ENGL 104 | Critical Reading | 3 |
| PSYC 105 | Introduction to Psychology | 3 |
| STAT 152 | Elementary Statistics I | 3 |
| Humanities Inquiry $($ p. 1378) | Hours | $\mathbf{1 2}$ |


| Second Year |  |  |
| :--- | :--- | :--- |
| Fall  <br> HLTH 210 Introduction to Public Health | 3 |  |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| Thematic Thread Requirement (p. 1378) $^{\text {Declare a Thematic Thread }}{ }^{3}$ | 3 |  |

## Spring

HLTH 301
Introduction to Health Education

| BIOL 217 | Anatomy and Physiology II with Lab | 3 |
| :---: | :---: | :---: |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 12 |
| Third Year |  |  |
| Fall |  |  |
| BIOL 210 | Medical Microbiology with Lab | 3 |
| HLTH 312 | Data Management for Health Science | 3 |
| HLTH 314 | Nutrition and Health | 3 |
| HLTH 406 | Program Planning and Evaluation | 3 |
| \& CHEM 111 | General Chemistry I and General Chemistry I Lab | 4 |
|  | Hours | 16 |
| Spring |  |  |
| HLTH 310 | Environmental Health | 3 |
| HLTH 311 | International Health | 3 |
| HLTH 313 | Biostatistics | 3 |
| HLTH 410 | Epidemiology | 3 |
| \& CHEM 112 | General Chemistry II and General Chemistry II Lab | 4 |
|  | Hours | 16 |
| Summer |  |  |
| HLTH 450 | Internship | 12 |
|  | Hours | 12 |
| Fourth Year |  |  |
| Fall |  |  |
| HLTH 309 | Introduction to the Study of Disease | 3 |
| BIOL 104 | Principles of Biology with Lab | 4 |
| CHEM 201 | Organic Chemistry I | 3 |
| Public Health Supporting Coursework |  | 6 |
|  | Hours | 16 |
| Winter |  |  |
| Potential On-line Winter Courses |  |  |
| International Health |  |  |
| ERS 250/Rock Studies |  |  |
|  | Hours | 0 |
| Spring |  |  |
| HLTH 440 | Public Health Seminar | 3 |
| BIOL 250 | Genetics with Lab | 4 |
| ERS 250 | Medical Terminology (online) ${ }^{2}$ | 3 |
| Public Health Supporting Coursework |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 16 |
| Summer |  |  |
| Potential On-line Summer Courses |  |  |
| International H | Women's Health Issues |  |

ERS 250/Rock Studies

| Hours | 0 |
| :--- | ---: | ---: |
| Total Hours** | 125 |

1 Course offered in multiple subjects; cannot take course in first major subject.

2 or PA 500 (Graduate courses taken as an undergraduate student count toward their graduate degree, not their undergraduate degree)
Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6266
Concentration Code: SRU Traditional
Revised: 07.14.2021

## Public Health, Minor

To access Minor Requirements, please view the Curriculum Guide tab.
Students in related disciplines find that a minor in Public Health opens additional opportunities in non-profit community agencies, departments of health, work-site health promotion, health care settings and health voluntaries such as the American Cancer Society and American Heart Association.

## Related Links

Public Health, Minor Program Page (https://www.sru.edu/academics/ majors-and-minors/public-health/)

Public Health Department Page (https://www.sru.edu/academics/ colleges-and-departments/ches/departments/public-health/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  | 3 |
| HLTH 103 | Health and Behavior Change | 3 |
| HLTH 210 | Introduction to Public Health |  |
| Electives |  |  |


| Select four of the following: |  |
| :--- | :--- |
| HLTH 301 | Introduction to Health Education |
| HLTH 309 | Introduction to the Study of Disease |
| HLTH 310 | Environmental Health |
| HLTH 311 | International Health |
| HLTH 312 | Data Management for Health Science |
| HLTH 313 | Biostatistics |
| HLTH 314 | Nutrition and Health |
| HLTH 406 | Program Planning and Evaluation |
| HLTH 410 | Epidemiology |
| HLTH 440 | Public Health Seminar |

Total Hours

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN PUBLIC HEALTH (40A)
This program is effective as of Fall 2010.
Revised 8-2019

## Social Work, Bachelor of Science (BS)

Program Director. Dr. Tami Micsky
Social work is a profession that applies knowledge about people and society to help persons, groups, or communities meet a diversity of needs, solve a wide range of problems, promote social justice, and assist people in becoming empowered. The baccalaureate program in social work prepares students for generalist social work practice. As beginning professional social workers, graduates typically work in the areas of child welfare, juvenile and adult corrections, public assistance, health and mental health, aging domestic violence, and chemical dependency, among others.

The undergraduate program in social work awards a Bachelor of Science degree in Social Work and is accredited by the Council on Social Work Education, the national accrediting agency for social work. Accreditation standards require a solid core of courses on social welfare issues and policies, social work practice skills, basic social science research methods, and a broad background in the liberal arts with special emphasis on psychology, biology, economics, politics, sociology, organization, and diverse ethnic groups. In fulfilling the academic requirements for social work, students must also uphold the values of
the profession of Social Work as expressed in the National Association of Social Work's Code of Ethics.

While Pennsylvania requires a master's degree to become a licensed social worker, some states license social workers holding a bachelor's degree. Since requirements vary by state, please check with the licensing board in the state you intend to practice.

## Program Learning Outcomes

The six goals of the Social Work Program are as follows:

1. To graduate students with a baccalaureate (B.S.) degree in Social Work who are competent to begin generalist social work practice.
2. To graduate students who are well prepared to enter graduate schools of Social Work, either directly after receiving the undergraduate degree, or after a period of practice.
3. To contribute to the intellectual, ethical, and emotional development of our students in order to enhance their awareness and involvement as citizens in the broad social welfare issues of our times.
4. To sensitize students to the human condition in order that they might develop a respect for human dignity, diversity, and freedom.
5. For students who are uncertain about a career choice, to provide a clear and honest introduction to the responsibilities and rewards of a Social Work career, so that they can make informed career choices.
6. To help meet the human resource needs for baccalaureate level social workers in the diverse mix of rural, small town, and metropolitan areas from which our students come and to which many wish to return.

## Related Links

Social Work, BS Program Page (https://www.sru.edu/academics/majors-and-minors/social-work/)

Social Work Department Page (https://www.sru.edu/academics/colleges-and-departments/ches/departments/social-work/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 54 |
| Electives | 24 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Sciences Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Sciences Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |
| Thematic Thread |  |  |
| Select 12 Credi | 378) ${ }^{2}$ | 12 |
| Total Hours |  | 42 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one | following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |

PE 202
Technology for Wellness
Total Hours

## Major Requirements

- 27 major credits must be taken at SRU or PASSHE
- 27 major credits must be taken at the 300 level or above
- ACT 34 (Criminal History) and ACT 151 (Child Abuse) clearances are required for admission to the Social Work program.
- Students must have a cumulative GPA of 2.0 for admission to the Social Work program.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Core Course (Other Disciplines) |  |  |
| Select one of the following: |  | 3 |
| PSYC 105 | Introduction to Psychology ${ }^{\text {1,2 }}$ |  |
| INDP 201 | Principles of Sociology ${ }^{1,2}$ |  |
| Subtotal |  | 3 |
| Required Core Courses - Social Work |  |  |
| SOWK 105 | Human Diversity ${ }^{1}$ | 3 |
| SOWK 251 | Introduction to Social Work ${ }^{1}$ | 3 |
| SOWK 328 | Human Behavior and the Social Environment ${ }^{1}$ | 3 |
| SOWK 340 | Social Welfare Institutions ${ }^{1}$ | 3 |
| SOWK 355 | Social Work Practice with Individuals ${ }^{1}$ | 3 |
| SOWK 356 | Social work Practice with Groups \& Families ${ }^{1}$ | 3 |
| SOWK 357 | Social Work Practice with Organizations and Communities ${ }^{1}$ | 3 |
| SOWK 407 | Social Policy Issues ${ }^{1}$ | 3 |
| SOWK 450 | SOWK Internship ${ }^{1}$ | 12 |
| SOWK 460 | Social Work Integrative Seminar ${ }^{1}$ | 3 |
| Subtotal |  | 39 |


| Research Methods |  |
| :--- | :--- |
| SOWK 318 | Research Methods ${ }^{1}$ 3 |

SOWK 319 Statistical Methods ${ }^{1} 3$
Subtotal 6

## Social Work Electives

Select two of the following: 6

| SOWK 200 | Introduction to Child Welfare ${ }^{1}$ |  |
| :---: | :---: | :---: |
| SOWK 230 | Social Justice and Equality ${ }^{1}$ |  |
| SOWK 300 | Crisis Intervention ${ }^{1}$ |  |
| SOWK 310 | Animal Assisted Interventions |  |
| SOWK 311 | Clinical and Academic Documentation for Social Work |  |
| SOWK 321 | Forensic Social Work |  |
| SOWK 334 | Clinical Perspectives on DSM Diagnoses |  |
| Subtotal |  | 6 |
| Total Hours |  | 54 |

Course counts for 50\% of Major requirements and Major GPA
2 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Field trips
2. Career Education
3. Internships
4. High-Impact Practice (HIP) designated classes
5. Job shadowing

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
SOCIAL WORK - BS (6181)
This program is effective as of Fall 2019.
Revised 10.29.2021
UCC 2.5.2019

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| SOWK 105 | Human Diversity | 3 |
| INDP 201 or PSYC 105 | Principles of Sociology or Introduction to Psychology | 3 |
| ENGL 102 | Critical Writing | 3 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| INDS 101 | FYRST Seminar | 1 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
|  | Hours | 16 |
| Spring |  |  |
| SOWK 251 | Introduction to Social Work | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| MATH 117 | Quantitative Reasoning | 3 |
| ENGL 104 | Critical Reading | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
|  | Hours | 15 |


| Second Year |  |  |
| :---: | :---: | :---: |
| Fall |  |  |
| SOWK 328 | Human Behavior and the Social Environment | 3 |
| SOWK 318 | Research Methods | 3 |
| SOWK 355 | Social Work Practice with Individuals ${ }^{2}$ | 3 |
| SCI 101 | Science of Life | 3 |
| Social Science Inquiry (p. 1378) |  | 3 |
| Declare a Thematic Thread ${ }^{3}$ |  |  |
|  | Hours | 15 |
| Spring |  |  |
| SOWK 319 | Statistical Methods | 3 |
| SOWK 356 | Social work Practice with Groups \& Families ${ }^{2}$ | 3 |
| SCI 102 | Understanding the Physical World | 3 |
| Elective |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| SOWK 340 | Social Welfare Institutions | 3 |
| SOWK 357 | Social Work Practice with Organizations and Communities ${ }^{2}$ | 3 |
| Social Work Elective or Rock Studies Elective |  | 3 |
| Rock Studies Thread course or Elective |  | 3 |
| Rock Studies Thread course or Elective |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| SOWK 407 | Social Policy Issues | 3 |
| Social Work Elective |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Elective |  | 3 |
| Elective |  | 3 |
|  | Hours | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| Social Work Elective or Rock Studies Elective |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Elective |  | 3 |
| Elective |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| SOWK 450 | SOWK Internship (S or summer) | 12 |
| SOWK 460 | Social Work Integrative Seminar (S or summer) | 3 |
|  | Hours | 15 |
|  | Total Hours** | 121 |

* Students are encouraged to take INDS 101 as a Free Elective.

1 Course offered in multiple subjects; cannot take course in first major subject.
2 Course requires a grade of $B$ or better

3 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread.

Major Code: 6181
Reviewed: 10-2019
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Social Work, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Social Work, Minor Program Page (https://www.sru.edu/academics/ majors-and-minors/social-work/)

Social Work Department Page (https://www.sru.edu/academics/colleges-and-departments/ches/departments/social-work/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Minor GPA: 2.00 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

| Code <br> Core Courses | Title | Hours |
| :--- | :--- | ---: |
| SOWK 251 | Introduction to Social Work | 3 |
| SOWK 328 | Human Behavior and the Social <br> Environment | 3 |
| SOWK 340 | Social Welfare Institutions | 3 |
| Social Work Electives |  |  |
| Select three of the following, at least one at 300 level or higher. |  |  |$\quad 9$

SOWK $334 \quad$ Clinical Perspectives on DSM Diagnoses
Total Hours

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN SOCIAL WORK(80B)
This program is effective as of Fall 2009
Revised 8-2019

## College of Liberal Arts Dean's Office Staff

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## Departments

- Art (p. 711)
- Asian Studies (p. 774)
- Cognitive Science and Leadership (p. 774)
- Criminology and Criminal Justice (p. 779)
- Dance (p. 794)
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- Gender Studies (p. 836)
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- Library (p. 873)
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- Music (p. 915)
- Nonprofit Management, Empowerment and Diversity Studies (p. 970)
- Philosophy (p. 1003)
- Political Science (p. 1015)
- Theatre (p. 1036)


## Art

| Chair | Secretary | Location | Department <br> Phone |
| :--- | :--- | :--- | :--- |
| Mr. Sean | Christine Byrd | 200 Art Building | 724-738-2020 |
| Macmillan |  |  |  |

## The Rock Difference

Students who major in art will develop the capacity to make tangible their aesthetic responses to experience. By increasing awareness of themselves, their environment and their culture, and by learning to think and act creatively, students prepare themselves for a life enriched through art. The broadly based Bachelor of Arts program with a concentration in art provides a diversified background suitable to generalist applications and an excellent foundation for further study in various disciplines. The Bachelor of Fine Arts degree program is for students interested in art as a profession. It is an intensive program of study aimed at developing a foundation of attitudes, traits and abilities with which to begin a lifetime as an artist. Emphasis is placed on students' personal experiences as the source of artistic motivation. The broadly based liberal studies curriculum provides students with a diversified background, which, in concert with their professional training, should lead to a successful career in art and applied vocations.
"The encouragement and support I received from the faculty and students in the Art Department at Slippery Rock University enabled me to gain the confidence to make it as a professional artist. The instruction I received provided both a practical and philosophic foundation that continues to contribute to my success as artist and teacher."
"Being creative and skilled are the keys to surviving in today's fast paced environment. The experience in the Art Department at Slippery Rock University prepared me to succeed in graduate school and in my professional career where constant change challenges all assumptions."

Dalton Good BFA ' 81
Director of Publications Point Park College

The Art Department sponsors regional and national travel opportunities to visit galleries and museums in cities such as Boston, Philadelphia, Toronto, New York, Washington, D.C. or Chicago each semester. Faculty organize day trips to exhibits in Cleveland and Pittsburgh several times each term. The department has developed exchange programs with
excellent art schools in Europe and Costa Rica to provide students with the opportunity for an international experience. Students have the opportunity to spend a semester studying and traveling in Europe or Costa Rica, experiencing different cultures. More than 100 students have participated in these exchanges.

Art faculty periodically take students to various professional society meetings such as the National Society for Education in Ceramic Arts, International Sculpture Society and Southern Graphics Society annual meetings. At these meetings students meet and get to know professionals in their field. They have an opportunity to attend lectures and demonstrations on the latest techniques being developed.

Each term, in our master studio program, the Art Department has visiting artists come to campus for workshops, lectures and critiques of student work. This program enables the student to know and experience the broadest possibilities in their own work.

Each year, the final exhibition in the campus gallery is devoted to an exhibit of student art. For this show, an invited juror judges the show, awarding prizes and scholarships for the coming year.

Students may elect to do an internship in their junior or senior year. Internships allow the student to sharpen skills learned in the classroom in a professional, working atmosphere. Students complete internships in various museums and galleries, and in photography, architectural, ceramic and graphic design studios. While interning, students gain a working knowledge in their chosen field, make contacts with professional artists, and learn to use the ideas and techniques practiced in the classroom.

The Art Society, a student run Art organization, coordinates field trips to special art exhibitions, raises monies for entry fees to local art exhibitions and sponsors exhibitions of their work to show in local galleries.

## Faculty

Theresa Antonellis
Instructor
Art
M.F.A., University of Massachusetts Amherst
B.A., Mount Holyoke College

## Tricia Bishop

Assistant Professor
Art
M.F.A., Syracuse University
B.F.A., Howard University

## Eric Charlton

Instructor
Art

## Matthew Conboy

Instructor
Art

## Emily Elliott

Assistant Professor
Art

## Heather Hertel

Professor
Art
M.F.A., Edinboro University
M.S., Syracuse University
B.F.A., Syracuse University

## Sean Macmillan

Associate Professor
Art
M.F.A., University of Kansas
B.F.A., Edinboro University

## Katherine Mickle

Associate Professor
Art
M.F.A., Ohio State University
M.A., Stephen Austin State University
B.F.A., Slippery Rock University

## Kurt Pitluga

Assistant Professor
Art
Ph.D., Pennsylvania State University
M.A., Pennsylvania State University
B.A., Edinboro University

## Doris Short

Instructor
Art
B.S., Art Institute of Pittsburgh

## Jon Shumway

Professor
Art
M.F.A., University of Iowa
M.A., University of lowa
B.A., Luther College

## Barbara Westman

Professor
Art
M.F.A., Academy of Fine Arts-Poland
B.A., Schola Posnaniensis/School of Applied Art

## Programs

All first-year students who enter SRU in the Summer and Fall terms of 2019 and after will follow Rock Studies. Students who entered SRU before Spring 2019 will follow Liberal Studies. All new transfer students beginning Summer 2019 and after will follow Liberal Studies. We anticipate that transfer students will begin to enter under Rock Studies during the Summer/Fall term of 2021.

## Majors

- Art, Bachelor of Arts (BA) (p. 728)
- Art, Bachelor of Fine Arts (BFA) (p. 731)
- Art, Bachelor of Fine Arts (BFA) - Concentration in Ceramic Arts (p. 734)
- Art, Bachelor of Fine Arts (BFA) - Concentration in Digital Media (p. 737)
- Art, Bachelor of Fine Arts (BFA) - Concentration in Drawing (p. 740)
- Art, Bachelor of Fine Arts (BFA) - Concentration in Fiber Arts (p. 743)
- Art, Bachelor of Fine Arts (BFA) - Concentration in Graphic Design (p. 746)
- Art, Bachelor of Fine Arts (BFA) - Concentration in K-12 Art Teache Preparation (p. 748)
- Art, Bachelor of Fine Arts (BFA) - Concentration in Metalsmithing (p. 752)
- Art, Bachelor of Fine Arts (BFA) - Concentration in Painting (p. 755)
- Art, Bachelor of Fine Arts (BFA) - Concentration in Photography (p. 758)
- Art, Bachelor of Fine Arts (BFA) - Concentration in Printmaking (p. 761)
- Art, Bachelor of Fine Arts (BFA) - Concentration in Psychology (p. 764)
- Art, Bachelor of Fine Arts (BFA) - Concentration in Sculpture (p. 767)


## Minors

- Art - Graphic Design Track for Communications Majors, Minor (p. 726)
- Art for Elementary Education Majors, Minor (p. 727)
- Art History, Minor (p. 728)
- Art, Minor (p. 770)
- Nonprofit Management in Art, Minor (p. 773)


## Certificates

- Art: Design, Certificate (p. 771)
- Art: Digital Media, Certificate (p. 771)
- Art: Graphic Design, Certificate (p. 772)
- Art: Photography, Certificate (p. 773)


## Courses

## ART 100-2-D Design

An introductory studio course examining the underlying structure of basic design in two-dimensional art. Students will be involved in the actual production of two-dimensional design solutions. The history of design is explored, as well as the various techniques employed by artists to express personal visions, communicate ideas or examine and interpret the human experience.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment is limited to students with a program in Art Graphic Design(Comm Major), Art, Art or Art With Certification (K-12).

## ART 101-3-D Design

An introductory studio course examining the underlying structure of basic design in three-dimensional art. Students will be involved in the actual production of three-dimensional design solutions. The history of design is explored, as well as the various techniques employed by artists to express personal visions, communicate ideas or examine and interpret the human experience.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment is limited to students with a major in Art, Art or Art With
Certification (K-12).

## ART 105 - Basic Studio Drawing

This course will provide students with introductory level drawing knowledge and skills, emphasizing fine art approaches. Drawing will be explored through production, critique, history and aesthetics. Students will be provided with the fundamental technical, historical and conceptual information necessary to produce fine art drawings and maintain a portfolio. The elements and principles of design will be incorporated through the use of various drawing materials and techniques. Emphasis will be placed on the hands-on exploration of formal, technical and conceptual relationships. Students will develop a sensitive response to subtleties in drawing as well as to the whole. Critical thinking will be addressed with each project, allowing students to improve their ability to analyze visual works of art. Through creative studio practice, students discover relationships relevant to their role as an artist and work to develop the following emphasized artistic traits: perceptual openness, flexibility/adaptability, the courage to take a risk, the ability to analyze, and self-confidence.

Credits: 3
Term(s) Typically Offered: Offered Fall, Spring, \& Summer Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Building a Healthy Society, Creating Art, Fighting Social Problems, The Future, Mind \& Brain, Political Arts, Transfer Thread Completion Course

## ART 106 - Basic Studio Painting

This course will provide students with introductory level painting knowledge and skills, emphasizing fine art approaches. Painting will be explored through production, critique, history and aesthetics in order to achieve individual artistic goals. Students will be provided with the fundamental technical, historical and conceptual information necessary to produce fine art paintings and develop a portfolio. The elements and principles of design will be incorporated through the use of various painting materials and techniques. Emphasis will be placed on the hands-on exploration of formal, technical and conceptual relationships. Students will develop a sensitive response to subtleties in paintings as well as to the whole. Critical thinking will be addressed with each project, allowing students to improve their ability to analyze visual works of art. Through creative studio practice, students discover relationships relevant to their role as an artist and work to develop the following emphasized artistic traits: perceptual openness, flexibility/adaptability, the courage to take a risk, the ability to analyze, and self-confidence.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Building a Healthy Society, Creating Art, Fighting Social Problems, The Future, Mind \& Brain, Political Arts, Transfer Thread Completion Course

## ART 107 - Basic Studio Photography

This course will provide students with introductory level photographic knowledge and skills, emphasizing fine art approaches. Photography will be explored through production, critique, history and aesthetics in order to achieve individual artistic goals. Students will be provided with the fundamental technical, historical and conceptual information necessary to produce fine art prints and maintain a portfolio. The elements and principles of design will be incorporated into the study of photography, with focus on formal, technical and conceptual relationships. Students will gain knowledge of various genres of photography, styles, tips and techniques. Critical thinking will be addressed with each project, allowing students to improve their ability to visually analyze artwork. Through creative studio practice, students discover relationships relevant to their role as an artist and work to develop the following emphasized artistic traits: perceptual openness, flexibility/adaptability, the courage to take a risk, the ability to analyze, and self-confidence.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Building a Healthy Society, Creating Art, Fighting Social Problems, The Future, Mind \& Brain, Political Arts, Transfer Thread Completion Course

## ART 108 - Basic Studio Printmaking

This course will provide students with introductory level printmaking knowledge and skills. Printmaking will be explored through production, critique, history and aesthetics. Students will be provided with the fundamental, technical, historical and conceptual information necessary to produce fine art prints and and editions of prints. The elements and principles of design will be incorporated through the use of various printmaking material and techniques. Emphasis will be placed on the hands-on exploration of formal, technical and conceptual relationships. Critical thinking will be addressed with each project, allowing students to improve their ability to analyze visual works of art. Through creative studio practice, students discover relationships relevant to their role as an artist and work to develop the following emphasized artistic traits: perceptual openness, flexibility/adaptability, the courage to take a risk, the ability to analyze, and self-confidence.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Building a Healthy Society, Creating Art, Fighting Social Problems, The Future, Mind \& Brain, Political Arts, Transfer Thread Completion Course

## ART 109-Basic Studio Metalsmithing

This course will provide students with introductory Metalsmithing knowledge and skills, emphasizing fine art approaches while utilizing a variety of materials, predominantly metal. Metalsmithing will be explored through production, critique, history and aesthetics in order to achieve individual artistic goals and expression. Students will be provided with the fundamental technical, historical and conceptual information necessary to produce fine art forms and develop a portfolio. Students gain an understanding of various techniques, styles and approaches to metalsmithing. Critical thinking will be addressed with each project, allowing students to improve their ability to analyze visual works of art. Through creative studio practice, students discover relationships relevant to their role as an artist and work to develop the following emphasized artistic traits: perceptual openness, flexibility/adaptability, the courage to take a risk, the ability to analyze, and self-confidence.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Building a Healthy Society, Creating Art, Fighting Social Problems, The Future, Mind \& Brain, Political Arts, Transfer Thread Completion Course

## ART 110 - Basic Studio Sculpture

This course will provide students with introductory Sculpture knowledge and skills, emphasizing fine art approaches while utilizing a variety of materials. Sculpture will be explored through production, critique, history and aesthetics in order to achieve individual artistic goals and expression. Students will be provided with the fundamental technical, historical and conceptual information necessary to produce fine art forms and develop a portfolio. Students gain an understanding of various techniques, styles and approaches to contemporary sculpture. Critical thinking will be addressed with each project, allowing students to improve their ability to analyze visual works of art. Through creative studio practice, students discover relationship relevant to their role as an artist and work to develop the following emphasized artistic traits: perceptual openness, flexibility/adaptability, the courage to take a risk, the ability to analyze, and self-confidence.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Building a Healthy Society, Creating Art, Fighting Social Problems, The Future, Mind \& Brain, Political Arts, Transfer Thread Completion Course

## ART 111 - Basic Studio Fiber Art

This course will provide students with introductory level Fiber Art knowledge and skills. Fiber Art will be explored through production, critique, history and aesthetics. Students will be provided with the fundamental technical, historical and conceptual information necessary to produce fine art forms and develop a portfolio. Through two-and threedimensional projects, students will have an opportunity to creatively explore a variety of traditional and non-traditional flexible materials, techniques and concepts while developing a portfolio. Emphasis will be place upon the ability to investigate the unique qualities and characteristics of materials and the development of an original response to an assignment. Critical thinking will be addressed with each project, allowing students to improve their ability to analyze visual works of art. Through creative studio practice, students discover relationships relevant to their role as an artist and work to develop the following emphasized artistic traits: perceptual openness, flexibility/adaptability, the courage to take a risk, the ability to analyze, and self-confidence.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Building a Healthy Society, Creating Art, Fighting Social Problems, The Future, Mind \& Brain, Political Arts, Transfer Thread Completion Course

## ART 112 - Basic Studio Ceramics

This course will provide students with introductory ceramics knowledge and skills, emphasizing fine art approaches while utilizing a variety of materials. Ceramics will be explored through production, critique, history and aesthetics in order to achieve individual artistic goals, and expression. Students will be provided with the fundamental technical, historical and conceptual information necessary to produce fine art forms and develop a portfolio. Students gain an understanding of various techniques, styles and approaches to contemporary ceramics. Emphasis will be placed upon the ability to investigate the unique qualities and characteristics of materials and the development of an original response to an assignment. Critical thinking will be addressed with each project, allowing students to improve their ability to analyze visual works of art. Through creative studio practice, students discover relationships relevant to their role as an artist and work to develop the following emphasized artistic traits: perceptual openness, flexibility/adaptability, the courage to take a risk, the ability to analyze, and self-confidence.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Building a Healthy Society, Creating Art, Fighting Social Problems, The Future, Mind \& Brain, Political Arts, Transfer Thread Completion Course

## ART 113 - Basic Studio Graphic Design

Students will explore Graphic Design with a beginning level of production, critique, history and aesthetics. This course is intended to develop the student's skill level and personal aesthetic. Creative responses to assignments will include the application of visual language skills to communicate ideas, meaning and information. Coursework will include traditional, digital and mixed media. It will also focus on studies in perception, visual organization, the graphic design process and ideation, with investigations into experimental and expressive aspects of graphic design. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problems; ability to synthesize.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Building a Healthy Society, Creating Art, Fighting Social Problems, The Future, Mind \& Brain, Political Arts, Transfer Thread Completion Course

## ART 114 - Basic Studio Digital Media

This course will provide students with introductory level Digital Media knowledge and skills, emphasizing fine art approaches that utilize the computer in addition to other various technologies to produce works of art. Digital Media will be explored through production, critique, history and aesthetics in order to achieve individual artistic goals. Students will be provided with the fundamental technical, historical and conceptual information necessary to produce digitally-based art. Technical ability and development, conceptual development, and media experimentation will be stressed. Critical thinking will be addressed with each project, allowing students to improve their ability to analyze visual works of art. Through creative studio practice, students discover relationships relevant to their role as an artist and work to develop the following emphasized artistic traits: perceptual openness, flexibility/adaptability, the courage to take a risk, the ability to analyze, and self-confidence.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Building a Healthy Society, Creating Art, Fighting Social Problems, The Future, Mind \& Brain, Political Arts, Transfer Thread Completion Course

## ART 115 - Visual Literacy

A cornerstone course involving the study of visual forms of communication with an emphasis on image-based media (newspaper, magazine, film, television, photography, informational graphics, interactive multimedia, digital games and web-based technologies). Topics include visual interpretation, visual manipulation, visual conventions, the role of visual media in cultural processes and aesthetic appreciation.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Global
Citizenship, Creating Art, Innovation, Entrepreneurship, and Positive
Change, Transfer Thread Completion Course

## ART 121 - Introduction to Visual Arts

This course provides an introduction to visual arts for high school students enrolled in SRU"s Summer Arts Academy.

Credits: 1
Term(s) Typically Offered: Offered as Needed

## ART 139- University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## ART 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ART 195-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## ART 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ART 200-Activities and Fundamentals

A course providing for the study of child development through creative activities. It includes theory, experimentation with two and threedimensional processes appropriate to the elementary classroom, methods of motivation, evaluation and classroom management.

## Credits: 3

Term(s) Typically Offered: Offered as Needed

## ART 205 - Intermediate Studio Drawing

The student will explore Drawing with an increased level of production, critique, history and aesthetics. This course will provide the student with a moderate level of fine art studio drawing. Students will explore how to work with the fine art medium of mark-making through process and production, including art history and discussion. Students will review fundamental technical and conceptual information necessary to further the creation of fine art pieces. Students will develop individual applications of drawing with an increased level to critically analyze both individual and peer artwork. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problem; ability to synthesize. Repeatable: consult individual curriculum guide.

Prerequisites: ART $100^{\mathrm{D}}$ or ART $101^{\mathrm{D}}$ or ART $105^{\mathrm{D}}$ or ART $106^{\mathrm{D}}$ or ART $107^{\mathrm{D}}$ or ART $108^{\mathrm{D}}$ or ART $109^{\mathrm{D}}$ or ART $110^{\mathrm{D}}$ or ART $111^{\mathrm{D}}$ or ART $112^{\mathrm{D}}$ or ART $114^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall, Spring, \& Summer
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Creating Art, The Future, Transfer Thread Completion Course

## ART 206 - Intermediate Studio Painting

The student will explore Painting with an increased level of production, critique, history and aesthetics. This course will provide the student with a moderate level of fine art studio painting. Students will explore how to work with the fine art medium of paint through process and production, including art history and discussion. Students will review fundamental technical and conceptual information necessary to further the creation of fine art pieces. Students will develop individual applications of painting with an increased level to critically analyze both individual and peer artwork. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure: sensitivity to problems: ability to synthesize. Repeatable: consult individual curriculum guide.

Prerequisites: ART $100^{\mathrm{D}}$ or ART $101^{\mathrm{D}}$ or ART $105^{\mathrm{D}}$ or ART $106^{\mathrm{D}}$ or ART $107^{\mathrm{D}}$ or ART $108^{\mathrm{D}}$ or ART $109^{\mathrm{D}}$ or ART $110^{\mathrm{D}}$ or ART $111^{\mathrm{D}}$ or ART $112^{\mathrm{D}}$ or ART $114^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Creating Art, The Future, Transfer Thread Completion Course

## ART 207 - Intermediate Studio Photography

The student will explore Photography with an increased level of production, critique, history and aesthetics. Student will continue to develop photographic knowledge and skills, emphasizing fine art approaches. Students will review fundamental technical and conceptual information necessary to further the creation of fine art photographs. Students will continue to receive technical, historical and conceptual information to help advance their portfolios. Primary emphasis will be placed on technical refinement alongside development of creative problem-solving skills. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problems; ability to synthesize. Repeatable: consult individual curriculum guide.

Prerequisites: ART $100^{\mathrm{D}}$ or ART $101^{\mathrm{D}}$ or ART $105^{\mathrm{D}}$ or ART $106^{\mathrm{D}}$ or ART $107^{\mathrm{D}}$ or ART $108^{\mathrm{D}}$ or ART $109^{\mathrm{D}}$ or ART $110^{\mathrm{D}}$ or ART $111^{\mathrm{D}}$ or ART $112^{\mathrm{D}}$ or ART $114^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Creating Art, The Future, Transfer Thread Completion Course

## ART 208 - Intermediate Studio Printmaking

The student will explore Printmaking with an increased level of production, critique, history and aesthetics. This course will provide students with opportunities to explore and develop techniques and concepts of Printmaking. Emphasis will be on the manual procedures of printing black and white as well as color prints. Continued development of technical ability, conceptual development and media experimentation will be stressed. Primary emphasis will be place on the development of creative problem-solving skills, Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problems; ability to synthesize. Repeatable: consult individual curriculum guide.

Prerequisites: ART $100^{\mathrm{D}}$ or ART $101^{\mathrm{D}}$ or ART $105^{\mathrm{D}}$ or ART $106^{\mathrm{D}}$ or ART $107^{\mathrm{D}}$ or ART $108^{\mathrm{D}}$ or ART $109^{\mathrm{D}}$ or ART $110^{\mathrm{D}}$ or ART $111^{\mathrm{D}}$ or ART $112^{\mathrm{D}}$ or ART $114^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Creating Art, The Future, Political Arts, Transfer Thread Completion Course

## ART 209- Intermediate Studio Metalsmithing

The student will explore Metalsmithing with an increased level of production, critique, history and aesthetics. this course is intended to increase skill level while continuing to develop the student's personal aesthetic. Students will demonstrate a variety of metalsmithing techniques while understanding Metalsmithing's technical and historical contexts. Students are expected to be self-motivated in terms of idea generation and execution. Students will explore avenues to make their work more personal by combining metalsmithing technical skills with form and concept. Primary emphasis will be placed on technical refinement alongside development of creative problem-solving skills. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problems; ability to synthesize. Repeatable: consult individual curriculum guide.

Prerequisites: ART $100^{\mathrm{D}}$ or ART $101^{\mathrm{D}}$ or ART $105^{\mathrm{D}}$ or ART $106^{\mathrm{D}}$ or ART $107^{\mathrm{D}}$ or ART $108^{\mathrm{D}}$ or ART $109^{\mathrm{D}}$ or ART $110^{\mathrm{D}}$ or ART $111^{\mathrm{D}}$ or ART $112^{\mathrm{D}}$ or ART $114^{D}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Creating Art, The Future, Transfer Thread Completion Course

## ART 210 - Intermediate Studio Sculpture

The student will explore Sculpture with an increased level of production, critique, history and aesthetics. This course is intended to increase skill level while continuing to develop the student's personal aesthetic. Students will demonstrate a variety of sculptural techniques while understanding Sculpture's contemporary and historical contexts. Students are expected to be self-motivated in terms of idea generation and execution. Students will explore avenues to make their work more personal by combining technical skills with form and concept. primary emphasis will be placed on technical refinement alongside development of creative problem-solving skills. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure: sensitivity to problems; ability to synthesize. Repeatable: consult individual curriculum guide

Prerequisites: ART $100^{\mathrm{D}}$ or ART $101^{\mathrm{D}}$ or ART $105^{\mathrm{D}}$ or ART $106^{\mathrm{D}}$ or ART $107^{D}$ or ART $108^{D}$ or ART $109^{D}$ or ART $110^{D}$ or ART $111^{D}$ or ART $112^{D}$ or ART $114^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Creating Art, The Future, Transfer Thread Completion Course

## ART 211 - Intermediate Studio Fiber Art

The student will continue to explore Fiber Art with an increased level of production, critique, history and aesthetics This course will provide students with opportunities to explore both traditional and non-traditional flexible materials, techniques and concepts within contemporary Fiber Art. Through two- and three-dimensional projects, students will continue to develop their skills, artistic perception and conceptual thinking. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problems; ability to synthesize. Repeatable: consult individual curriculum guide.

Prerequisites: ART $100^{\mathrm{D}}$ or ART $101^{\mathrm{D}}$ or ART $105^{\mathrm{D}}$ or ART $106^{\mathrm{D}}$ or ART $107^{\mathrm{D}}$ or ART $108^{\mathrm{D}}$ or ART $109^{\mathrm{D}}$ or ART $110^{\mathrm{D}}$ or ART $111^{\mathrm{D}}$ or ART $112^{\mathrm{D}}$ or ART $114^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Creating Art,
The Future, Transfer Thread Completion Course

## ART 212 - Intermediate Studio Ceramics

The student will explore Ceramics with an increased level of production, critique, history and aesthetics. Students will explore avenues to make their work more personal by combining Ceramic technical skills with form and concept. Primary emphasis will be placed on technical refinement of wheel-throwing and hand-building construction alongside development of creative prob em-solving skills. Various methods of glazing and firing are addressed as they relate to student work on specific projects. Technical refinement alongside development of creative problemsolving skills will be emphasized also. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problems; ability to synthesize. Repeatable: consult individual curriculum guide.

Prerequisites: ART $100^{\mathrm{D}}$ or ART $101^{\mathrm{D}}$ or ART $105^{\mathrm{D}}$ or ART $106^{\mathrm{D}}$ or ART $107^{D}$ or ART $108^{D}$ or ART $109^{D}$ or ART $110^{D}$ or ART $111^{D}$ or ART $112^{D}$ or ART $114^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Creating Art, The Future, Transfer Thread Completion Course

## ART 213 - Intermediate Studio Graphic Design

The student will explore Graphic Design with an increased level of production, critique, history and aesthetics. This course is intended to increase skill level while continuing to develop the student's personal aesthetic. Creative responses to assignments will include the application of visual language skills to communicate ideas, meaning and information. Coursework will include traditional, digital and mixed media. Coursework will focus on studies in perception, visual organization, the graphic design process and ideation, with investigations into experimental and expressive aspects of graphic design. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problems; ability to synthesize. Repeatable: consult individual curriculum guide.

Prerequisites: ART $100^{\mathrm{D}}$ or ART $101^{\mathrm{D}}$ or ART $105^{\mathrm{D}}$ or ART $106^{\mathrm{D}}$ or ART $107^{\mathrm{D}}$ or ART $108^{\mathrm{D}}$ or ART $109^{\mathrm{D}}$ or ART $110^{\mathrm{D}}$ or ART $111^{\mathrm{D}}$ or ART $112^{\mathrm{D}}$ or ART $114^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Creating Art, The Future, Transfer Thread Completion Course

## ART 214 - Intermediate Studio Digital Media

The student will explore Digital media with an increased level of production, critique, history and aesthetics in order to achieve individual artistic goals. Emphasis will be placed upon production and process. Students will review fundamental technical and conceptual information necessary to further the creation of fine art pieces while maintaining a portfolio. New digital techniques will be explored as they become necessary to articulate and advance individual creative needs. Primary emphasis will be place on technical refinement alongside development of creative problem-solving skills. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problems; ability to synthesize. Repeatable: consult individual guide.

Prerequisites: ART $100^{\mathrm{D}}$ or ART $101^{\mathrm{D}}$ or ART $105^{\mathrm{D}}$ or ART $106^{\mathrm{D}}$ or ART $107^{\mathrm{D}}$ or ART $108^{\mathrm{D}}$ or ART $109^{\mathrm{D}}$ or ART $110^{\mathrm{D}}$ or ART $111^{\mathrm{D}}$ or ART $112^{\mathrm{D}}$ or ART $114^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Creating Art, The Future, Transfer Thread Completion Course

## ART 225 - Overview of Western Art

A sweeping survey intended to acquaint the student with the stylistic development and chronology of the western tradition in the arts. Covers the period and styles prevalent in the Western World from the Beginnings of art to the modern era.

Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): Transfer Thread Completion Course

## ART 226-Overview of World Art

A survey course intended to acquaint the student with the stylistic developments and chronology of the visual arts in Asia, Africa, India and South America. Special emphasis will be given to the expression of cultural, religious and aesthetic purposes of art works created outside the western tradition.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Creating Art, Political Arts, Transfer Thread Completion Course, Transnational Culture, Who Do We Think We Are

## ART 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ART 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## ART 298-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ART 300 - Art Seminar

A seminar for advanced art studio majors, designed to sharpen the students' critical and evaluation skills.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ART PORTFOLIO APPROVED attribute.

## ART 305 - Advanced Studio Drawing

This course will investigate an advanced level of drawing production, critique, history and aesthetics, and will focus on the achievement of individual artistic goals through the exploration of concept-based assignments. A wide range of traditional and non-traditional materials and processes will be utilized to further the skillful creation of artwork, and new drawing techniques will be explored to aid in the articulation of individual creative ideas. Emphasis will be placed upon making judgments and developing fluency through heightened production and an expanded exploration of process. Additionally, students will strengthen their ability to critically analyze artwork, and will maintain a drawing portfolio. CAPP Prerequisites: Must take 1 of the following: ART 205, ART 206, ART 207, ART 208, AT 209, ART 210, ART 211, ART 212, ART 213 or ART 214.

Credits: 3
Term(s) Typically Offered: Offered Fall, Spring, \& Summer
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 306 - Advanced Studio Painting

This course will investigate an advanced level of painting production, critique, history and aesthetics, and will focus on the achievement of individual artistic goals through the exploration of concept-based assignments. A wide range of traditional and non-traditional materials and processes will be utilized to further the skillful creation of artwork, and new drawing techniques will be explored to aid in the articulation of individual creative ideas. Emphasis will be placed upon making judgments and developing fluency through heightened production and an expanded exploration of process. Additionally, students will strengthen their ability to critically analyze artwork, and will maintain a painting portfolio. CAPP Prerequisites: Must take 1 of the following: ART 205, ART 206, ART 207, ART 208, AT 209, ART 210, ART 211, ART 212, ART 213 or ART 214.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 307 - Advanced Studio Photography

This course will investigate an advanced level of photographic production, critique, history and aesthetics. Students will continue to investigate genres of photography, and new photographic techniques will be explored to aid in the articulation of individual artistic goals. Emphasis will be placed upon strengthening portfolios through heightened production and an expanded exploration of process. Students will continue to strengthen their ability to critically analyze artwork. Through creative studio practice, students should develop the following emphasized artistic traits: independence in making judgments and fluency in ideas and materials. Repeatable: consult individual curriculum guide.

Prerequisites: ART $205^{D}$ or ART $206^{D}$ or ART $207^{D}$ or ART $208^{D}$ or ART $209^{\mathrm{D}}$ or ART $210^{\mathrm{D}}$ or ART $211^{\mathrm{D}}$ or ART $212^{\mathrm{D}}$ or ART $213^{\mathrm{D}}$ or ART $214^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 308 - Advanced Studio Printmaking

This course will provide students with opportunities to explore techniques and concepts of printmaking at an advanced level. Through projects students will have an opportunity to develop their skills, artistic perception and conceptual thinking. The course will focus on students gaining independence in making judgments, and developing fluency in their art process. Through creative studio practice, students should be able to develop the following emphasized artistic traits: independence in making judgments and fluency in ideas and materials.

Prerequisites: ART $205^{\mathrm{D}}$ or ART $206^{\mathrm{D}}$ or ART $207^{\mathrm{D}}$ or ART $208^{\mathrm{D}}$ or ART $209^{\mathrm{D}}$ or ART $210^{\mathrm{D}}$ or ART $211^{\mathrm{D}}$ or ART $212^{\mathrm{D}}$ or ART $213^{\mathrm{D}}$ or ART $214^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 309 - Advanced Studio Metalsmithing

This course will investigate an advanced level of metalsmithing production, critique, history and aesthetics. Students will continue to investigate genres of metalsmithing, and new metalsmithing techniques will be explored to aid in the articulation of individual artistic goals. Emphasis will be placed upon strengthening portfolios through heightened production and an expanded exploration of process. Students wilt continue to strengthen their ability to critically analyze artwork.
Through creative studio practice, students should develop the following emphasized artistic traits: independence in making judgments and fluency in ideas and materials. Repeatable: consult individual curriculum guide.

Prerequisites: ART $205^{\mathrm{D}}$ or ART $206^{\mathrm{D}}$ or ART $207^{\mathrm{D}}$ or ART $208^{\mathrm{D}}$ or ART $209^{\mathrm{D}}$ or ART $210^{\mathrm{D}}$ or ART $211^{\mathrm{D}}$ or ART $212^{\mathrm{D}}$ or ART $213^{\mathrm{D}}$ or ART $214^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 310 - Advanced Studio Sculpture

This course will investigate an advanced level of Sculpture production, critique, nistory and aesthetics. Students will continue to investigate genres of Sculpture, and new Sculpture techniques will be explored to aid in the articulation of individual artistic goals. Emphasis will be placed upon strengthening portfolios through heightened production and an expanded exploration of process. Students will continue to strengthen their ability to critically analyze artwork. Through creative studio practice, students should develop the following emphasized artistic traits: independence in making judgments and fluency in ideas and materials. Repeatable: consult individual curriculum guide.
Prerequisites: ART $205^{\mathrm{D}}$ or ART $206^{\mathrm{D}}$ or ART $207^{\mathrm{D}}$ or ART $208^{\mathrm{D}}$ or ART $209^{\mathrm{D}}$ or ART $210^{\mathrm{D}}$ or ART $211^{\mathrm{D}}$ or ART $212^{\mathrm{D}}$ or ART $213^{\mathrm{D}}$ or ART $214^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 311-Advanced Studio Fiber Art

This course will provide students with opportunities to explore traditional and non-traditional flexible materials, techniques and concepts of contemporary Fiber Art at an advanced level. Through two-and threedimensional projects students will have an opportunity to develop their skills, artistic perception and conceptual thinking. The course will focus on students gaining independence in making judgments, and developing fluency in their art process. Through creative studio practice, students should be able to develop the following emphasized artistic traits: independence in making judgments and fluency in ideas and materials. Repeatable: consult individual curriculum guide.
Prerequisites: ART $205^{\mathrm{D}}$ or ART $206^{\mathrm{D}}$ or ART $207^{\mathrm{D}}$ or ART $208^{\mathrm{D}}$ or ART $209^{\mathrm{D}}$ or ART $210^{\mathrm{D}}$ or ART $211^{\mathrm{D}}$ or ART $212^{\mathrm{D}}$ or ART $213^{\mathrm{D}}$ or ART $214^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 312 - Advanced Studio Ceramics

This course will investigate an advanced level of ceramics production, critique, history and aesthetics, and will focus on the achievement of individual artistic goals through the exploration of functional and concept-based assignments. A wide range of traditional and nontraditional materials and processes will be utilized to further the skillful creation of artwork, and new ceramic techniques will be explored to aid in the articulation of individual creative endeavors. Emphasis will be placed on fluency through heightened production and an expanded exploration of process. Students will strengthen their ability to critically analyze artwork, and will maintain a ceramics portfolio. Through creative studio practice, students should develop the following emphasized artistic traits: independence in making judgments and fluency in ideas and materials. Repeatable: consult individual curriculum guide.

Prerequisites: ART $205^{\mathrm{D}}$ or ART $206^{\mathrm{D}}$ or ART $207^{\mathrm{D}}$ or ART $208^{\mathrm{D}}$ or ART $209^{\mathrm{D}}$ or ART $210^{\mathrm{D}}$ or ART $211^{\mathrm{D}}$ or ART $212^{\mathrm{D}}$ or ART $213^{\mathrm{D}}$ or ART $214^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 313-Advanced Studio Graphic Design

This course will investigate an advanced level of graphic design production, critique, history and aesthetics, and will focus on the achievement of individual artistic goals through the exploration of concept-based assignments. A wide range of traditional and nontraditional materials and processes will be utilized to further the skillful creation of artwork, and new graphic design techniques will be through heightened production and an expanded exploration of process. Students will strengthen their ability to critically analyze artwork, and will maintain a graphic design portfolio. Through creative studio practice, students would develop the following emphasized artistic traits: independence in making judgments and fluency in ideas and materials. Repeatable: consult individual curriculum guide.

Prerequisites: ART $205^{\mathrm{D}}$ or ART $206^{\mathrm{D}}$ or ART $207^{\mathrm{D}}$ or ART $208^{\mathrm{D}}$ or ART $209^{\mathrm{D}}$ or ART $210^{\mathrm{D}}$ or ART $211^{\mathrm{D}}$ or ART $212^{\mathrm{D}}$ or ART $213^{\mathrm{D}}$ or ART $214^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 314-Advanced Studio Digital Media

This course will investigate an advanced level of digital media production, critique, history and aesthetics, and will focus on the achievement of individual artistic goals through the exploration of concept-based assignments. A wide range of traditional and non-traditional materials and processes will be utilized to further the skillful creation of artwork, and new digital media techniques will be explored to aid in the articulation of individual creative endeavors. Emphasis will be placed on fluency through heightened production and an expanded exploration of process. Students will strengthen their ability to critically analyze artwork, and will maintain a digital media portfolio. Through creative studio practice, students should develop the following emphasized artistic traits: independence in making judgments and fluency in ideas and materials. Repeatable: consult individual curriculum guide. CAPP Prerequisites: Must take 1 of the following: ART 205, ART 206, ART 207, ART 208, AT 209, ART 210, ART 211, ART 212, ART 213 or ART 214.

Credits: 3
Term(s) Typically Offered: Offered Fall, Spring, \& Summer
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 315 - Master Studio

A course in which master artists and craftsmen speak to the history and development of their discipline. They will also demonstrate techniques and critique student work. May be repeated for a maximum of 9 credits.

Credits: 1
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 317 - Elementary Art Methods and Materials

This course provides an exploration of age appropriate instructional methods, materials and techniques for comprehensive elementary art programs. Art education theory, developmental stages of artistic growth, the importance of the arts in the curriculum, issues of inclusion, differentiation of instruction and assessment, PA Standards for the Arts, and strategies to enhance interdisciplinary connections will be included. Opportunity is provided to engage in, and analyze, actual instruction and artistic products. Field placement required.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 325 - North American Art History

Explores the history of the visual arts produced on the North American continent and covers the artistic expressions of Native Americans and the development of European colonial art to the Second World War.Can be repeated for up to 6 credits.

Prerequisite: ART $225^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Being
American, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 335 - The Renaissance Tradition

Explores the historical development of the visual arts in Europe from the mid-14th century to the mid-17th century.Can be repeated for up to 6 credits.

Prerequisite: ART $225^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread

## Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 345 - Foundations of Modern Art

The development of modern concepts and approaches in the visual arts from the late 18th century up to and including Impressionism in the late 19th century.Can be repeated for up to 6 credits.
Prerequisite: ART $225^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Art \& Society, Creating Art, Revolutions, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 355 - Early Modern Art

Explores the history of the visual arts during the late nineteenth century culminating with the surrealist movement before the Second World War. Can be repeated for up to 6 credits.
Prerequisite: ART $225^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 365 - Art Since 1945

Explores the development of the visual arts in the late twentieth century. It will cover the social, cultural and stylistic movements from Abstract Expressionism to contemporary art.Can be repeated for up to 6 credits.

Prerequisite: ART $225^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Art \& Society, Creating Art, Political Arts, Revolutions, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## ART 398-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 405 - Senior Studio Drawing

The student will demonstrate intrinsic motivation and a high degree of self-awareness in a personal investigation of drawing production, critique, history and aesthetics, and will demonstrate self-directed behavior relevant to professionalism and artistry. Coursework will require an understanding of self that extends to an integral commitment in the production of drawing. The quality and caliber of drawing work produced in this course will define the student as a drawing artist. CAPP Prerequisites: Must take 1 of the following: ART 305, ART 306, ART 307, ART 308, ART 309, ART 310, ART 311, ART 312, ART 313 or ART 314

Credits: 3
Term(s) Typically Offered: Offered Fall, Spring, \& Summer
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 406-Senior Studio Painting

The student will demonstrate intrinsic motivation and a high degree of self-awareness in a personal investigation of painting production, critique, history and aesthetics, and will demonstrate self-directed behavior relevant to professionalism and artistry. Coursework will require an understanding of self that extends to an integral commitment in the production of painting. The quality and caliber of drawing work produced in this course will define the student as a painter. CAPP Prerequisites: Must take 1 of the following: ART 305, ART 306, ART 307, ART 308, ART 309, ART 310, ART 311, ART 312, ART 313 or ART 314

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 407 - Senior Studio Photography

This course will encourage students to explore personal investigations of photographic production, critique, history and aesthetics. Students will demonstrate self-directed behavior relevant to professionalism and artistry. The course requires students to build a cohesive body of work with an integral emphasis on the photographic image, allowing students to supplement their technical and conceptual aptitude while developing a greater understanding of their placement in a larger historical context. Coursework will emphasize a high level of quantity, caliber and ambition to further articulate a professional portfolio. Through creative studio practice, students should develop a high degree of self-awareness and intrinsic motivation. Repeatable: consult individual curriculum guide CAPP Prerequisites: Must take 1 of the following: ART 305, ART 306, ART 307, ART 308, ART 309, ART 310, ART 311, ART 312, ART 313 or ART 314.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 408 - Senior Studio Printmaking

The quality and caliber of prints produced in this course will define the student as an artist. Emphasis will be placed on artistic perception, developing concepts and individual artistic vision. Students will focus on a personal investigation of printmaking, technique, critique, history and aesthetics, and will demonstrate self-directed behavior relevant to professionalism and artistry. Through creative studio practice, students should develop a high degree of self-awareness and intrinsic motivation. CAPP Prerequisites: Must take 1 of the following: ART 305, ART 306, ART 307, ART 308, ART 309, ART 310, ART 311, ART 312, ART 313 or ART 314.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 409 - Senior Studio Metalsmithing

This course will encourage students to explore a personal investigation of metalsmithing production, critique, history and aesthetics. Students will demonstrate self-directed behavior relevant to professionalism and artistry. Coursework will require an understanding of self that extends to an integral commitment in the production of a variety of work that is representative of the student's individual aesthetic. The quality and caliber of work produced in this course will define the student as a metalsmith. Through creative studio practice, students should develop a high degree of self awareness and intrinsic motivation. Repeatable: consult individual curriculum guide. CAPP Prerequisites: Must take 1 of the following: ART 305, ART 306, ART 307, ART 308, ART 309, ART 310, ART 311, ART 312, ART 313 or ART 314.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 410-Senior Studio Sculpture

This course will encourage students to explore a personal investigation of Sculpture through production, critique, history and aesthetics. Students will demonstrate self-directed behavior relevant to professionalism and artistry. Coursework will require an understanding of self that extends to an integral commitment in the production of a variety of work that is representative of the student's individual aesthetic. The quality and caliber of work produced in this course will define the student as a sculptor. Through creative studio practice, students should develop a high degree of self-awareness and intrinsic motivation. Repeatable: consult individual curriculum guide. CAPP Prerequisites: Must take 1 of the following: ART 305, ART 306, ART 307, ART 308, ART 309, ART 310, ART 311, ART 312, ART 313 or ART 314.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 411 - Senior Studio Fiber Art

The quality and caliber of fiber artwork produced in this course will define the student as an artist. Emphasis will be placed on artistic perception, developing concepts and individual artistic vision. Students will focus on a personal investigation of fiber art materials, technique, critique, history and aesthetics, and will demonstrate self-directed behavior relevant to professionalism and artistry. Through creative studio practice, students should develop a high degree of self-awareness and intrinsic motivation. Repeatable: consult individual curriculum guide.

Prerequisites: ART $305^{\mathrm{D}}$ or ART $306^{\mathrm{D}}$ or ART $307^{\mathrm{D}}$ or ART $308^{\mathrm{D}}$ or ART $309^{\mathrm{D}}$ or ART $310^{\mathrm{D}}$ or ART $311^{\mathrm{D}}$ or ART $312^{\mathrm{D}}$ or ART $313^{\mathrm{D}}$ or ART $314^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 412 - Senior Studio Ceramics

This course will encourage students to explore a personal investigation of ceramics production, critique, history and aesthetics. Students will demonstrate self-directed behavior relevant to professionalism and artistry. Coursework will require an understanding of self that extends to an integral commitment in the production of ceramics. The quality and caliber of ceramic work produced in this course will define the student as a ceramic artist. Through creative studio practice, students should develop a high degree of self-awareness and intrinsic motivation. Repeatable: consult individual curriculum guide. CAPP Prerequisites: Must take 1 of the following: ART 305, ART 306, ART 307, ART 308, ART 309, ART 310, ART 311, ART 312, ART 313 or ART 314.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 413 - Senior Studio Graphic Design

This course will encourage students to explore a personal investigation of graphic design production, critique, history and aesthetics. Students will demonstrate self-directed behavior relevant to professionalism and artistry. coursework will require an understanding of self that extends to an integral commitment in the production of graphic design. The quality and caliber of graphic design work produced in this course will define the student as a graphic artist. Through creative studio practice, students should develop a high degree of self-awareness and intrinsic motivation. Repeatable: consult individual curriculum guide.

Prerequisites: ART $305^{\mathrm{D}}$ or ART $306^{\mathrm{D}}$ or ART $307^{\mathrm{D}}$ or ART $308^{\mathrm{D}}$ or ART $309^{\mathrm{D}}$ or ART $310^{\mathrm{D}}$ or ART $311^{\mathrm{D}}$ or ART $312^{\mathrm{D}}$ or ART $313^{\mathrm{D}}$ or ART $314^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 414-Senior Studio Digital Media

This course will encourage students to explore a personal investigation of digital media production, critique, history and aesthetics. Students will demonstrate self-directed behavior relevant to professionalism and artistry. Coursework will require an understanding of self that extends to an integral commitment in the production of digital media. The quality and caliber of digital media work produced in this course will define the student as a digital artist. Through creative studio practice, students should develop a high degree of self-awareness and intrinsic motivation. Repeatable: consult individual curriculum guide. CAPP Prerequisites: Must take 1 of the following: ART 305, ART 306, ART 307, ART 308, ART 309, ART 310, ART 311, ART 312, ART 313 or ART 314.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 420 - Art History Seminar

A seminar for students qualified to do independent study and research in art history. Topics selected through consultation with the instructor.Can be repeated for up to 6 credits.
Prerequisite: ART $225^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 425 - Senior Project Drawing

A capstone course emphasizing the articulation of ideas and presentation. This course provides independent study in drawing, culminating in a public exhibition demonstrating the student's artistic direction. The student will focus on concepts relevant to individual interests, and will determine the content and form based on past study of drawing production, critique, history and aesthetics. The student is responsible for all necessary components of a professional exhibition of their drawing work. Permission of the instructor.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## ART 426 - Senior Project Painting

This course provides independent study in painting, culminating in a public exhibition demonstrating the student's artistic direction. The student will focus on concepts relevant to individual interests, and will determine the content and form based on past study of painting production, critique, history and aesthetics. The student is responsible for all necessary components of a professional exhibition of their graphic design work. Permission of the instructor.

Prerequisites: ART $306^{D}$ or ART $406^{D}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## ART 427 - Senior Project Photography

A capstone course emphasizing the articulation of ideas and presentation. Senior students will engage in an individually proposed project, culminating in a public exhibition with supporting materials that demonstrate the student's artistic expertise. The student will focus on an individual direction in Photography, the content and form of which will be determined by past photographic investigations, critique, history and aesthetics while working closely with the Photography professor. The student is responsible for all components of their projects while displaying a high level of self-awareness, intrinsic motivation, and professionalism. By permission of instructor.

Prerequisites: ART $307^{\text {D }}$ or ART $407^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## ART 428 - Senior Project Printmaking

In this capstone course the senior student will engage in an individually proposed project, culminating in a public exhibition demonstrating the student's artistic direction. The student will focus on concepts relevant to individual interests in printmaking, and will determine the content and form based on past study of printmaking production creation, critique, history and aesthetics, and under the supervision of the Fiber Art Professor. The student is responsible for all necessary components of a professional exhibition of their work. By permission of the instructor.

Prerequisites: ART $308^{D}$ or ART $408^{D}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## ART 429 - Senior Project Metalsmithing

A capstone course emphasizing the articulation of ideas and presentation. Senior students will engage in an individually proposed project, culminating in a public exhibition with supporting materials that demonstrate the student's artistic expertise. The student will focus on an individual direction in Metalsmithing, the content and form of which will be determined by past studio investigations, critique, history and aesthetics while working closely with the Metalsmithing professor.
The student is responsible for all components of their projects while displaying a high level of self-awareness, intrinsic motivation, and professionalism. By permission of instructor.

Prerequisites: ART $309^{\mathrm{D}}$ or ART $409^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 430-Senior Project Sculpture

A capstone course emphasizing the articulation of ideas and presentation. Senior students will engage in an individually proposed project, culminating in a public exhibition with supporting materials that demonstrate the student's artistic expertise. The student will focus on an individual direction in Sculpture, the content and form of which will be determined by past studio investigations, critique, history and aesthetics while working closely with the Sculpture professor. The student is responsible for all components of their projects whiJe displaying a high level of self-awareness, intrinsic motivation, and professionalism. By permission of instructor.

Prerequisites: ART $310^{\mathrm{D}}$ or ART $410^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## ART 431 - Senior Project Fiber Art

In this capstone course the senior student will engage in an individually proposed project, culminating in a public exhibition demonstrating the student's artistic direction. The student will focus on concepts relevant to individual interests in fiber art, and will determine the content and form based on past study of fiber art production creation, critique, history and aesthetics, and under the supervision of the Fiber Art Professor. The student is responsible for all necessary components of a professional exhibition of their work. By permission of the instructor.

Prerequisites: ART $311^{\mathrm{D}}$ or ART $411^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## ART 432 - Senior Project Ceramics

A capstone course emphasizing the articulation of ideas and presentation. Senior students will engage in an individually proposed project, culminating in a public exhibition with supporting materials that demonstrate the student's artistic expertise. The student will focus on an individual direction in ceramics, the content and form of which will be determined by past ceramics investigations, critique, history and aesthetics while working closely with the ceramics professor. The student is responsible for all components of their projects while displaying a high level of self-awareness, intrinsic motivation, and professionalism. By permission of instructor.

Prerequisites: ART $312^{\text {D }}$ or ART $412^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## ART 433 - Senior Project Graphic Design

A capstone course emphasizing the articulation of ideas and presentation. Senior students will engage in an individually proposed project, culminating in a public exhibition with supporting materials that demonstrate the student's artistic expertise. The student will focus on an individual direction in Graphic Design, the content and form of which will be determined by past Graphic Design professor. The student is responsible for all components of their projects while displaying a high level of self-awareness, intrinsic motivation, and professionalism. By permission of instructor.

Prerequisites: ART $313^{D}$ or ART $413^{D}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 434 - Senior Project Digital Media

A capstone course emphasizing the articulation of ideas and presentation. Senior students will engage in an individually proposed project, culminating in a public exhibition with supporting materials that demonstrate the student's artistic expertise. The student will focus on an individual direction in Digital Media, the content and form of which will be determined by past digital media investigations, critique, history and aesthetics while working closely with the Digital Media professor. The student is responsible for all components of their projects while displaying a high level of self-awareness, intrinsic motivation, and professionalism. By permission of instructor.
Prerequisites: ART $314^{\text {D }}$ or ART $414^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## ART 440 - Art Education Methods

This class meets once a week to discuss field placement experiences and teaching skills and fulfills part of the Pennsylvania Department of Education (PDE) Stage 3 Pre-Student Teaching Practical requirements. Activities include discussions on research, development and preparation of art lesson plans, strategies for success in an inclusive art classroom, and analysis and assessment of teaching experiences.

Credits: 1
Term(s) Typically Offered: Offered Fall Terms Odd
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.
Enrollment is limited to students with a program in Art.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## ART 450 - Internship

Professional experiences geared to student vocational goals. Working in galleries, museums or graphic design studios, working with professional artists in their studios and other job-related experiences.

Corequisite(s): ART 451
Credits: 1-12
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 451 - Art Education Methods Internship

This internship covers some of the Stage 3 Pre-Student Teaching field experiences: 90 hours of documented placement under the supervision and mentorship of certified K-12 Art Teacher(s). At least one experience during Stage 3 must include students with special needs in inclusive settings. Activities include assisting small or large groups of children, lesson development/preparation, and lesson plans. Observation and evaluation of teaching by the professor will occur near the end of the semester.

Corequisite(s): ART 440

## Credits: 2

Term(s) Typically Offered: Offered Fall Terms Odd
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.
Enrollment is limited to students with a program in Art.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## ART 475 - Extended Studio Drawing

This course provides individualized creative work in drawing that focuses on a specific concept, process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

## Credits: 1

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## ART 476 - Extended Studio Painting

This course provides individualized creative work in Painting that focuses on a specific concept, process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## ART 477 - Extended Studio Photography

This course provides individualized creative work in Photography that focuses on a specific concept, process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## ART 478 - Extended Studio Printmaking

This course provides individualized creative work in Printmaking that focuses on a specific concept, process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

## Credits: 1

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## ART 479 - Extended Studio Metalsmithing

This course provides individualized creative work in Metalsmithing that focuses on a specific concept, process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## ART 480-Extended Studio Sculpture

This course provides individualized creative work in Sculpture that focuses on a specific concept, process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## ART 481 - Extended Studio Fiber Art

This course provides individualized creative work in Fiber Art that focuses on a specific concept process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## ART 482 - Extended Studio Ceramics

This course provides individualized creative work in Ceramics that focuses on a specific concept, process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

ART 483 - Extended Studio Graphic Design
This course provides individualized creative work in Graphic Design that focuses on a specific concept, process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 484 - Extended Studio Digital Media

This course provides individualized creative work in Digital Media that focuses on a specific concept, process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## ART 490-Independent Study

Offers the opportunities of advanced creative activity in a single area of concentration (painting, graphics, ceramics, art history, etc.) to be chosen by the student with the consent of the department. Prerequisites: Junior or senior standing, completion of lower level course offerings in chosen area of concentration, acceptance of project proposal by the department and permission of the instructor, departmental chairperson and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 498-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Art - Graphic Design Track for Communications Majors, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Art - Graphic Design for Communication Majors, Minor Program Page (https://www.sru.edu/academics/majors-and-minors/art-graphic-designminor/)

Art Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/art/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.00 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Basic Studio Courses |  |  |
| ART 100 | 2-D Design | 3 |
| ART 107 | Basic Studio Photography | 3 |
| ART 114 | Basic Studio Digital Media | 3 |
| Art Synthesis Course |  |  |
| ART 205 | Intermediate Studio Drawing | 3 |
| Advanced Studio Courses |  |  |
| ART 313 | Advanced Studio Graphic Design | 3 |
| ART 314 | Advanced Studio Digital Media | 3 |
| Senior Studio Course |  |  |
| Select one of the following: |  | 3 |
| ART 405 | Senior Studio Drawing |  |
| ART 406 | Senior Studio Painting |  |
| ART 407 | Senior Studio Photography |  |
| ART 408 | Senior Studio Printmaking |  |
| ART 413 | Senior Studio Graphic Design |  |
| ART 414 | Senior Studio Digital Media |  |

## Total Hours

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN ART GRAPHIC DESIGN (04D)
For Communication Major(s)
This program is effective as of Fall 2003
Revision date: 07-2019

## Art for Elementary Education Majors, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Art for Elementary Education Majors, Minor Program Page (https:// www.sru.edu/academics/majors-and-minors/art-early-childhood-education-minor/)

Art Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/art/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.00 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Basic Studio Required Course |  |  |
| ART 105 | Basic Studio Drawing | 3 |
| Basic 2D Studio Courses |  |  |
| Select one of the following: |  | 3 |
| ART 106 | Basic Studio Painting |  |
| ART 107 | Basic Studio Photography |  |
| ART 108 | Basic Studio Printmaking |  |
| ART 114 | Basic Studio Digital Media |  |
| Basic 3D Studio Courses |  |  |
| Select one of the following: |  | 3 |
| ART 109 | Basic Studio Metalsmithing |  |
| ART 110 | Basic Studio Sculpture |  |
| ART 111 | Basic Studio Fiber Art |  |
| ART 112 | Basic Studio Ceramics |  |
| Art History Course |  |  |
| ART 225 | Overview of Western Art | 3 |
| Art Synthesis Course |  |  |
| Select one of the following: |  | 3 |
| ART 205 | Intermediate Studio Drawing |  |
| ART 206 | Intermediate Studio Painting |  |
| ART 207 | Intermediate Studio Photogra |  |


| ART 208 | Intermediate Studio Printmaking |
| :--- | :--- |
| ART 209 | Intermediate Studio Metalsmithing |
| ART 210 | Intermediate Studio Sculpture |
| ART 211 | Intermediate Studio Fiber Art |
| ART 212 | Intermediate Studio Ceramics |
| ART 213 | Intermediate Studio Graphic Design |
| ART 214 | Intermediate Studio Digital Media |

Advanced Studio Courses
Select one of the following:
3

| ART 305 | Advanced Studio Drawing |
| :--- | :--- |
| ART 306 | Advanced Studio Painting |
| ART 307 | Advanced Studio Photography |
| ART 308 | Advanced Studio Printmaking |
| ART 309 | Advanced Studio Metalsmithing |
| ART 310 | Advanced Studio Sculpture |
| ART 311 | Advanced Studio Fiber Art |
| ART 312 | Advanced Studio Ceramics |
| ART 313 | Advanced Studio Graphic Design |
| ART 314 | Advanced Studio Digital Media |

Advanced Topics in Elementary Art

| ART 317 | Elementary Art Methods and Materials | 3 |
| :--- | ---: | ---: |
| Total Hours | $\mathbf{2 1}$ |  |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN ART FOR EARLY CHILDHOOD MAJORS (04C)
This program is effective as of Fall 2007.
Revision date: 8-2019

## Art History, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Art History, Minor Program Page (https://www.sru.edu/academics/ majors-and-minors/art-history-minor/)

Art Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/art/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Minor GPA: 2.00 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

| Code <br> Required Art Courses | Title | Hours |
| :--- | :--- | ---: |
| ART 225 | Overview of Western Art | 3 |
| ART 226 | Overview of World Art | 3 |
| Electives |  | 12 |
| Select four of the following: |  |  |
| ART 325 | North American Art History |  |
| ART 335 | The Renaissance Tradition |  |
| ART 345 | Foundations of Modern Art |  |
| ART 355 | Early Modern Art |  |
| ART 365 | Art Since 1945 | $\mathbf{1 8}$ |
| ART 420 | Art History Seminar |  |
| Total Hours |  |  |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN ART HISTORY (04B)
This program is effective as of Spring 2004
Revision date: 8-2019

## Art, Bachelor of Arts (BA)

## Program Learning Outcomes

- Critical Thinking: Art majors will locate, analyze and synthesize art historical information and context within their own work.
- Degree Program Writing Competency: Students will be able to effectively communicate in writing for purposes of the discipline.
- Direction: Art majors develop a personal direction through their choice of medium, idea and/or style. Students will demonstrate intellectual and artistic curiosity while committing to improvement.
- Professional Proficiency: Art majors will perceive, discuss and demonstrate professional proficiency upon graduation by applying their knowledge and skills of fine art.
- Technique: Art majors will demonstrate technical aptitude. The department assesses the technical quality of student production. Each medium varies with its technical demands.


## Related Links

Art, BA Program Page (https://www.sru.edu/academics/majors-and-minors/art-ba/)

Art Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/art/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher

## Overall GPA: 2.0 or higher

## Summary*

| Code Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Modern Language Requirement | $0-9$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 39 |
| Electives | 39 |
| All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |

## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: | 3 |  |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |


| Subtotal | 15 |
| :--- | :---: |
| Creative and Aesthetic Inquiry |  |
| Select 12 Credits (p. 1378) | 3 |
| Humanities Inquiry | 3 |
| Select 12 Credits (p. 1378) |  |
| Social Science Inquiry | 3 |
| Select 12 Credits (p. 1378) |  |
| Natural Sciences Inquiry | 3 |
| SCI 101 | Science of Life |


| Physical Sciences Inquiry |  |
| :--- | ---: |
| SCI $102 \quad$ Understanding the Physical World | 3 |
| Subtotal | 15 |
| Thematic Thread |  |
| Select 12 Credits (p. 1378) |  |
| Total Hours | $\mathbf{4 2}$ |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete $0-9$ credits | $0-9$ |  |
| Total Hours | $\mathbf{0 - 9}$ |  |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra | $\mathbf{0 - 3}$ |
| Total Hours |  |  |

## Computer Competency

Code Title Hours

Demonstrate "computer competency" by one of the following: 0-3
Pass Computer Competency Exam OR
Select one of the following at SRU or another post-secondary institution:

| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| :--- | :--- | :--- |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and |  |
|  | Programming |  |
| PE 202 | Technology for Wellness | $\mathbf{0 - 3}$ |
| otal Hours |  |  |

## Major Requirements

- 20 major credits must be taken at SRU or PASSHE
- 20 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Core Courses |  |  |
| ART 105 | Basic Studio Drawing ${ }^{1}$ | 3 |
| ART 225 | Overview of Western Art ${ }^{1}$ | 3 |
| ART 100 | 2-D Design ${ }^{1}$ | 3 |
| or ART 101 | 3-D Design |  |
| Subtotal |  | 9 |
| 300 Level Art |  |  |



| ART 106 | Basic Studio Painting ${ }^{1}$ |  |
| :---: | :---: | :---: |
| ART 107 | Basic Studio Photography ${ }^{1}$ |  |
| ART 108 | Basic Studio Printmaking ${ }^{1}$ |  |
| ART 109 | Basic Studio Metalsmithing ${ }^{1}$ |  |
| ART 110 | Basic Studio Sculpture ${ }^{1}$ |  |
| ART 111 | Basic Studio Fiber Art ${ }^{1}$ |  |
| ART 112 | Basic Studio Ceramics ${ }^{1}$ |  |
| ART 113 | Basic Studio Graphic Design ${ }^{1}$ |  |
| ART 114 | Basic Studio Digital Media ${ }^{1}$ |  |
| Subtotal |  | 3 |

2D Elective
Select one of the following:
ART 205 Intermediate Studio Drawing ${ }^{1}$
ART 206 Intermediate Studio Painting ${ }^{1}$
ART 207 Intermediate Studio Photography ${ }^{1}$
ART 208 Intermediate Studio Printmaking ${ }^{1}$
ART 213 Intermediate Studio Graphic Design ${ }^{1}$
ART 214 Intermediate Studio Digital Media
Subtotal
3D Elective
Select one of the following:

| ART 209 | Intermediate Studio Metalsmithing ${ }^{1}$ |
| :---: | :--- |
| ART 210 | Intermediate Studio Sculpture ${ }^{1}$ |
| ART 211 | Intermediate Studio Fiber Art ${ }^{1}$ |
| ART 212 | Intermediate Studio Ceramics ${ }^{1}$ |
| Subtotal |  |

## 300 Level Electives

Select three of the following, you may take any class twice:

| ART 305 | Advanced Studio Drawing ${ }^{1}$ |
| :--- | :--- |
| ART 306 | Advanced Studio Painting ${ }^{1}$ |
| ART 307 | Advanced Studio Photography ${ }^{1}$ |
| ART 308 | Advanced Studio Printmaking ${ }^{1}$ |
| ART 309 | Advanced Studio Metalsmithing ${ }^{1}$ |
| ART 310 | Advanced Studio Sculpture ${ }^{1}$ |
| ART 311 | Advanced Studio Fiber Art ${ }^{1}$ |
| ART 312 | Advanced Studio Ceramics ${ }^{1}$ |
| ART 313 | Advanced Studio Graphic Design ${ }^{1}$ |
| ART 314 | Advanced Studio Digital Media ${ }^{1}$ |

Subtotal

## Senior Studio

Select three of the following, you may take any class twice:
9

| ART 407 | Senior Studio Photography ${ }^{1}$ |
| :---: | :---: |
| ART 408 | Senior Studio Printmaking ${ }^{1}$ |
| ART 409 | Senior Studio Metalsmithing ${ }^{1}$ |
| ART 410 | Senior Studio Sculpture ${ }^{1}$ |
| ART 411 | Senior Studio Fiber Art ${ }^{1}$ |
| ART 412 | Senior Studio Ceramics ${ }^{1}$ |
| ART 413 | Senior Studio Graphic Design ${ }^{1}$ |
| ART 414 | Senior Studio Digital Media ${ }^{1}$ |
| Subtotal |  |
| Total Hours |  |
| 1 Course counts for $50 \%$ of Major and Major GPA <br> * Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course. |  |
|  |  |

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Student leadership development
5. Service opportunities (e.g., Empty Bowls program)
6. Career education and development
7. Internships
8. Student exhibitions
9. Field Experiences

ART - BA (5 04)
This program is effective as of Fall 2020.
Revised 02.2020
UCC 12.3.2019

## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

Course Title Hours
First Year
Fall
SUBJ 139 University Seminar ${ }^{1} 3$
ENGL 102 Critical Writing 3
Creative \& Aesthetic Inquiry (p. 1378) 3

| ART 100 | 2-D Design | 3 |
| :--- | :--- | ---: |
| INDS 101 | FYRST Seminar |  |
| MODL 101 | Modern Language Requirement | 1 |
|  | Hours | 3 |
| Spring |  | $\mathbf{1 6}$ |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| ART 225 | Overview of Western Art | 3 |
| ART 105 | Basic Studio Drawing | 3 |
| Elective, Minor or Other Requirement | 3 |  |
|  | Hours | $\mathbf{1 5}$ |


| Second Year |  |  |
| :--- | :--- | ---: |
| Fall |  | 3 |
| POLS 235 | Civil Discourse and Democracy | 3 |
| Humanities Inquiry (p. 1378) | 3 |  |
| ART 1XX | Basic Studio | 3 |
| ART 2XX | Intermediate Studio (2D Elective) | 3 |
| MODL 102 | Modern Language Requirement $^{\text {Declare a Thematic Thread }}{ }^{2}$ |  |
|  | Hours | $\mathbf{1 5}$ |


| Spring |  |  |
| :--- | :--- | ---: |
| SCI 102 | Understanding the Physical World | 3 |
| ART 2XX | Intermediate Studio (3D Elective) | 3 |
| ART 3XX | Art History Elective | 3 |
| Social Science Inquiry (p. 1378) | 3 |  |
| Elective, Minor, or Other Requirement | 3 |  |
|  | Hours | $\mathbf{1 5}$ |

Third Year
Fall

| SCI 101 | Science of Life | 3 |
| :--- | :--- | ---: |
| ART 3XX | Advanced Studio | 3 |
| ART 3XX | Advanced Studio | 3 |
| Elective, Minor, or Other Requirement | 3 |  |
| MODL 103 | Modern Language Requirement | 3 |
|  | Hours | $\mathbf{1 5}$ |

## Spring

Thematic Thread Requirement (p. 1378) 3
ART 3 XX Advanced Studio 3
ART 4XX Senior Studio 3
Elective, Minor, or Other Requirement 3
Elective, Minor, or Other Requirement 3

Hours

| Fourth Year |  |
| :--- | ---: |
| Fall |  |
| Thematic Thread Requirement (p. 1378) | 3 |
| Thematic Thread Requirement (p. 1378) | 3 |
| ART 4XX Senior Studio | 3 |
| Elective, Minor, or Other Requirement | 3 |
| Elective, Minor, or Other Requirement | 3 |
| Hours | $\mathbf{1 5}$ |

## Spring

ART 4XX
Senior Studio

| Thematic Thread Requirement (p. 1378) |  |
| :---: | :---: |
| Elective, Minor, or Other Requirement | 3 |
| Elective, Minor, or Other Requirement | 3 |
| Elective, Minor, or Other Requirement | 3 |
| Hours | 15 |
| Total Hours** | 1 |
| 2 Work with your Academic Adviser to Thread by the end of your fall seme year. Click here (https://forms.officer ResponsePage.aspx?id=ul1VhjsH9 VJnD6riXkdMh1UNEFHMUNHOEIS |  |
| * Students are encouraged to take IND |  |
| Major Code: 504 |  |
| Revision Code: 01.28.2021 |  |
| ** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year. |  |
| Art, Bachelor of Fine Arts (BFA) |  |
| Program Learning Outcomes |  |

- Critical Thinking: Art majors will locate, analyze and synthesize art historical information and context within their own work.
- Degree Program Writing Competency: Students will be able to effectively communicate in writing for purposes of the discipline.
- Direction: Art majors develop a personal direction through their choice of medium, idea and/or style. Students will demonstrate intellectual and artistic curiosity while committing to improvement.
- Professional Proficiency: Art majors will perceive, discuss and demonstrate professional proficiency upon graduation by applying their knowledge and skills of fine art.
- Technique: Art majors will demonstrate technical aptitude. The department assesses the technical quality of student production. Each medium varies with its technical demands.


## Related Links

Art, BFA Program Page (https://www.sru.edu/academics/majors-and-minors/art-bfa/)

Art Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/art/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Code | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 78 |

## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |

Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378)
Humanities Inquiry $\quad 3$
Social Science Inquiry
Select 3 Credits (p. 1378) 3
Natural Sciences Inquiry
SCI $101 \quad$ Science of Life
Physical Sciences Inquiry
SCI 102 Understanding the Physical World 3
Subtotal 15

## Thematic Thread

| Select 12 Credits $(\mathrm{p} .1378)^{2}$ | 12 |
| :--- | :--- |
| Total Hours | 42 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | $\mathbf{0 - 3}$ |

## Computer Competency

| Code | Title | Hours |
| :---: | :---: | :---: |
| Demonstrate "computer competency" by one of the following: |  | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |
| Major Requirements |  |  |
| - 39 major credits must be taken at SRU or PASSHE |  |  |
| - 39 major credits must be taken at the 300 level or above |  |  |

Code Title Hours

Required Courses

| ART 100 | 2-D Design ${ }^{1}$ | 3 |
| :--- | :--- | ---: |
| ART 101 | 3-D Design ${ }^{1}$ | 3 |
| ART 105 | Basic Studio Drawing $^{1}$ | 3 |
| ART 225 | Overview of Western Art $^{1}$ | 3 |
| ART 226 | Overview of World Art $^{1}$ | 3 |
| ART 300 | Art Seminar $^{1}$ | 3 |
| Subtotal |  | 18 |

Art History Electives
Select two of the following: 6

| ART 325 | North American Art History ${ }^{1}$ |
| :---: | :---: |
| ART 335 | The Renaissance Tradition ${ }^{1}$ |
| ART 345 | Foundations of Modern Art ${ }^{1}$ |
| ART 355 | Early Modern Art ${ }^{1}$ |
| ART 365 | Art Since $1945{ }^{1}$ |
| ART 420 | Art History Seminar ${ }^{1}$ |
| Subtotal |  |
| 100 Level Electives |  |
| Select three | lowing, no class may be repeated: |

Select three of the following, no class may be repeated:
ART $106 \quad$ Basic Studio Painting ${ }^{1}$

| ART 107 | Basic Studio Photography $^{1}$ |
| :--- | :--- |
| ART 108 | Basic Studio Printmaking $^{1}$ |
| ART 109 | Basic Studio Metalsmithing $^{1}$ |
| ART 110 | Basic Studio Sculpture $^{1}$ |
| ART 111 | Basic Studio Fiber Art $^{1}$ |
| ART 112 | Basic Studio Ceramics $^{1}$ |
| ART 113 | Basic Studio Graphic Design $^{1}$ |
| ART 114 | Basic Studio Digital Media $^{1}$ |
| Subtotal |  |

## 200 Level Electives

Select four of the following courses, take any class twice: 12

| ART 205 | Intermediate Studio Drawing ${ }^{1}$ |
| :--- | :--- |
| ART 206 | Intermediate Studio Painting ${ }^{1}$ |
| ART 207 | Intermediate Studio Photography ${ }^{1}$ |
| ART 208 | Intermediate Studio Printmaking ${ }^{1}$ |


| ART 209 | Intermediate Studio Metalsmithing |  |
| :---: | :---: | :---: |
| ART 210 | Intermediate Studio Sculpture ${ }^{1}$ |  |
| ART 211 | Intermediate Studio Fiber Art ${ }^{1}$ |  |
| ART 212 | Intermediate Studio Ceramics ${ }^{1}$ |  |
| ART 213 | Intermediate Studio Graphic Design ${ }^{1}$ |  |
| ART 214 | Intermediate Studio Digital Media ${ }^{1}$ |  |
| Subtotal |  | 12 |
| 300 Level Electives |  |  |
| Select four of the follo | wing, take any class up to three times: | 12 |
| ART 305 | Advanced Studio Drawing ${ }^{1}$ |  |
| ART 306 | Advanced Studio Painting ${ }^{1}$ |  |
| ART 307 | Advanced Studio Photography ${ }^{1}$ |  |
| ART 308 | Advanced Studio Printmaking ${ }^{1}$ |  |
| ART 309 | Advanced Studio Metalsmithing ${ }^{1}$ |  |
| ART 310 | Advanced Studio Sculpture ${ }^{1}$ |  |
| ART 311 | Advanced Studio Fiber Art ${ }^{1}$ |  |
| ART 312 | Advanced Studio Ceramics ${ }^{1}$ |  |
| ART 313 | Advanced Studio Graphic Design ${ }^{1}$ |  |
| ART 314 | Advanced Studio Digital Media ${ }^{1}$ |  |
| Subtotal |  | 12 |
| 400 Level Electives |  |  |
| Select three of the foll | lowing, take any class up to two times: | 9 |
| ART 405 | Senior Studio Drawing ${ }^{1}$ |  |
| ART 406 | Senior Studio Painting ${ }^{1}$ |  |
| ART 407 | Senior Studio Photography ${ }^{1}$ |  |
| ART 408 | Senior Studio Printmaking ${ }^{1}$ |  |
| ART 409 | Senior Studio Metalsmithing ${ }^{1}$ |  |
| ART 410 | Senior Studio Sculpture ${ }^{1}$ |  |
| ART 411 | Senior Studio Fiber Art ${ }^{1}$ |  |
| ART 412 | Senior Studio Ceramics ${ }^{1}$ |  |
| ART 413 | Senior Studio Graphic Design ${ }^{1}$ |  |
| ART 414 | Senior Studio Digital Media ${ }^{1}$ |  |

## Subtotal

## SR Project

Select one of the following, 400 level pre-req or permission of instructor.


1 Course counts for $50 \%$ of Major requirements and Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Student leadership development
5. Service opportunities (e.g., Empty Bowls program)
6. Career education and development
7. Internships
8. Student exhibitions
9. Field Experiences

ART - BFA (5305)
This program is effective as of Fall 2020.
Revised 02.2020
UCC 12.3.2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
${ }_{3}$ Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ART 225 | Overview of Western Art ${ }^{3}$ | 3 |
| ART 100 | 2-D Design | 3 |
| ART 105 | Basic Studio Drawing | 3 |
|  | Hours | $\mathbf{1 5}$ |
| Spring |  |  |
| ART 101 | 3-D Design | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| ART 1XX | Basic Studio | 3 |
| ART 1XX | Basic Studio | 3 |
|  | Hours | $\mathbf{1 5}$ |


| Second Year |  |  |
| :---: | :---: | :---: |
| Fall |  |  |
| POLS 235 | Civil Discourse and Democracy | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
| ART 226 | Overview of World Art | 3 |
| ART 1XX | Basic Studio | 3 |
| ART 2XX | Intermediate Studio | 3 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 15 |
| Spring |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Social Science Inquiry (p. 1378) |  | 3 |
| ART 2XX | Intermediate Studio | 3 |
| ART 2XX | Intermediate Studio | 3 |
| ART 2XX | Intermediate Studio | 3 |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| SCI 101 | Science of Life | 3 |
| ART 3XX | Art History | 3 |
| ART 3 XX/4XX | Art Elective | 3 |
| ART 3XX | Advanced Studio | 3 |
| ART 3XX | Advanced Studio | 3 |
|  | Hours | 15 |
| Spring |  |  |
| ART 3XX | Art History | 3 |
| ART 3XX | Advanced Studio | 3 |
| ART 3XX | Advanced Studio | 3 |
| ART 300 | Art Seminar | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 15 |


| Fourth Year |  |  |
| :--- | ---: | ---: |
| Fall |  |  |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| ART 4XX | Senior Studio | 3 |
| ART 4XX | Senior Studio | 3 |
| ART 30X/40X | ART Elective | 3 |
|  | Hours | $\mathbf{1 5}$ |


| Spring |  |  |
| :--- | ---: | ---: |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| ART 30X or 40X Art Elective | 3 |  |
| ART 4xX | Senior Studio | 3 |
| ART 4XX | Senior Project | 3 |
| Elective | Hours | 3 |
|  | Total Hours** | $\mathbf{1 5}$ |
|  | $\mathbf{1 2 0}$ |  |

[^21]2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/ ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UIdNTi4u)to declare a thread.
3 Meets Creative \& Aesthetics Inquiry requirement for the Rock Integrated Studies Program.

* Students are encouraged to take INDS 101 as a Free Elective.

Major Code: 5305
Revision date: 01.28.2021
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Art, Bachelor of Fine Arts (BFA) Concentration in Ceramic Arts Program Learning Outcomes

- Critical Thinking: Art majors will locate, analyze and synthesize art historical information and context within their own work.
- Degree Program Writing Competency: Students will be able to effectively communicate in writing for purposes of the discipline.
- Direction: Art majors develop a personal direction through their choice of medium, idea and/or style. Students will demonstrate intellectual and artistic curiosity while committing to improvement.
- Professional Proficiency: Art majors will perceive, discuss and demonstrate professional proficiency upon graduation by applying their knowledge and skills of fine art.
- Technique: Art majors will demonstrate technical aptitude. The department assesses the technical quality of student production. Each medium varies with its technical demands.


## Related Links

Art - Ceramic Arts, BFA Program Page (https://www.sru.edu/academics/ majors-and-minors/art-bfa-concetration-in-ceramics/)

Art Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/art/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Code | Title | Hours |
| :--- | ---: | ---: |
| Rock Studies Requirements | 42 |  |
| Other Basic Requirements | $0-3$ |  |

Computer Competency 0-3
Major/Concentration Requirements ..... 78

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | :--- |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :---: | :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |

Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378)
Humanities Inquiry
Select 3 Credits (p. 1378) $3010 \mid$
Social Science Inquiry
Select 3 Credits (p. 1378) 3

| Natural Science Inquiry |
| :--- | :--- |
| SCI $101 \quad$ Science of Life |

Physical Science Inquiry
SCI $102 \quad 3$
Subtotal 15

Thematic Thread

| Select 12 Credits $(\mathrm{p} .1378)^{2}$ | 12 |
| :--- | :--- |
| Total Hours | 42 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 from at least 3 Categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code $\quad$ Title | Hours |  |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP $110 \quad$ Beginning Algebra | $\mathbf{0 - 3}$ |  |
| Total Hours |  |  |
| Computer Competency |  |  |
| Code $\quad$ Title | Hours |  |
| Demonstrate "computer competency" by one of the following: | $0-3$ |  |
| Pass Computer Competency Exam OR |  |  |

Select one of the following at SRU or another post-secondary institution:

| CPSC 100 | Introduction to Computing for Liberal Arts |
| :--- | :--- |
| CPSC 110 | Computer Concepts |
| CPSC 130 | Introduction to Computing and <br> Programming |
| PE 202 | Technology for Wellness |

PE 202
Technology for Wellness
Total Hours

## Major Requirements

- 39 major credits must be taken at SRU or PASSHE
- 39 major credits must be taken at the 300 level or above
Code Title Hours

Required Courses

| ART 100 | 2-D Design ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| ART 101 | 3-D Design ${ }^{1}$ | 3 |
| ART 105 | Basic Studio Drawing ${ }^{1}$ | 3 |
| ART 225 | Overview of Western Art ${ }^{1}$ | 3 |
| ART 226 | Overview of World Art ${ }^{1}$ | 3 |
| ART 300 | Art Seminar ${ }^{1}$ | 3 |

## Art History Electives

Select two of the following: 6

| ART 325 | North American Art History ${ }^{1}$ |
| :--- | :--- |
| ART 335 | The Renaissance Tradition $^{1}$ |
| ART 345 | Foundations of Modern Art $^{1}$ |
| ART 355 | Early Modern Art ${ }^{1}$ |
| ART 365 | Art Since 1945 $^{1}$ |
| ART 420 | Art History Seminar $^{1}$ |

Ceramic Arts Concentration ( 15 credits)
Concentration courses count towards BFA Studio requirements.
(200-400 level courses are repeatable - see below for course details).
Select 12 credits from the following:

| ART 112 | Basic Studio Ceramics ${ }^{1}$ | 0-3 |
| :---: | :---: | :---: |
| ART 212 | Intermediate Studio Ceramics ${ }^{1}$ | 0-6 |
| ART 312 | Advanced Studio Ceramics ${ }^{1}$ | 0-9 |
| ART 412 | Senior Studio Ceramics ${ }^{1}$ | 0-6 |
| Ceramic A | entration Required - Capstone Course | 3 |

ART $432 \quad$ Senior Project Ceramics ${ }^{1}$

## Additional Studio Requirements

## 100 Level Electives

Select three of the following courses, no class may be repeated: $\quad 9$

| ART 106 | Basic Studio Painting $^{1}$ |
| :--- | :--- |
| ART 107 | Basic Studio Photography $^{1}$ |
| ART 108 | Basic Studio Printmaking $^{1}$ |
| ART 109 | Basic Studio Metalsmithing $^{1}$ |
| ART 110 | Basic Studio Sculpture $^{1}$ |
| ART 111 | Basic Studio Fiber Art $^{1}$ |
| ART 112 | Basic Studio Ceramics |
| ART 113 | Basic Studio Graphic Design $^{1}$ |
| 200 Level Electives |  |
| Select four of the following courses, you may take any class |  |
| twice: |  |


| ART 205 | Intermediate Studio Drawing ${ }^{1}$ |  |
| :---: | :---: | :---: |
| ART 206 | Intermediate Studio Painting ${ }^{1}$ |  |
| ART 207 | Intermediate Studio Photography ${ }^{1}$ |  |
| ART 208 | Intermediate Studio Printmaking ${ }^{1}$ |  |
| ART 209 | Intermediate Studio Metalsmithing ${ }^{1}$ |  |
| ART 210 | Intermediate Studio Sculpture ${ }^{1}$ |  |
| ART 211 | Intermediate Studio Fiber Art ${ }^{1}$ |  |
| ART 212 | Intermediate Studio Ceramics ${ }^{1}$ |  |
| ART 213 | Intermediate Studio Graphic Design ${ }^{1}$ |  |
| ART 214 | Intermediate Studio Digital Media ${ }^{1}$ |  |
| 300 Level Ele |  |  |
| Select four three times: | owing courses, you may take any class up to | 12 |
| ART 305 | Advanced Studio Drawing ${ }^{1}$ |  |
| ART 306 | Advanced Studio Painting ${ }^{1}$ |  |
| ART 307 | Advanced Studio Photography ${ }^{1}$ |  |
| ART 308 | Advanced Studio Printmaking ${ }^{1}$ |  |
| ART 309 | Advanced Studio Metalsmithing ${ }^{1}$ |  |
| ART 310 | Advanced Studio Sculpture ${ }^{1}$ |  |
| ART 311 | Advanced Studio Fiber Art ${ }^{1}$ |  |
| ART 312 | Advanced Studio Ceramics ${ }^{1}$ |  |
| ART 313 | Advanced Studio Graphic Design ${ }^{1}$ |  |
| ART 314 | Advanced Studio Digital Media ${ }^{1}$ |  |
| 400 Level Ele |  |  |
| Select three to two times | lowing courses, you may take any class up | 9 |
| ART 405 | Senior Studio Drawing ${ }^{1}$ |  |
| ART 406 | Senior Studio Painting ${ }^{1}$ |  |
| ART 407 | Senior Studio Photography ${ }^{1}$ |  |
| ART 408 | Senior Studio Printmaking ${ }^{1}$ |  |
| ART 409 | Senior Studio Metalsmithing ${ }^{1}$ |  |
| ART 410 | Senior Studio Sculpture ${ }^{1}$ |  |
| ART 411 | Senior Studio Fiber Art ${ }^{1}$ |  |
| ART 412 | Senior Studio Ceramics ${ }^{1}$ |  |
| ART 413 | Senior Studio Graphic Design ${ }^{1}$ |  |
| ART 414 | Senior Studio Digital Media ${ }^{1}$ |  |
| Art Electives |  |  |
| Select from 300-400 level courses |  | 9 |
| Total Hours |  | 78 |

1 Course counts for $50 \%$ of Major requirements and Major GPA.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Student leadership development
5. Service opportunities (e.g., Empty Bowls program)
6. Career education and development
7. Internships
8. Student exhibitions
9. Field Experiences

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
ART - BFA (5305)
Concentration in Ceramic Arts (CERA)
This program is effective as of Fall 2020.
Revised 03.09.2021
UCC 12.3.2019
Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ART 100 | 2-D Design | 3 |
| ART 105 | Basic Studio Drawing | 3 |
| ART 225 | Overview of Western Art | 3 |
|  | Hours | 15 |
| Spring | Critical Reading |  |
| ENGL 104 | Quantitative Reasoning | 3 |
| MATH 117 | 3-D Design | 3 |
| ART 101 | Basic Studio (Concentration) | 3 |
| ART 1XX | Basic Studio | 3 |
| ART 1XX | Hours | 3 |
|  | 15 |  |

## Second Year

Fall

| POLS 235 | Civil Discourse and Democracy | 3 |
| :---: | :---: | :---: |
| Humanities Inquiry (p. 1378) |  | 3 |
| ART 226 | Overview of World Art | 3 |
| ART 1XX | Basic Studio | 3 |
| ART 2XX | Intermediate Studio | 3 |
| Declare a Thematic Thread ${ }^{1}$ |  |  |
|  | Hours | 15 |
| Spring |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Social Sci | (p. 1378) | 3 |


| ART 2XX | Intermediate Studio (Concentration) | 3 |
| :---: | :---: | :---: |
| ART 2XX | Intermediate Studio | 3 |
| ART 2XX | Intermediate Studio | 3 |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| SCI 101 | Science of Life | 3 |
| ART 3XX | Advanced Studio | 3 |
| ART 3XX | Advanced Studio | 3 |
| ART 30X or 40X ART Elective |  | 3 |
|  | Hours | 12 |
| Spring |  |  |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| ART 3XX | Art History | 3 |
| ART 3XX | Advanced Studio | 3 |
| ART 3XX | Advanced Studio (Concentration) | 3 |
| ART 300 | Art Seminar | 3 |
|  | Hours | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| ART 4XX | Senior Studio | 3 |
| ART 4XX | Senior Studio (Concentration) | 3 |
| ART 30X or 40X ART Elective |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| ART 30X or 40X Art Elective |  | 3 |
| ART 4xX | Senior Studio | 3 |
| ART 4xX | Senior Project (Concentration) | 3 |
| Elective |  | 3 |
|  | Hours | 15 |
|  | Total Hours** | 117 |

1 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/ ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UIdNTi4u)to declare a thread.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

ART - BFA (5305)
Concentration in Ceramic Arts (CERA)
Revised: 01.28.2021

## Art, Bachelor of Fine Arts (BFA) Concentration in Digital Media Program Learning Outcomes

- Critical Thinking: Art majors will locate, analyze and synthesize art historical information and context within their own work.
- Degree Program Writing Competency: Students will be able to effectively communicate in writing for purposes of the discipline.
- Direction: Art majors develop a personal direction through their choice of medium, idea and/or style. Students will demonstrate intellectual and artistic curiosity while committing to improvement.
- Professional Proficiency: Art majors will perceive, discuss and demonstrate professional proficiency upon graduation by applying their knowledge and skills of fine art.
- Technique: Art majors will demonstrate technical aptitude. The department assesses the technical quality of student production. Each medium varies with its technical demands.


## Related Links

Art - Digital Media, BFA Program Page (https://www.sru.edu/academics/ majors-and-minors/art-bfa-digital-media/)

Art Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/art/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major/Concentration Requirements | 78 |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: | 3 |  |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |


| Integrated Inquiry |  |
| :---: | :---: |
| Creative and Aesthetic Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Humanities Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Social Science Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Natural Science Inquiry |  |
| SCI 101 Science of Life | 3 |
| Physical Science Inquiry |  |
| SCI 102 Understanding the Physical World | 3 |
| Subtotal | 15 |
| Thematic Thread |  |
| Select 12 Credits (p. 1378) ${ }^{2}$ | 12 |
| Total Hours | 42 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 from at least 3 Categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate "computer competency" by one of the following: |  | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major Requirements

- 39 major credits must be taken at SRU or PASSHE
- 39 major credits must be taken at the 300 level or above
Code Title Hours

| Required Courses |  |  |
| :--- | :--- | :--- |
| ART 100 | 2-D Design ${ }^{1}$ | 3 |
| ART 101 | 3-D Design ${ }^{1}$ | 3 |
| ART 105 | Basic Studio Drawing $^{1}$ | 3 |
| ART 225 | Overview of Western Art $^{1}$ | 3 |


| ART 226 | Overview of World Art ${ }^{1}$ |
| :--- | :--- |
| ART 300 | Art Seminar ${ }^{1}$ |
| Art History Electives |  |
| Select two of the following: |  |
| ART 325 | North American Art History ${ }^{1}$ |
| ART 335 | The Renaissance Tradition $^{1}$ |
| ART 345 | Foundations of Modern Art $^{1}$ |
| ART 355 | Early Modern Art $^{1}$ |
| ART 365 | Art Since 1945 $^{1}$ |
| ART 420 | Art History Seminar $^{1}$ |

## Digital Media Concentration ( 15 Credits)

Concentration courses count towards BFA Studio requirements.
(200-400 level courses are repeatable - see below for course
details - see below for course details).
Select 12 credits from the following:

| ART 114 | Basic Studio Digital Media ${ }^{1}$ | 0-3 |
| :---: | :---: | :---: |
| ART 214 | Intermediate Studio Digital Media ${ }^{1}$ | 0-6 |
| ART 314 | Advanced Studio Digital Media ${ }^{1}$ | 0-9 |
| ART 414 | Senior Studio Digital Media ${ }^{1}$ | 0-6 |
| Digital Media 1st Concentration Required - Capstone Course |  |  |
| ART 434 | Senior Project Digital Media ${ }^{1}$ | 3 |

Additional Studio Requirements
100 Level Electives
Select three of the following courses, no class may be repeated: 9

| ART 106 | Basic Studio Painting ${ }^{1}$ |
| :---: | :---: |
| ART 107 | Basic Studio Photography ${ }^{1}$ |
| ART 108 | Basic Studio Printmaking ${ }^{1}$ |
| ART 109 | Basic Studio Metalsmithing ${ }^{1}$ |
| ART 110 | Basic Studio Sculpture ${ }^{1}$ |
| ART 111 | Basic Studio Fiber Art ${ }^{1}$ |
| ART 112 | Basic Studio Ceramics ${ }^{1}$ |
| ART 113 | Basic Studio Graphic Design ${ }^{1}$ |
| 200 Level Electives |  |
| Select four of | owing courses, you may take any class |

Select four of the following courses, you may take any class
twice:

| ART 205 | Intermediate Studio Drawing ${ }^{1}$ |
| :--- | :--- | :--- |
| ART 206 | Intermediate Studio Painting ${ }^{1}$ |
| ART 207 | Intermediate Studio Photography ${ }^{1}$ |
| ART 208 | Intermediate Studio Printmaking ${ }^{1}$ |
| ART 209 | Intermediate Studio Metalsmithing ${ }^{1}$ |
| ART 210 | Intermediate Studio Sculpture ${ }^{1}$ |
| ART 211 | Intermediate Studio Fiber Art ${ }^{1}$ |
| ART 212 | Intermediate Studio Ceramics ${ }^{1}$ |
| ART 213 | Intermediate Studio Graphic Design ${ }^{1}$ |
| ART 214 | Intermediate Studio Digital Media ${ }^{1}$ |
| 300 Level Electives |  |
| Select four of the following courses, you may take any class up to |  |
| three times: |  |
| ART 305 | Advanced Studio Drawing ${ }^{1}$ |
| ART 306 | Advanced Studio Painting ${ }^{1}$ |
| ART 307 | Advanced Studio Photography ${ }^{1}$ |
| ART 308 | Advanced Studio Printmaking ${ }^{1}$ |
| ART 309 | Advanced Studio Metalsmithing ${ }^{1}$ |


| ART 310 | Advanced Studio Sculpture ${ }^{1}$ |  |
| :---: | :---: | :---: |
| ART 311 | Advanced Studio Fiber Art ${ }^{1}$ |  |
| ART 312 | Advanced Studio Ceramics ${ }^{1}$ |  |
| ART 313 | Advanced Studio Graphic Design ${ }^{1}$ |  |
| ART 314 | Advanced Studio Digital Media ${ }^{1}$ |  |
| 400 Level Electives |  |  |
| Select three of the fol to two times: | lowing courses, you may take any class up | 9 |
| ART 405 | Senior Studio Drawing ${ }^{1}$ |  |
| ART 406 | Senior Studio Painting ${ }^{1}$ |  |
| ART 407 | Senior Studio Photography ${ }^{1}$ |  |
| ART 408 | Senior Studio Printmaking ${ }^{1}$ |  |
| ART 409 | Senior Studio Metalsmithing ${ }^{1}$ |  |
| ART 410 | Senior Studio Sculpture ${ }^{1}$ |  |
| ART 411 | Senior Studio Fiber Art ${ }^{1}$ |  |
| ART 412 | Senior Studio Ceramics ${ }^{1}$ |  |
| ART 413 | Senior Studio Graphic Design ${ }^{1}$ |  |
| ART 414 | Senior Studio Digital Media ${ }^{1}$ |  |
| Art Electives |  |  |
| Select from 300-400 level courses ${ }^{1}$ |  | 9 |
| Total Hours |  | 78 |

1 Course counts for $50 \%$ of Major requirements and Major GPA.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Student leadership development
5. Service opportunities (e.g., Empty Bowls program)
6. Career education and development
7. Internships

Student exhibitions
Field Experiences

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

Concentration in Digital Media (DGME)
This program is effective as of Fall 2020.
Revised 03.09.2021
UCC 12.3.2019
Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ART 100 | 2-D Design | 3 |
| ART 105 | Basic Studio Drawing | 3 |
| ART 225 | Overview of Western Art | 3 |
|  | Hours | 15 |
| Spring |  |  |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| ART 101 | 3-D Design | 3 |
| ART 1XX | Basic Studio (Concentration) | 3 |
| ART 1XX | Basic Studio | 3 |
|  | Hours | 15 |
| Second Year |  |  |
| Fall |  |  |
| POLS 235 | Civil Discourse and Democracy | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
| ART 226 | Overview of World Art | 3 |
| ART 1XX | Basic Studio | 3 |
| ART 2XX | Intermediate Studio | 3 |
| Declare a Thematic Thread ${ }^{1}$ |  |  |
|  | Hours | 15 |
| Spring |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Social Science Inquiry (p. 1378) |  | 3 |
| ART 2XX | Intermediate Studio | 3 |
| ART 2XX | Intermediate Studio | 3 |
| ART 2XX | Intermediate Studio (Concentration) | 3 |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| SCI 101 | Science of Life | 3 |
| ART 30X | Art History | 3 |
| ART 3XX | Advanced Studio | 3 |
| ART 3XX | Advanced Studio | 3 |
| ART 30X or 40X ART Elective |  | 3 |


| Spring |  |  |
| :--- | :--- | :--- |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| ART 3XX | Art History | 3 |
| ART 3XX | Advanced Studio | 3 |
| ART 3XX | Advanced Studio (Concentration) | 3 |


| ART 300 | Art Seminar | 3 |
| :---: | :---: | :---: |
|  | Hours | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| ART 4XX | Senior Studio | 3 |
| ART 4XX | Senior Studio (Concentration) | 3 |
| ART 30X or 40X ART Elective |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| ART 30X or 40X Art Elective |  | 3 |
| ART 4 xX | Senior Studio | 3 |
| ART 4xX | Senior Project (Concentration) | 3 |
| Elective |  | 3 |
|  | Hours | 15 |
|  | Total Hours** | 120 |
| 2 Work <br> Threa <br> year. <br> Respo <br> VJnD <br> decla | cademic Adviser to declare a Th d of your fall semester in your se https://forms.office.com/Pages/ spx?id=ul1VhjsH90-30bc6d8W9 NEFHMUNHOEI5TkJOWIRHVzR |  |

** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

ART - BFA (5305)
Concentration in Digital Media (DGME)
Revised: 01.28.2021

## Art, Bachelor of Fine Arts (BFA) Concentration in Drawing <br> Program Learning Outcomes

- Critical Thinking: Art majors will locate, analyze and synthesize art historical information and context within their own work.
- Degree Program Writing Competency: Students will be able to effectively communicate in writing for purposes of the discipline.
- Direction: Art majors develop a personal direction through their choice of medium, idea and/or style. Students will demonstrate intellectual and artistic curiosity while committing to improvement.
- Professional Proficiency: Art majors will perceive, discuss and demonstrate professional proficiency upon graduation by applying their knowledge and skills of fine art.
- Technique: Art majors will demonstrate technical aptitude. The department assesses the technical quality of student production. Each medium varies with its technical demands.


## Related Links

Art - Drawing, BFA Program Page (https://www.sru.edu/academics/ majors-and-minors/art-bfa-concentration-in-drawing/)

Art Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/art/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major/Concentration Requirements | 78 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar |  |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: | 3 |  |
| COMM 200 |  | Civil Discourse: Theory \& Practice |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |

Subtotal ..... 15

Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378) 3

Humanities Inquiry
Select 3 Credits (p. 1378) 3
Social Science Inquiry
Select 3 Credits (p. 1378) 3
Natural Science Inquiry
SCI 101 Science of Life 3

Physical Science Inquiry
SCI $102 \quad 3$
Subtotal 15
Thematic Thread
Select 12 Credits $(\mathrm{p} .1378)^{2} \quad 12$
Total Hours 42

1 Course offered in multiple subjects; cannot take course in first major subject.

2
from at least 3 Categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |

## Total Hours

## Computer Competency

| Code | Title | Hours |
| :---: | :---: | :---: |
| Demonstrate "computer competency" by one of the following: |  | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one institution | ollowing at SRU or another post-secondary |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major Requirements

- 39 major credits must be taken at SRU or PASSHE
- 39 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| ART 100 | 2-D Design ${ }^{1}$ | 3 |
| ART 101 | 3-D Design ${ }^{1}$ | 3 |
| ART 105 | Basic Studio Drawing ${ }^{1}$ | 3 |
| ART 225 | Overview of Western Art ${ }^{1}$ | 3 |
| ART 226 | Overview of World Art ${ }^{1}$ | 3 |
| ART 300 | Art Seminar ${ }^{1}$ | 3 |
| Art History Electives |  |  |
| Select two of the following: |  | 6 |
| ART 325 | North American Art History ${ }^{1}$ |  |
| ART 335 | The Renaissance Tradition ${ }^{1}$ |  |
| ART 345 | Foundations of Modern Art ${ }^{1}$ |  |
| ART 355 | Early Modern Art ${ }^{1}$ |  |
| ART 365 | Art Since $1945{ }^{1}$ |  |
| ART 420 | Art History Seminar ${ }^{1}$ |  |
| Drawing Concentration (15 Credits) |  |  |
| Concentration courses count towards BFA Studio requirements. (200-400 level courses are repeatable - see below for course details).) |  |  |
| Select 12 credits from the following: |  |  |
| ART 205 | Intermediate Studio Drawing ${ }^{1}$ | 0-6 |


| ART 305 | Advanced Studio Drawing ${ }^{1}$ | $0-9$ |
| :--- | :--- | :---: |
| ART 405 | Senior Studio Drawing $^{1}$ | $0-6$ |
| Drawing 1st Concentration Required - Capstone Course |  |  |
| ART 425 | Senior Project Drawing ${ }^{1}$ | 3 |

Additional Studio Requirements
100 Level Electives
Select three of the following courses, no class may be repeated: 9

| ART 106 | Basic Studio Painting ${ }^{1}$ |
| :---: | :---: |
| ART 107 | Basic Studio Photography ${ }^{1}$ |
| ART 108 | Basic Studio Printmaking ${ }^{1}$ |
| ART 109 | Basic Studio Metalsmithing ${ }^{1}$ |
| ART 110 | Basic Studio Sculpture ${ }^{1}$ |
| ART 111 | Basic Studio Fiber Art ${ }^{1}$ |
| ART 112 | Basic Studio Ceramics ${ }^{1}$ |
| ART 113 | Basic Studio Graphic Design ${ }^{1}$ |

200 Level Electives
Select four of the following courses, you may take any class 12
twice:

three times:

| ART 305 | Advanced Studio Drawing ${ }^{1}$ |
| :--- | :--- |
| ART 306 | Advanced Studio Painting ${ }^{1}$ |
| ART 307 | Advanced Studio Photography ${ }^{1}$ |
| ART 308 | Advanced Studio Printmaking ${ }^{1}$ |
| ART 309 | Advanced Studio Metalsmithing ${ }^{1}$ |
| ART 310 | Advanced Studio Sculpture ${ }^{1}$ |
| ART 311 | Advanced Studio Fiber Art ${ }^{1}$ |
| ART 312 | Advanced Studio Ceramics ${ }^{1}$ |
| ART 313 | Advanced Studio Graphic Design ${ }^{1}$ |
| ART 314 | Advanced Studio Digital Media ${ }^{1}$ |

## 400 Level Electives

Select three of the following courses, you may take any class up 9 to two times:

| ART 405 | Senior Studio Drawing ${ }^{1}$ |
| :---: | :---: |
| ART 406 | Senior Studio Painting ${ }^{1}$ |
| ART 407 | Senior Studio Photography ${ }^{1}$ |
| ART 408 | Senior Studio Printmaking ${ }^{1}$ |
| ART 409 | Senior Studio Metalsmithing ${ }^{1}$ |
| ART 410 | Senior Studio Sculpture ${ }^{1}$ |
| ART 411 | Senior Studio Fiber Art ${ }^{1}$ |
| ART 412 | Senior Studio Ceramics ${ }^{1}$ |
| ART 413 | Senior Studio Graphic Design ${ }^{1}$ |


| ART 414 | Senior Studio Digital Media ${ }^{1}$ |
| :--- | ---: |
| Art Electives | 9 |
| Select from $300-400$ level courses ${ }^{1}$ | $\mathbf{7 8}$ |
| Total Hours |  |

1 Course counts for 50\% of Major requirements and Major GPA.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Student leadership development
5. Service opportunities (e.g., Empty Bowls program)
6. Career education and development
7. Internships
8. Student exhibitions
9. Field Experiences

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
ART - BFA (5305)
Concentration in Drawing (DRAW)
This program is effective as of Fall 2020.
Revised 03.09.2021
UCC 12.3.2019
Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall | University Seminar ${ }^{1}$ | 3 |
| SUBJ 139 | Critical Writing | 3 |
| ENGL 102 | 2-D Design | 3 |
| ART 100 | Basic Studio Drawing | 3 |
| ART 105 | Overview of Western Art | 3 |
| ART 225 | Hours | $\mathbf{1 5}$ |
|  |  | 3 |


| MATH 117 | Quantitative Reasoning | 3 |
| :--- | :--- | ---: |
| ART 101 | 3-D Design | 3 |
| ART 1X X | Basic Studio (Concentration) | 3 |
| ART 1XX | Basic Studio | $\mathbf{3}$ |
|  | Hours | $\mathbf{1 5}$ |

## Second Year

Fall

| POLS 235 | Civil Discourse and Democracy | 3 |
| :---: | :---: | :---: |
| Humanities Inquiry (p. 1378) |  | 3 |
| ART 226 | Overview of World Art | 3 |
| ART 1XX | Basic Studio | 3 |
| ART 2XX | Intermediate Studio | 3 |
| Declare a Thematic Thread ${ }^{1}$ |  |  |
|  | Hours | 15 |
| Spring |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Social Science Inquiry (p. 1378) |  | 3 |
| ART 2XX | Intermediate Studio | 3 |
| ART 2XX | Intermediate Studio | 3 |
| ART 2XX | Intermediate Studio (Concentration) | 3 |
|  | Hours | 15 |

## Third Year

Fall

| SCI 101 | Science of Life | 3 |
| :--- | :--- | ---: |
| ART 30X | Art History | 3 |
| ART 3XX | Advanced Studio | 3 |
| ART 3XX | Advanced Studio | 3 |
| ART 30X or 40X ART Elective | 3 |  |
|  | Hours | $\mathbf{1 5}$ |


| Spring |  |  |
| :--- | :--- | ---: |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| ART 3XX | Art History | 3 |
| ART 3XX | Advanced Studio | 3 |
| ART 3XX | Advanced Studio (Concentration) | 3 |
| ART 300 | Art Seminar | 3 |
|  | Hours | $\mathbf{1 5}$ |
| Fourth Year |  |  |

Fall
Thematic Thread Requirement (p. 1378) 3
Thematic Thread Requirement (p. 1378) 3

| ART 4XX | Senior Studio | 3 |
| :--- | :--- | :--- |
| ART 4XX | Senior Studio (Concentration) | 3 |

ART 30 X or 40 X ART Elective 3
Hours 15
Spring
Thematic Thread Requirement (p. 1378) 3
ART 30X or 40X Art Elective 3
ART $4 x X \quad$ Senior Studio 3

| Elective |  | 3 |
| :--- | :--- | ---: |
| Hours | $\mathbf{1 5}$ |  |
| Total Hours** | $\mathbf{1 2 0}$ |  |

1 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/ ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UIdNTi4u)to declare a thread.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

ART - BFA (5305)
Concentration in Drawing (DRAW)
Revised: 01.28.2021

## Art, Bachelor of Fine Arts (BFA) Concentration in Fiber Arts

## Program Learning Outcomes

- Critical Thinking: Art majors will locate, analyze and synthesize art historical information and context within their own work.
- Degree Program Writing Competency: Students will be able to effectively communicate in writing for purposes of the discipline.
- Direction: Art majors develop a personal direction through their choice of medium, idea and/or style. Students will demonstrate intellectual and artistic curiosity while committing to improvement.
- Professional Proficiency: Art majors will perceive, discuss and demonstrate professional proficiency upon graduation by applying their knowledge and skills of fine art.
- Technique: Art majors will demonstrate technical aptitude. The department assesses the technical quality of student production. Each medium varies with its technical demands.


## Related Links

Art - Fiber Arts, BFA Program Page (https://www.sru.edu/academics/ majors-and-minors/art-bfa-fiber-art/)

Art Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/art/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major/Concentration Requirements | 78 |

* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Science Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Science Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |
| Thematic Thread |  |  |
| Select 12 Credits (p.1378) ${ }^{2}$ |  | 12 |
| Total Hours |  | 42 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 from at least 3 Categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Complete one of the following: | $0-3$ |
| Meet required minimum SAT or ACT math score OR |  |
| ESAP 110 | Beginning Algebra |


| Computer Competency |
| :--- |
| Code <br> Cemonstrate "computer competency" by one of the following: |
| Ditle Hours <br> Pass Computer Competency Exam OR  |
| Select one of the following at SRU or another post-secondary <br> institution: |
| CPSC 100 | | CPSC 110 | Introduction to Computing for Liberal Arts |
| :--- | :--- |
| CPSC 130 | Computer Concepts <br> Introduction to Computing and <br> Programming |
| PE 202 | Technology for Wellness |

## Major Requirements

- 39 major credits must be taken at SRU or PASSHE
- 39 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| ART 100 | 2-D Design ${ }^{1}$ | 3 |
| ART 101 | 3-D Design ${ }^{1}$ | 3 |
| ART 105 | Basic Studio Drawing ${ }^{1}$ | 3 |
| ART 225 | Overview of Western Art ${ }^{1}$ | 3 |
| ART 226 | Overview of World Art ${ }^{1}$ | 3 |
| ART 300 | Art Seminar ${ }^{1}$ | 3 |

## Art History Electives

Select two of the following:

| ART 325 | North American Art History ${ }^{1}$ |
| :--- | :--- |
| ART 335 | The Renaissance Tradition ${ }^{1}$ |
| ART 345 | Foundations of Modern Art ${ }^{1}$ |
| ART 355 | Early Modern Art ${ }^{1}$ |
| ART 365 | Art Since $1945{ }^{1}$ |
| ART 420 | Art History Seminar ${ }^{1}$ |

## Fiber Art Concentration (15 Credits)

Concentration courses count towards BFA Studio requirements.
(200-400 level courses are repeatable - see below for course details).
Select 12 credits from the following:

| ART 111 | Basic Studio Fiber Art $^{1}$ | $0-3$ |
| :--- | :--- | :--- |
| ART 211 | Intermediate Studio Fiber Art $^{1}$ | $0-6$ |
| ART 311 | Advanced Studio Fiber Art $^{1}$ | $0-9$ |
| ART 411 $^{1}$ | Senior Studio Fiber Art $^{1}$ | $0-6$ |

Fiber Art 1st Concentration Required - Capstone Course
ART $431 \quad$ Senior Project Fiber Art3

Additional Studio Requirements
100 Level Electives
Select three of the following courses, no class may be repeated:

| ART 106 | Basic Studio Painting ${ }^{1}$ |
| :---: | :---: |
| ART 107 | Basic Studio Photography ${ }^{1}$ |
| ART 108 | Basic Studio Printmaking ${ }^{1}$ |
| ART 109 | Basic Studio Metalsmithing ${ }^{1}$ |
| ART 110 | Basic Studio Sculpture ${ }^{1}$ |
| ART 111 | Basic Studio Fiber Art ${ }^{1}$ |


| ART 112 | Basic Studio Ceramics $^{1}$ |  |
| :---: | :--- | :--- |
| ART 113 | Basic Studio Graphic Design ${ }^{1}$ |  |
| 200 Level Electives |  | 12 |

Select four of the following courses, you may take any class
twice:
 three times:

| ART 305 | Advanced Studio Drawing ${ }^{1}$ |
| :--- | :--- |
| ART 306 | Advanced Studio Painting ${ }^{1}$ |
| ART 307 | Advanced Studio Photography ${ }^{1}$ |
| ART 308 | Advanced Studio Printmaking ${ }^{1}$ |
| ART 309 | Advanced Studio Metalsmithing ${ }^{1}$ |
| ART 310 | Advanced Studio Sculpture ${ }^{1}$ |
| ART 311 | Advanced Studio Fiber Art ${ }^{1}$ |
| ART 312 | Advanced Studio Ceramics ${ }^{1}$ |
| ART 313 | Advanced Studio Graphic Design ${ }^{1}$ |
| ART 314 | Advanced Studio Digital Media ${ }^{1}$ |

400 Level Electives
Select three of the following courses, you may take any class up 9 to two times:

| ART 405 | Senior Studio Drawing ${ }^{1}$ |  |
| :---: | :---: | :---: |
| ART 406 | Senior Studio Painting ${ }^{1}$ |  |
| ART 407 | Senior Studio Photography ${ }^{1}$ |  |
| ART 408 | Senior Studio Printmaking ${ }^{1}$ |  |
| ART 409 | Senior Studio Metalsmithing ${ }^{1}$ |  |
| ART 410 | Senior Studio Sculpture ${ }^{1}$ |  |
| ART 411 | Senior Studio Fiber Art ${ }^{1}$ |  |
| ART 412 | Senior Studio Ceramics ${ }^{1}$ |  |
| ART 413 | Senior Studio Graphic Design ${ }^{1}$ |  |
| ART 414 | Senior Studio Digital Media ${ }^{1}$ |  |
| Art Electives |  |  |
| Select from 300-400 level courses ${ }^{1}$ |  | 9 |
| Total Hours |  | 78 |

1 Course counts for $50 \%$ of Major requirements and Major GPA.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student
success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Student leadership development
5. Service opportunities (e.g., Empty Bowls program)
6. Career education and development
7. Internships
8. Student exhibitions
9. Field Experiences

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
ART - BFA (5305)
Concentration in Fiber Art (FIBA)
This program is effective as of Fall 2020.
Revised 03.09.2021
UCC 12.3.2019

## Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall | University Seminar ${ }^{1}$ |  |
| SUBJ 139 | Critical Writing | 3 |
| ENGL 102 | 2-D Design | 3 |
| ART 100 | Basic Studio Drawing | 3 |
| ART 105 | Overview of Western Art | 3 |
| ART 225 | Hours | 3 |
|  | Critical Reading | $\mathbf{1 5}$ |
| Spring | Quantitative Reasoning | 3 |
| ENGL 104 | 3-D Design | 3 |
| MATH 117 | Basic Studio (Concentration) | 3 |
| ART 101 | Basic Studio | 3 |
| ART 1X X | Hours | 3 |
| ART 1XX |  | $\mathbf{1 5}$ |

## Second Year

Fall

| POLS 235 | Civil Discourse and Democracy | 3 |
| :--- | :--- | :--- |
| Humanities Inquiry $($ p. 1378) | 3 |  |
| ART 226 | Overview of World Art | 3 |
| ART 1XX | Basic Studio | 3 |
| ART 2XX | Intermediate Studio | 3 |



| Third Year |  |  |
| :--- | :--- | ---: |
| Fall |  |  |
| SCI 101 | Science of Life | 3 |
| ART 30X | Art History | 3 |
| ART 3XX | Advanced Studio | 3 |
| ART 3XX | Advanced Studio | 3 |
| ART 30X or 40X ART Elective | 3 |  |
|  | Hours | $\mathbf{1 5}$ |


| Spring |  |  |
| :--- | :--- | ---: |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| ART 3XX | Art History | 3 |
| ART 3XX | Advanced Studio | 3 |
| ART 3XX | Advanced Studio (Concentration) | 3 |
| ART 300 | Art Seminar | 3 |
|  | Hours | $\mathbf{1 5}$ |

## Fourth Year

Fall

| Thematic Thread Requirement (p. 1378) | 3 |  |
| :--- | ---: | ---: |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| ART 4XX | Senior Studio | 3 |
| ART 4XX | Senior Studio (Concentration) | 3 |
| ART 30X or 40X ART Elective | 3 |  |
| Hours | $\mathbf{1 5}$ |  |


| Spring |  |  |
| :--- | ---: | ---: |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| ART 30X or 40X Art Elective | 3 |  |
| ART $4 \times X$ | Senior Studio | 3 |
| ART $4 \times X$ | Senior Project (Concentration) | 3 |
| Elective |  | 3 |
|  | Hours | $\mathbf{1 5}$ |
|  | Total Hours** | $\mathbf{1 2 0}$ |

1 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/
ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UIdNTi4u)to declare a thread.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

ART - BFA (5305)
Concentration in Fiber Art (FIBA)
Revised: 01.28.2021

## Art, Bachelor of Fine Arts (BFA) Concentration in Graphic Design Program Learning Outcomes

- Critical Thinking: Art majors will locate, analyze and synthesize art historical information and context within their own work.
- Degree Program Writing Competency: Students will be able to effectively communicate in writing for purposes of the discipline.
- Direction: Art majors develop a personal direction through their choice of medium, idea and/or style. Students will demonstrate intellectual and artistic curiosity while committing to improvement.
- Professional Proficiency: Art majors will perceive, discuss and demonstrate professional proficiency upon graduation by applying their knowledge and skills of fine art.
- Technique: Art majors will demonstrate technical aptitude. The department assesses the technical quality of student production. Each medium varies with its technical demands.


## Related Links

Art - Graphic Design, BFA Program Page (https://www.sru.edu/ academics/majors-and-minors/art-bfa-graphic-design/)

Art Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/art/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.00 or higher
Overall GPA: 2.00 or higher

## Summary*

| Code Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major/Concentration Requirements | 78 |
|  |  |
| * All undergraduate degree programs require a minimum of | 120 credits. |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: | 3 |  |

[^22]

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra | $\mathbf{0 - 3}$ |
| Total Hours |  |  |

## Computer Competency

Code Title Hours

Demonstrate "computer competency" by one of the following: 0-3
Pass Computer Competency Exam OR
Select one of the following at SRU or another post-secondary
institution:
CPSC 100 Introduction to Computing for Liberal Arts
CPSC 110 Computer Concepts
CPSC 130 Introduction to Computing and
Programming
PE 202 Technology for Wellness
Total Hours

## Major Requirements

- 39 major credits must be taken at SRU or PASSHE
- 39 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  |  |
| ART 100 | 2-D Design ${ }^{1}$ | 3 |


| ART 101 | 3-D Design ${ }^{1}$ |
| :---: | :---: |
| ART 105 | Basic Studio Drawing ${ }^{1}$ |
| ART 225 | Overview of Western Art ${ }^{1}$ |
| ART 226 | Overview of World Art ${ }^{1}$ |
| ART 300 | Art Seminar ${ }^{1}$ |
| Art History Electives |  |
| Select two of the following: |  |
| ART 325 | North American Art History ${ }^{1}$ |
| ART 335 | The Renaissance Tradition ${ }^{1}$ |
| ART 345 | Foundations of Modern Art ${ }^{1}$ |
| ART 355 | Early Modern Art ${ }^{1}$ |
| ART 365 | Art Since $1945{ }^{1}$ |
| ART 420 | Art History Seminar ${ }^{1}$ |

## Graphic Design Concentration ( 15 Credits)

These courses will count towards BFA Studio requirements.
(200-400 level courses are repeatable - see below for course details).

| Select 12 credits from the following: |  |  |
| :--- | :--- | ---: |
| ART 213 | Intermediate Studio Graphic Design ${ }^{1}$ | $0-6$ |
| ART 313 | Advanced Studio Graphic Design ${ }^{1}$ | $0-9$ |
| ART 413 | Senior Studio Graphic Design $^{1}$ | $0-6$ |
| Graphic Design 1st | Concentration Required - Capstone Course |  |
| ART 433 | Senior Project Graphic Design | 3 |

Additional Studio Requirements
100 Level Electives
Select three of the following courses, no class may be repeated:

| ART 106 | Basic Studio Painting $^{1}$ |
| :--- | :--- |
| ART 107 | Basic Studio Photography $^{1}$ |
| ART 108 | Basic Studio Printmaking $^{1}$ |
| ART 109 | Basic Studio Metalsmithing $^{1}$ |
| ART 110 | Basic Studio Sculpture $^{1}$ |
| ART 111 | Basic Studio Fiber Art $^{1}$ |
| ART 112 | Basic Studio Ceramics $^{1}$ |
| ART 113 | Basic Studio Graphic Design $^{1}$ |
| ART 114 | Basic Studio Digital Media $^{1}$ |
| 200 Level Electives |  |

Select four of the following courses, you may take any class 12 twice:

| ART 205 | Intermediate Studio Drawing ${ }^{1}$ |
| :--- | :--- |
| ART 206 | Intermediate Studio Painting ${ }^{1}$ |
| ART 207 | Intermediate Studio Photography ${ }^{1}$ |
| ART 208 | Intermediate Studio Printmaking ${ }^{1}$ |
| ART 209 | Intermediate Studio Metalsmithing ${ }^{1}$ |
| ART 210 | Intermediate Studio Sculpture ${ }^{1}$ |
| ART 211 | ${\text { Intermediate Studio Fiber Art }{ }^{1}}^{\text {ART 212 }}$ |
| Intermediate Studio Ceramics ${ }^{1}$ |  |
| ART 213 | Intermediate Studio Graphic Design ${ }^{1}$ |
| ART 214 | Intermediate Studio Digital Media ${ }^{1}$ |
| 300 Level Electives |  |
| Select four of the following courses, you may take any class up to |  | three times:

ART 305
ART 306
Advanced Studio Drawing ${ }^{1}$
Advanced Studio Painting ${ }^{1}$


1 Course counts for $50 \%$ of Major requirements and Major GPA.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Student leadership development
5. Service opportunities (e.g., Empty Bowls program)
6. Career education and development
7. Internships
8. Student exhibitions
9. Field Experiences

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information
on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
ART - BFA (5305)
Concentration in Graphic Design (GDES)
This program is effective as of Fall 2020.
Revised 03.09.2021
UCC 12.3.2019

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ART 100 | 2-D Design | 3 |
| ART 105 | Basic Studio Drawing | 3 |
| ART 225 | Overview of Western Art | 3 |
|  | Hours | 15 |
| Spring |  |  |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| ART 101 | 3-D Design | 3 |
| ART 1X X | Basic Studio (Concentration) | 3 |
| ART 1XX | Basic Studio | 3 |
|  | Hours | 15 |
| Second Year |  |  |
| Fall |  |  |
| POLS 235 | Civil Discourse and Democracy | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
| ART 226 | Overview of World Art | 3 |
| ART 1XX | Basic Studio | 3 |
| ART 2XX | Intermediate Studio | 3 |
| Declare a Thematic Thread ${ }^{1}$ |  |  |
|  | Hours | 15 |
| Spring |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Social Science Inquiry (p. 1378) |  | 3 |
| ART 2XX | Intermediate Studio | 3 |
| ART 2XX | Intermediate Studio | 3 |
| ART 2XX | Intermediate Studio (Concentration) | 3 |
|  | Hours | 15 |


| Third Year |  |  |
| :--- | :--- | ---: |
| Fall |  |  |
| SCI 101 | Science of Life | 3 |
| ART 30X | Art History | 3 |
| ART 3XX | Advanced Studio | 3 |
| ART 3XX | Advanced Studio | 3 |
| ART 30X or 40X ART Elective | 3 |  |
|  | Hours | $\mathbf{1 5}$ |

## Spring

Thematic Thread Requirement (p. 1378)

| ART 3XX | Art History | 3 |
| :---: | :---: | :---: |
| ART 3XX | Advanced Studio | 3 |
| ART 3XX | Advanced Studio (Concentration) | 3 |
| ART 300 | Art Seminar | 3 |
|  | Hours | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| ART 4XX | Senior Studio | 3 |
| ART 4XX | Senior Studio (Concentration) | 3 |
| ART 30X or 40X ART Elective |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| ART 30X or 40X Art Elective |  | 3 |
| ART 4 xX | Senior Studio | 3 |
| ART 4xX | Senior Project (Concentration) | 3 |
| Elective |  | 3 |
|  | Hours | 15 |
|  | Total Hours** | 120 |
| 1 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/ ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UIdNTi4u)to declare a thread. |  |  |
| * This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year. |  |  |
| ART - BFA (5305) <br> Concentration in Graphic Design (GDES) <br> Revised: 01.28.2021 |  |  |
| Art, Bachelor of Fine Arts (BFA) - |  |  |
| Prepa |  |  |

Students in the BFA Art program will have the option to elect this concentration and take most of the required coursework as undergraduates at SRU to prepare for certification through Carlow University. BFA Art graduates with this concentration will enroll at Carlow University for a semester of student teaching, and will obtain K-12 Art Teacher Certification through Carlow University.

This concentration can be completed within the current curricular structure of the BFA degree, and with the addition of six College of Education classes. Students are required to take one class (at any level) in most studio art disciplines. See adviser.

This concentration includes all coursework and requirements specified by the Pennsylvania Department of Education, with student teaching and K-12 Art Teacher certification obtained through Carlow University.

## Program Learning Outcomes

- Critical Thinking: Art majors will locate, analyze and synthesize art historical information and context within their own work.
- Degree Program Writing Competency: Students will be able to effectively communicate in writing for purposes of the discipline.
- Direction: Art majors develop a personal direction through their choice of medium, idea and/or style. Students will demonstrate intellectual and artistic curiosity while committing to improvement.
- Professional Proficiency: Art majors will perceive, discuss and demonstrate professional proficiency upon graduation by applying their knowledge and skills of fine art.
- Technique: Art majors will demonstrate technical aptitude. The department assesses the technical quality of student production. Each medium varies with its technical demands.


## Related Links

Art - K-12 Teacher Preparation, BFA Program Page (https://www.sru.edu/ academics/majors-and-minors/art-bfa-teacher-preparation/)

Art Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/art/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 3.0 or higher
Overall GPA: 3.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major/Concentration Requirements | 78 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

Rock Studies Requirements
Code
Title

| Code | Title | Hours |
| :--- | :--- | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: | 3 |  |

Select one of the following:

| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |
| Subtotal |  |


| Integrated Inquiry |  |
| :--- | ---: |
| Creative and Aesthetic Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Humanities Inquiry | 3 |
| Select 3 Credits (p. 1378) | 3 |
| Social Science Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Natural Science Inquiry |  |
| SCI 101 Science of Life |  |
| Physical Science Inquiry | 3 |
| SCl 102 Understanding the Physical World |  |
| Subtotal | 15 |
| Thematic Thread |  |
| Select 12 Credits (p. 1378) ${ }^{2}$ | 12 |
| Total Hours | $\mathbf{4 2}$ |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 from at least 3 Categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | :---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | $\mathbf{0 - 3}$ |

## Computer Competency

| Code | Title | Hours |
| :--- | :--- | ---: |
| Demonstrate "computer competency" by one of the following: | $0-3$ |  | | Pass Computer Competency Exam OR |
| :--- | :--- |

## Major Requirements

- 39 major credits must be taken at SRU or PASSHE
- 39 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  | 3 |
| ART 100 | 2-D Design ${ }^{1}$ | 3 |
| ART 101 | 3-D Design ${ }^{1}$ | 3 |
| ART 105 | Basic Studio Drawing $^{1}$ | 3 |
| ART 225 | Overview of Western Art ${ }^{1}$ | 3 |


| ART 226 | Overview of World Art ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| ART 300 | Art Seminar ${ }^{1}$ | 3 |
| Subtotal |  | 18 |
| Electives |  |  |
| Art History Electives |  |  |
| Select two of the following: |  | 6 |
| ART 325 | North American Art History ${ }^{1}$ |  |
| ART 335 | The Renaissance Tradition ${ }^{1}$ |  |
| ART 345 | Foundations of Modern Art ${ }^{1}$ |  |
| ART 355 | Early Modern Art ${ }^{1}$ |  |
| ART 365 | Art Since $1945{ }^{1}$ |  |
| ART 420 | Art History Seminar ${ }^{1}$ |  |
| 100 Level Electives |  |  |
| Select three of the following courses, no class may be repeated: |  | 9 |
| ART 106 | Basic Studio Painting ${ }^{1}$ |  |
| ART 107 | Basic Studio Photography ${ }^{1}$ |  |
| ART 108 | Basic Studio Printmaking ${ }^{1}$ |  |
| ART 109 | Basic Studio Metalsmithing ${ }^{1}$ |  |
| ART 110 | Basic Studio Sculpture ${ }^{1}$ |  |
| ART 111 | Basic Studio Fiber Art ${ }^{1}$ |  |
| ART 112 | Basic Studio Ceramics ${ }^{1}$ |  |
| ART 113 | Basic Studio Graphic Design ${ }^{1}$ |  |
| ART 114 | Basic Studio Digital Media ${ }^{1}$ |  |
| 200 Level Electives |  |  |
| Select four of the following courses, you may take any class twice: |  | 12 |
| ART 205 | Intermediate Studio Drawing ${ }^{1}$ |  |
| ART 206 | Intermediate Studio Painting ${ }^{1}$ |  |
| ART 207 | Intermediate Studio Photography ${ }^{1}$ |  |
| ART 208 | Intermediate Studio Printmaking ${ }^{1}$ |  |
| ART 209 | Intermediate Studio Metalsmithing ${ }^{1}$ |  |
| ART 210 | Intermediate Studio Sculpture ${ }^{1}$ |  |
| ART 211 | Intermediate Studio Fiber Art ${ }^{1}$ |  |
| ART 212 | Intermediate Studio Ceramics ${ }^{1}$ |  |
| ART 213 | Intermediate Studio Graphic Design ${ }^{1}$ |  |
| ART 214 | Intermediate Studio Digital Media ${ }^{1}$ |  |
| 300 Level Electives |  |  |
| Select four of the following courses, you may take any class up to three times: |  | 12 |
| ART 305 | Advanced Studio Drawing ${ }^{1}$ |  |
| ART 306 | Advanced Studio Painting ${ }^{1}$ |  |
| ART 307 | Advanced Studio Photography ${ }^{1}$ |  |
| ART 308 | Advanced Studio Printmaking ${ }^{1}$ |  |
| ART 309 | Advanced Studio Metalsmithing ${ }^{1}$ |  |
| ART 310 | Advanced Studio Sculpture ${ }^{1}$ |  |
| ART 311 | Advanced Studio Fiber Art ${ }^{1}$ |  |
| ART 312 | Advanced Studio Ceramics ${ }^{1}$ |  |
| ART 313 | Advanced Studio Graphic Design ${ }^{1}$ |  |
| ART 314 | Advanced Studio Digital Media ${ }^{1}$ |  |
| 400 Level Electives |  |  |
| Select three of the following courses, you may take any class up to two times: |  | 9 |
| ART 405 | Senior Studio Drawing ${ }^{1}$ |  |


| ART 406 | Senior Studio Painting ${ }^{1}$ |  |
| :---: | :---: | :---: |
| ART 407 | Senior Studio Photography ${ }^{1}$ |  |
| ART 408 | Senior Studio Printmaking ${ }^{1}$ |  |
| ART 409 | Senior Studio Metalsmithing ${ }^{1}$ |  |
| ART 410 | Senior Studio Sculpture ${ }^{1}$ |  |
| ART 411 | Senior Studio Fiber Art ${ }^{1}$ |  |
| ART 412 | Senior Studio Ceramics ${ }^{1}$ |  |
| ART 413 | Senior Studio Graphic Design ${ }^{1}$ |  |
| ART 414 | Senior Studio Digital Media ${ }^{1}$ |  |
| SR Project |  |  |
| Select one of the following: ${ }^{2}$ |  | 3 |
| ART 425 | Senior Project Drawing ${ }^{1}$ |  |
| ART 426 | Senior Project Painting ${ }^{1}$ |  |
| ART 427 | Senior Project Photography ${ }^{1}$ |  |
| ART 428 | Senior Project Printmaking ${ }^{1}$ |  |
| ART 429 | Senior Project Metalsmithing ${ }^{1}$ |  |
| ART 430 | Senior Project Sculpture ${ }^{1}$ |  |
| ART 431 | Senior Project Fiber Art ${ }^{1}$ |  |
| ART 432 | Senior Project Ceramics ${ }^{1}$ |  |
| ART 433 | Senior Project Graphic Design ${ }^{1}$ |  |
| ART 434 | Senior Project Digital Media ${ }^{1}$ |  |
| Art Electives |  |  |
| Select from 300-400 level courses 1,3 |  | 9 |
| Subtotal |  | 60 |
| Total Hours |  | 78 |

1 Course counts for $50 \%$ of Major requirements and Major GPA.
2400 level pre-req or permission of instructor.
3 The Art classes required for PA K-12 Art Teacher Certification can be used as Art Electives.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Concentration Requirements

## Code Title Hours

Art Education Concentration
The following four ART classes are required for Art Teacher Certification and also can be used as Art Elective in the BFA Art degree.

| ART 317 | Elementary Art Methods and Materials ${ }^{1}$ | 3 |
| :--- | :--- | :--- |
| AE 327 | Secondary Art Methods \& Mat (Carlow) | 3 |
| ART $440^{\text {ART 451 }}$ | Art Education Methods ${ }^{1,2}$ | 1 |
| Total Hours | Art Education Methods Internship ${ }^{1,2}$ | 2 |

1 Course counts for $50 \%$ of Major requirements and Major GPA.
2 Taken concurrently.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## PENNSYLVANIA DEPARTMENT OF EDUCATION (PDE) REQUIRED EDUCATION-RELATED COURSES \& CANDIDACY FOR CERTIFICATION REVIEW

| Code | Title | Hours |
| :---: | :---: | :---: |
| 1. Pass the following Courses: |  |  |
| SEFE 200 | Introduction to Education, Teaching Methods and Field |  |
| SPED 121 | Overview of Special Education |  |
| 2. Candidacy for Certification Review: |  |  |
| A. At 48 credits and prior to taking upper level education-related coursework, students must pass the Candidacy for Certification on Review and meet minimum PDE requirements. Consult with Adviser. |  |  |
| B. Pass the following courses: |  |  |
| CDEV 248 | Human Development and Education |  |
| ENGL 102 | Critical Writing |  |
| ENGL 104 | Critical Reading |  |
| SEFE 200 | Introduction to Education, Teaching Methods and Field |  |
| SPED 121 | Overview of Special Education |  |
| MATH | Two MATH Courses |  |
| C. Complete Field Experiences: |  |  |
| Stage 1 - Observations |  |  |
| Stage 2 - Explorations |  |  |
| D. Have a minimum GPA of 3.0 |  |  |
| E. Pass the PAPA Basic Skills Tests or equivalent. |  |  |
| F. Obtain all PA Clearances: |  |  |
| The Pennsylvania State Police Request for Criminal Records Check (Act 34) |  |  |
| The Federal Criminal History Record (Act 114). |  |  |
| The Child Abuse History Clearance (Act 151). |  |  |
| Complete the Arrest/Conviction Report and Certification (Act 24). |  |  |
| TB Test |  |  |
| 3. Sucessfully complete the following courses: |  |  |
| SEFE 326 | ELL Strategies and Practice |  |
| SEFE 342 | Educational Psychology for Diverse Learners |  |
| SPED 350 | Universal Intervention |  |
| SPED 360 | Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners |  |

4. Before SRU Graduation and student teaching placement
(through Carlow University) pass PRAXIS II-Fundamental Subjects Content Knowledge. PRAXIS II-Art Content knowledge is required for K - 12 Art Teach Certification through Carlow University.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Student leadership development
5. Service opportunities (e.g., Empty Bowls program)
6. Career education and development
7. Internships
8. Student exhibitions
9. Field Experiences

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
ART- BFA (5305)
Concentration in K-12 Art Teacher Preparation (ARTE)
This program is effective as of Fall 2020.
Revised 02.2020
UCC 10.29.2021

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| SUBJ 139 | University Seminar * | 3 |
| ENGL 102 | Critical Writing | 3 |
| Select one |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| ART 100 | 2-D Design | 3 |
| ART 105 | Basic Studio Drawing | 3 |
| ART 225 | Overview of Western Art | 3 |
|  | Hours | 18 |
| Spring |  |  |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| ART 226 | Overview of World Art | 3 |
| ART 101 | 3-D Design | 3 |
| SPED 121 | Overview of Special Education ${ }^{1}$ | 3 |
| ART 1 XX | Art Studio 100 Level | 3 |
|  | Hours | 18 |
| Second Year |  |  |
| Fall |  |  |
| Humanities Inquiry (p. 1378) |  | 3 |
| SCI 101 | Science of Life | 3 |
| ART 1XX | Art Studio 100 Level | 3 |
| ART 1XX | Art Studio 100 Level | 3 |


| ART 2XX | Art Studio 200 Level |  |
| :--- | :--- | ---: |
| SEFE 200 | Introduction to Education, Teaching <br> Methods and Field | 3 |
| Declare a Thematic Thread $^{5}$ | 3 |  |
|  | Hours $^{\text {Spring }}$ |  |
| SCI 102 | Understanding the Physical World | $\mathbf{1 8}$ |
| Social Science Inquiry (p. 1378) | 3 |  |
| ART 2XX | Art Studio 200 Level | 3 |
| ART 2XX | Art Studio 200 Level | 3 |
| ART 2XX | Art Studio 200 Level | 3 |
| CDEV 248 | Human Development and Education ${ }^{2}$ | 3 |
|  | Hours | 3 |


| Third Year |  |  |
| :---: | :---: | :---: |
| Fall |  |  |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| ART 3XX | Art Studio 300 Level | 3 |
| ART 3XX | Art Studio 300 Level | 3 |
| ART 317 | Elementary Art Methods and Materials | 3 |
| EDUCATION MATH REQUIREMENT |  | 3 |
| SEFE 326 | ELL Strategies and Practice | 3 |
|  | Hours | 18 |


| Spring |  |  |
| :--- | :--- | ---: |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| ART 3XX | Art Studio 300 Level | 3 |
| ART 3XX | Art Studio 300 Level | 3 |
| *Art Studio Elective (AE 327 Carlow Presession) | 3 |  |
| ART 300 | Art Seminar | 3 |
| SPED 350 | Universal Intervention ${ }^{3}$ | 3 |
|  | Hours | $\mathbf{1 8}$ |

Fourth Year
Fall

| ART 317 | Elementary Art Methods and Materials | 3 |
| :--- | :--- | :---: |
| ART 451 | Art Education Methods Internship | 2 |
| ART 440 | Art Education Methods | 1 |
| ART 4XX | Art Studio 400 Level | 3 |
| ART 4XX | Art Studio 400 Level | 3 |
| SEFE 342 | Educational Psychology for Diverse | 3 |
|  | Learners | $\mathbf{1 5}$ |

Spring
ART 4XX Art Studio 400 Level

Art History - select one from the following: 3

| ART 325 | North American Art History |
| :--- | :--- |
| ART 335 | The Renaissance Tradition |
| ART 345 | Foundations of Modern Art |
| ART 355 365 | Early Modern Art |
| ART 420 | Art Since 1945 |

Senior Project - select one from the following:

| ART 425 | Senior Project Drawing |
| :--- | :--- |
| ART 426 | Senior Project Painting |

ART $426 \quad$ Senior Project Painting

| ART 427 | Senior Project Photography |  |
| :---: | :---: | :---: |
| ART 428 | Senior Project Printmaking |  |
| ART 429 | Senior Project Metalsmithing |  |
| ART 430 | Senior Project Sculpture |  |
| ART 431 | Senior Project Fiber Art |  |
| ART 432 | Senior Project Ceramics |  |
| ART 433 | Senior Project Graphic Design |  |
| ART 434 | Senior Project Digital Media |  |
| SPED 360 | Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners ${ }^{4}$ | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 18 |
|  | Total Hours** | 141 |

1 Stage 1: 20 Hour Observation
2 Stage 2: 20 hour Observation
3 Praxis II: 0511 and 5511
4 Praxis II: Art 0134
5 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/
ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UIdNTi4u)to declare a thread.

* Course offered in multiple subject areas; cannot take in first major subject area.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

ART- BFA (5305)
Concentration in K-12 Art Teacher Preparation (ARTE)
Revised 01.27.2021

## Art, Bachelor of Fine Arts (BFA) Concentration in Metalsmithing <br> Program Learning Outcomes

- Critical Thinking: Art majors will locate, analyze and synthesize art historical information and context within their own work.
- Degree Program Writing Competency: Students will be able to effectively communicate in writing for purposes of the discipline.
- Direction: Art majors develop a personal direction through their choice of medium, idea and/or style. Students will demonstrate intellectual and artistic curiosity while committing to improvement.
- Professional Proficiency: Art majors will perceive, discuss and demonstrate professional proficiency upon graduation by applying their knowledge and skills of fine art.
- Technique: Art majors will demonstrate technical aptitude. The department assesses the technical quality of student production. Each medium varies with its technical demands.


## Related Links

Art - Metalsmithing, BFA Program Page (https://www.sru.edu/ academics/majors-and-minors/art-bfa-concentration-in-metalsmithing/)

Art Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/art/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Title | Hours |
| :--- | ---: |
| Code | 42 |
| Rock Studies Requirements | $0-3$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | 78 |
| Major/Concentration Requirements |  |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |

Select one of the following: 3

| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |

Subtotal 15
Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378)
Humanities Inquiry
Select 3 Credits (p. 1378) 3
Social Science Inquiry
Select 3 Credits (p. 1378) 3

Natural Science Inquiry

| SCI 101 | Science of Life | 3 |
| :--- | :--- | ---: |
| Physical Science Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |


| Thematic Thread |  |
| :--- | :--- |
| Select 12 Credits $($ p. 1378) |  |

## Total Hours

1 Course offered in multiple subjects; cannot take course in first major subject.
2 from at least 3 Categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | $\mathbf{0 - 3}$ |

## Computer Competency

Code Title Hours

Demonstrate "computer competency" by one of the following: 0-3
Pass Computer Competency Exam OR
Select one of the following at SRU or another post-secondary institution:

| CPSC 100 | Introduction to Computing for Liberal Arts |
| :--- | :--- |
| CPSC 110 | Computer Concepts |
| CPSC 130 | Introduction to Computing and <br>  <br> Programming |
| PE 202 | Technology for Wellness |
| Total Hours | $\mathbf{0 - 3}$ |

## Major Requirements

- 39 major credits must be taken at SRU or PASSHE
- 39 major credits must be taken at the 300 level or above
Code Title Hours


## Required Courses

| ART 100 | 2-D Design $^{1}$ | 3 |
| :--- | :--- | :--- |
| ART 101 | 3-D Design $^{1}$ | 3 |
| ART 105 | Basic Studio Drawing $^{1}$ | 3 |
| ART 225 | Overview of Western Art $^{1}$ | 3 |
| ART 226 | Overview of World Art $^{1}$ | 3 |
| ART 300 | Art Seminar $^{1}$ | 3 |

Art History Electives
Select two of the following: 6

| ART 325 | North American Art History ${ }^{1}$ |
| :---: | :---: |
| ART 335 | The Renaissance Tradition ${ }^{1}$ |
| ART 345 | Foundations of Modern Art ${ }^{1}$ |
| ART 355 | Early Modern Art ${ }^{1}$ |
| ART 365 | Art Since $1945{ }^{1}$ |
| ART 420 | Art History Seminar ${ }^{1}$ |
| Metalsmithing Concentration ( 15 Credits) |  |
| Concentration courses count towards BFA Studio requirements. (200-400 level courses are repeatable - see below for course details). |  |
| Select 12 credits from the following: |  |
| ART 109 | Basic Studio Metalsmithing ${ }^{1}$ |


| ART 209 | Intermediate Studio Metalsmithing ${ }^{1}$ | 0-6 |
| :---: | :---: | :---: |
| ART 309 | Advanced Studio Metalsmithing ${ }^{1}$ | 0-9 |
| ART 409 | Senior Studio Metalsmithing ${ }^{1}$ | 0-6 |
| Metalsmithing 1st Concentration Required - Capstone Course |  |  |
| ART 429 | Senior Project Metalsmithing ${ }^{1}$ | 3 |
| Additional Studio Requirements |  |  |
| 100 Level Electives |  |  |
| Select three of the following courses, no class may be repeated: |  | 9 |
| ART 106 | Basic Studio Painting ${ }^{1}$ |  |
| ART 107 | Basic Studio Photography ${ }^{1}$ |  |
| ART 108 | Basic Studio Printmaking ${ }^{1}$ |  |
| ART 109 | Basic Studio Metalsmithing ${ }^{1}$ |  |
| ART 110 | Basic Studio Sculpture ${ }^{1}$ |  |
| ART 111 | Basic Studio Fiber Art ${ }^{1}$ |  |
| ART 112 | Basic Studio Ceramics ${ }^{1}$ |  |
| ART 113 | Basic Studio Graphic Design ${ }^{1}$ |  |
| 200 Level Electives |  |  |
| Select four of the following courses, you may take any class twice: |  | 12 |
| ART 205 | Intermediate Studio Drawing ${ }^{1}$ |  |
| ART 206 | Intermediate Studio Painting ${ }^{1}$ |  |
| ART 207 | Intermediate Studio Photography ${ }^{1}$ |  |
| ART 208 | Intermediate Studio Printmaking ${ }^{1}$ |  |
| ART 209 | Intermediate Studio Metalsmithing ${ }^{1}$ |  |
| ART 210 | Intermediate Studio Sculpture ${ }^{1}$ |  |
| ART 211 | Intermediate Studio Fiber Art ${ }^{1}$ |  |
| ART 212 | Intermediate Studio Ceramics ${ }^{1}$ |  |
| ART 213 | Intermediate Studio Graphic Design ${ }^{1}$ |  |
| ART 214 | Intermediate Studio Digital Media ${ }^{1}$ |  |
| 300 Level Electives |  |  |
| Select four of the following courses, you may take any class up to three times: |  | 12 |
| ART 305 | Advanced Studio Drawing ${ }^{1}$ |  |
| ART 306 | Advanced Studio Painting ${ }^{1}$ |  |
| ART 307 | Advanced Studio Photography ${ }^{1}$ |  |
| ART 308 | Advanced Studio Printmaking ${ }^{1}$ |  |
| ART 309 | Advanced Studio Metalsmithing ${ }^{1}$ |  |
| ART 310 | Advanced Studio Sculpture ${ }^{1}$ |  |
| ART 311 | Advanced Studio Fiber Art ${ }^{1}$ |  |
| ART 312 | Advanced Studio Ceramics ${ }^{1}$ |  |
| ART 313 | Advanced Studio Graphic Design ${ }^{1}$ |  |
| ART 314 | Advanced Studio Digital Media ${ }^{1}$ |  |
| 400 Level Electives |  |  |
| Select three of the following courses, you may take any class up to two times: |  | 9 |
| ART 405 | Senior Studio Drawing ${ }^{1}$ |  |
| ART 406 | Senior Studio Painting ${ }^{1}$ |  |
| ART 407 | Senior Studio Photography ${ }^{1}$ |  |
| ART 408 | Senior Studio Printmaking ${ }^{1}$ |  |
| ART 409 | Senior Studio Metalsmithing ${ }^{1}$ |  |
| ART 410 | Senior Studio Sculpture ${ }^{1}$ |  |
| ART 411 | Senior Studio Fiber Art ${ }^{1}$ |  |
| ART 412 | Senior Studio Ceramics ${ }^{1}$ |  |


| ART 413 | Senior Studio Graphic Design ${ }^{1}$ |  |
| :---: | ---: | ---: |
| ART 414 | Senior Studio Digital Media ${ }^{1}$ |  |
| Art Electives |  | 9 |
| Select from 300-400 level courses ${ }^{1}$ | $\mathbf{7 8}$ |  |
| Total Hours |  |  |

1 Course counts for $50 \%$ of Major requirements and Major GPA.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Student leadership development
5. Service opportunities (e.g., Empty Bowls program)
6. Career education and development
7. Internships
8. Student exhibitions
9. Field Experiences

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
ART - BFA (5305)
Concentration in Metalsmithing (METL)
This program is effective as of Fall 2020.
Revised 03.09.2021
UCC 12.3.2019

## Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall | University Seminar ${ }^{1}$ | 3 |
| SUBJ 139 | Critical Writing | 3 |
| ENGL 102 | 2-D Design | 3 |
| ART 100 | Basic Studio Drawing | 3 |
| ART 105 | Overview of Western Art | 3 |
| ART 225 | Hours | $\mathbf{1 5}$ |


| Spring |  |  |
| :---: | :---: | :---: |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| ART 101 | 3-D Design | 3 |
| ART 1XX | Basic Studio (Concentration) | 3 |
| ART 1XX | Basic Studio | 3 |
|  | Hours | 15 |
| Second Year |  |  |
| Fall |  |  |
| POLS 235 | Civil Discourse and Democracy | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
| ART 226 | Overview of World Art | 3 |
| ART 1XX | Basic Studio | 3 |
| ART 2XX | Intermediate Studio | 3 |
| Declare a Thematic Thread ${ }^{1}$ |  |  |
|  | Hours | 15 |
| Spring |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Social Science Inquiry (p. 1378) |  | 3 |
| ART 2XX | Intermediate Studio | 3 |
| ART 2XX | Intermediate Studio | 3 |
| ART 2XX | Intermediate Studio (Concentration) | 3 |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| SCI 101 | Science of Life | 3 |
| ART 30X | Art History | 3 |
| ART 3XX | Advanced Studio | 3 |
| ART 3XX | Advanced Studio | 3 |
| ART 30X or 40X ART Elective |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| ART 3XX | Art History | 3 |
| ART 3XX | Advanced Studio | 3 |
| ART 3XX | Advanced Studio (Concentration) | 3 |
| ART 300 | Art Seminar | 3 |
|  | Hours | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| ART 4XX | Senior Studio | 3 |
| ART 4XX | Senior Studio (Concentration) | 3 |
| ART 30X or 40X ART Elective |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| ART 30X or 40X Art Elective |  | 3 |
| ART 4 xX | Senior Studio | 3 |
| ART 4 xX | Senior Project (Concentration) | 3 |


| Elective | 3 |
| :--- | ---: | ---: |
| Hours | 15 |
|  | 120 |
| Total Hours** |  |
| Work with your Academic Adviser to declare a Thematic |  |
| Thread by the end of your fall semester in your second |  |
| year. Click here (https://forms.office.com/Pages/ |  |
| ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7Wtmwv- |  |
| VJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UldNTi4u)to |  |
| declare a thread. |  |
|  |  |
| ** This document is meant to serve as a guide. Some planners may show |  |
| more than 120 credits because faculty have created flexibility in choosing |  |
| courses. However, only 120 credits are required to obtain a degree. Please |  |
| consult with your academic adviser and refer to your curriculum guide prior to |  |
| registering for courses. This plan should be reviewed, and verified, by you and |  |
| your academic adviser at least once each academic year. |  |

ART - BFA (5305)
Concentration in Metalsmithing (METL)
Revised: 01.28.2021

## Art, Bachelor of Fine Arts (BFA) Concentration in Painting Program Learning Outcomes

- Critical Thinking: Art majors will locate, analyze and synthesize art historical information and context within their own work.
- Degree Program Writing Competency: Students will be able to effectively communicate in writing for purposes of the discipline.
- Direction: Art majors develop a personal direction through their choice of medium, idea and/or style. Students will demonstrate intellectual and artistic curiosity while committing to improvement.
- Professional Proficiency: Art majors will perceive, discuss and demonstrate professional proficiency upon graduation by applying their knowledge and skills of fine art.
- Technique: Art majors will demonstrate technical aptitude. The department assesses the technical quality of student production. Each medium varies with its technical demands.


## Related Links

Art - Painting, BFA Program Page (https://www.sru.edu/academics/ majors-and-minors/art-bfa-painting/)

Art Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/art/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major/Concentration Requirements | 78 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Science Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Science Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |
| Thematic Thread |  |  |
| Select 12 Credits (p.1378) ${ }^{2}$ |  | 12 |
| Total Hours |  | 42 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 from at least 3 Categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | :---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required | minimum SAT or ACT math score OR |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | $\mathbf{0 - 3}$ |

## Computer Competency

| Code | Title | Hours |
| :--- | :--- | ---: |
| Demonstrate "computer competency" by one of the following: | $0-3$ |  |
| Pass Computer Competency Exam OR |  |  |

Total Hours 0-3

## Major Requirements

- 39 major credits must be taken at SRU or PASSHE
- 39 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| ART 100 | 2-D Design ${ }^{1}$ | 3 |
| ART 101 | 3-D Design ${ }^{1}$ | 3 |
| ART 105 | Basic Studio Drawing ${ }^{1}$ | 3 |
| ART 225 | Overview of Western Art ${ }^{1}$ | 3 |
| ART 226 | Overview of World Art ${ }^{1}$ | 3 |
| ART 300 | Art Seminar ${ }^{1}$ | 3 |

## Art History Electives

Select two of the following:

| ART 325 | North American Art History ${ }^{1}$ |
| :--- | :--- |
| ART 335 | The Renaissance Tradition ${ }^{1}$ |
| ART 345 | ${\text { Foundations of Modern Art }{ }^{1}}^{1}$ |
| ART 355 | Early Modern Art ${ }^{1}$ |
| ART 365 | ${\text { Art Since } 19455^{1}}^{\text {ART 420 }}$ |
| Art History Seminar ${ }^{1}$ |  |

## Painting Concentration ( 15 Credits)

Concentration courses count towards BFA Studio requirements. (200-400 level courses are repeatable - see below for course details).
Select 12 credits from the following:
ART 106 Basic Studio Painting ${ }^{1}$ 0-3
ART 206 Intermediate Studio Painting ${ }^{1}$ 0-6
ART 306 Advanced Studio Painting ${ }^{1} \quad 0-9$
ART 406 Senior Studio Painting ${ }^{1}$ 0-6
Painting 1st Concentration Required - Capstone Course
ART $426 \quad$ Senior Project Painting ${ }^{1}$ 3

Additional Studio Requirements
100 Level Electives
Select three of the following courses, no class may be repeated: 9

| ART 106 | Basic Studio Painting $^{1}$ |
| :--- | :--- |
| ART 107 | Basic Studio Photography $^{1}$ |
| ART 108 | Basic Studio Printmaking $^{1}$ |
| ART 109 | Basic Studio Metalsmithing $^{1}$ |
| ART 110 | Basic Studio Sculpture $^{1}$ |
| ART 111 | Basic Studio Fiber Art $^{1}$ |


| ART 112 | Basic Studio Ceramics ${ }^{1}$ |  |
| :---: | :---: | :---: |
| ART 113 | Basic Studio Graphic Design ${ }^{1}$ |  |
| 200 Level Electives |  |  |
| Select four of the follo twice: | wing courses, you may take any class | 12 |
| ART 205 | Intermediate Studio Drawing ${ }^{1}$ |  |
| ART 206 | Intermediate Studio Painting ${ }^{1}$ |  |
| ART 207 | Intermediate Studio Photography ${ }^{1}$ |  |
| ART 208 | Intermediate Studio Printmaking ${ }^{1}$ |  |
| ART 209 | Intermediate Studio Metalsmithing ${ }^{1}$ |  |
| ART 210 | Intermediate Studio Sculpture ${ }^{1}$ |  |
| ART 211 | Intermediate Studio Fiber Art ${ }^{1}$ |  |
| ART 212 | Intermediate Studio Ceramics ${ }^{1}$ |  |
| ART 213 | Intermediate Studio Graphic Design ${ }^{1}$ |  |
| ART 214 | Intermediate Studio Digital Media ${ }^{1}$ |  |
| 300 Level Electives |  |  |
| Select four of the follo three times: | owing courses, you may take any class up to | 12 |
| ART 305 | Advanced Studio Drawing ${ }^{1}$ |  |
| ART 306 | Advanced Studio Painting ${ }^{1}$ |  |
| ART 307 | Advanced Studio Photography ${ }^{1}$ |  |
| ART 308 | Advanced Studio Printmaking ${ }^{1}$ |  |
| ART 309 | Advanced Studio Metalsmithing ${ }^{1}$ |  |
| ART 310 | Advanced Studio Sculpture ${ }^{1}$ |  |
| ART 311 | Advanced Studio Fiber Art ${ }^{1}$ |  |
| ART 312 | Advanced Studio Ceramics ${ }^{1}$ |  |
| ART 313 | Advanced Studio Graphic Design ${ }^{1}$ |  |
| ART 314 | Advanced Studio Digital Media ${ }^{1}$ |  |
| 400 Level Electives |  |  |

Select three of the following courses, you may take any class up 9
to two times:

| ART 405 | Senior Studio Drawing ${ }^{1}$ |  |
| :---: | :---: | :---: |
| ART 406 | Senior Studio Painting ${ }^{1}$ |  |
| ART 407 | Senior Studio Photography ${ }^{1}$ |  |
| ART 408 | Senior Studio Printmaking ${ }^{1}$ |  |
| ART 409 | Senior Studio Metalsmithing ${ }^{1}$ |  |
| ART 410 | Senior Studio Sculpture ${ }^{1}$ |  |
| ART 411 | Senior Studio Fiber Art ${ }^{1}$ |  |
| ART 412 | Senior Studio Ceramics ${ }^{1}$ |  |
| ART 413 | Senior Studio Graphic Design ${ }^{1}$ |  |
| ART 414 | Senior Studio Digital Media ${ }^{1}$ |  |
| Art Electives |  |  |
| Select from 300-400 level courses ${ }^{1}$ |  | 9 |
| Total Hours |  | 78 |

1 Course counts for 50\% of Major requirements and Major GPA.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student
success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Student leadership development
5. Service opportunities (e.g., Empty Bowls program)
6. Career education and development
7. Internships
8. Student exhibitions
9. Field Experiences

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
ART - BFA (5305)
Concentration in Painting (PNTG)
This program is effective as of Fall 2020.
Revised 03.09.2021
UCC 12.3.2019

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ART 100 | 2-D Design | 3 |
| ART 105 | Basic Studio Drawing | 3 |
| ART 225 | Overview of Western Art | 3 |
|  | Hours | 15 |
| Spring |  |  |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| ART 101 | 3-D Design | 3 |
| ART 1XX | Basic Studio (Concentration) | 3 |
| ART 1XX | Basic Studio | 3 |
|  | Hours | 15 |
| Second Year |  |  |
| Fall |  |  |
| POLS 235 | Civil Discourse and Democracy | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
| ART 226 | Overview of World Art | 3 |
| ART 1XX | Basic Studio | 3 |
| ART 2XX | Intermediate Studio | 3 |


| Declare a Thematic Thread ${ }^{1}$ |  |  |
| :---: | :---: | :---: |
|  | Hours | 15 |
| Spring |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Social Science Inquiry (p. 1378) |  | 3 |
| ART 2XX | Intermediate Studio | 3 |
| ART 2XX | Intermediate Studio | 3 |
| ART 2XX | Intermediate Studio (Concentration) | 3 |
|  | Hours | 15 |


| Third Year |  |  |
| :--- | :--- | ---: |
| Fall |  |  |
| SCI 101 | Science of Life | 3 |
| ART 30X | Art History | 3 |
| ART 3XX | Advanced Studio | 3 |
| ART 3XX | Advanced Studio | 3 |
| ART 30X or 40X ART Elective | 3 |  |
|  | Hours | $\mathbf{1 5}$ |


| Spring |  |  |
| :--- | :--- | ---: |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| ART 3XX | Art History | 3 |
| ART 3XX | Advanced Studio | 3 |
| ART 3XX | Advanced Studio (Concentration) | 3 |
| ART 300 | Art Seminar | 3 |
|  | Hours | $\mathbf{1 5}$ |

Fourth Year
Fall

| Thematic Thread Requirement (p. 1378) | 3 |  |
| :--- | ---: | ---: |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| ART 4XX | Senior Studio | 3 |
| ART 4XX | Senior Studio (Concentration) | 3 |
| ART 30X or 40X ART Elective | 3 |  |
| Hours |  |  |
| Spring | $\mathbf{1 5}$ |  |
| Thematic Thread Requirement (p. 1378) |  |  |
| ART 30X or 40X Art Elective | 3 |  |
| ART 4xX | Senior Studio | 3 |
| ART 4xX | Senior Project (Concentration) | 3 |
| Elective |  | 3 |
|  | Hours | 3 |
|  | Total Hours** | $\mathbf{1 5}$ |

1 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/ ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UIdNTi4u)to declare a thread.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

ART - BFA (5305)
Concentration in Painting (PNTG)
Revised: 01.28.2021

## Art, Bachelor of Fine Arts (BFA) Concentration in Photography

## Program Learning Outcomes

- Critical Thinking: Art majors will locate, analyze and synthesize art historical information and context within their own work.
- Degree Program Writing Competency: Students will be able to effectively communicate in writing for purposes of the discipline.
- Direction: Art majors develop a personal direction through their choice of medium, idea and/or style. Students will demonstrate intellectual and artistic curiosity while committing to improvement.
- Professional Proficiency: Art majors will perceive, discuss and demonstrate professional proficiency upon graduation by applying their knowledge and skills of fine art.
- Technique: Art majors will demonstrate technical aptitude. The department assesses the technical quality of student production. Each medium varies with its technical demands.


## Related Links

Art - Photography, BFA Program Page (https://www.sru.edu/academics/ majors-and-minors/art-bfa-photography/)

Art Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/art/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Code Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major/Concentration Requirements | 78 |
|  |  |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: | 3 |  |


| PHIL 110 Ethics and Civil Discourse |  |
| :---: | :---: |
| POLS 235 Civil Discourse and Democracy |  |
| Subtotal | 15 |
| Integrated Inquiry |  |
| Creative and Aesthetic Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Humanities Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Social Science Inquiry |  |
| Select 12 Credits (p. 1378) | 3 |
| Natural Science Inquiry |  |
| SCI 101 Science of Life | 3 |
| Physical Science Inquiry |  |
| SCI 102 Understanding the Physical World | 3 |
| Subtotal | 15 |
| Thematic Thread |  |
| Select 12 Credits (p.1378) ${ }^{2}$ | 12 |
| Total Hours | 42 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2
from at least 3 Categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |

## Total Hours

## Computer Competency

| Code | Title | Hours |
| :---: | :---: | :---: |
| Demonstrate "computer competency" by one of the following: |  | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one institution: | llowing at SRU or another post-secondary |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major Requirements

- 39 major credits must be taken at SRU or PASSHE
- 39 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  |  |
| ART 100 | 2-D Design ${ }^{1}$ | 3 |


| ART 101 | 3-D Design ${ }^{1}$ | 3 |
| :--- | :--- | :--- |
| ART $105{ }^{10}$ | 3 |  |
| ART 225 | Basic Studio Drawing $^{1}$ | 3 |
| ART 226 | Overview of Western Art $^{1}$ | 3 |
| ART 300 | Overview of World Art $^{1}$ | 3 |

## Art History Electives

Select two of the following:

| ART 325 | North American Art History ${ }^{1}$ |
| :--- | :--- |
| ART 335 | The Renaissance Tradition $^{1}$ |
| ART 345 | Foundations of Modern Art ${ }^{1}$ |
| ART 355 | Early Modern Art ${ }^{1}$ |
| ART 365 | Art Since $1945^{1}$ |
| ART 420 | Art History Seminar $^{1}$ |

## Photography Concentration (15 Credits)

Concentration courses count towards BFA Studio requirements.
(200-400 level courses are repeatable - see below for course details).
Select 12 credits from the following:
ART 107 Basic Studio Photography ${ }^{1}$ 0-3
ART 207 Intermediate Studio Photography ${ }^{1}$ 0-6

ART 307 Advanced Studio Photography ${ }^{1}$ 0-9
ART 407 Senior Studio Photography ${ }^{1}$ 0-6
Photography 1st Concentration Required - Capstone Course
ART 427 Senior Project Photography ${ }^{1} 3$

Additional Studio Requirements
100 Level Electives
Select three of the following courses, no class may be repeated: 9

| ART 106 | Basic Studio Painting ${ }^{1}$ |
| :---: | :---: |
| ART 107 | Basic Studio Photography ${ }^{1}$ |
| ART 108 | Basic Studio Printmaking ${ }^{1}$ |
| ART 109 | Basic Studio Metalsmithing ${ }^{1}$ |
| ART 110 | Basic Studio Sculpture ${ }^{1}$ |
| ART 111 | Basic Studio Fiber Art ${ }^{1}$ |
| ART 112 | Basic Studio Ceramics ${ }^{1}$ |
| ART 113 | Basic Studio Graphic Design ${ }^{1}$ |
| 0 Level Electives |  |

Select four of the following courses, you may take any class 12
twice:

| ART 205 | Intermediate Studio Drawing ${ }^{1}$ |
| :---: | :---: |
| ART 206 | Intermediate Studio Painting ${ }^{1}$ |
| ART 207 | Intermediate Studio Photography ${ }^{1}$ |
| ART 208 | Intermediate Studio Printmaking ${ }^{1}$ |
| ART 209 | Intermediate Studio Metalsmithing ${ }^{1}$ |
| ART 210 | Intermediate Studio Sculpture ${ }^{1}$ |
| ART 211 | Intermediate Studio Fiber Art ${ }^{1}$ |
| ART 212 | Intermediate Studio Ceramics ${ }^{1}$ |
| ART 213 | Intermediate Studio Graphic Design ${ }^{1}$ |
| ART 214 | Intermediate Studio Digital Media ${ }^{1}$ |
| 300 Level Electives |  |
| Select four | wing courses, you may take any class up to |

three times:

| ART 305 | Advanced Studio Drawing ${ }^{1}$ |
| :--- | :--- |
| ART 306 | Advanced Studio Painting ${ }^{1}$ |


| ART 307 | Advanced Studio Photography ${ }^{1}$ |  |
| :---: | :---: | :---: |
| ART 308 | Advanced Studio Printmaking ${ }^{1}$ |  |
| ART 309 | Advanced Studio Metalsmithing ${ }^{1}$ |  |
| ART 310 | Advanced Studio Sculpture ${ }^{1}$ |  |
| ART 311 | Advanced Studio Fiber Art ${ }^{1}$ |  |
| ART 312 | Advanced Studio Ceramics ${ }^{1}$ |  |
| ART 313 | Advanced Studio Graphic Design ${ }^{1}$ |  |
| ART 314 | Advanced Studio Digital Media ${ }^{1}$ |  |
| 400 Level El |  |  |
| Select three to two time | lowing courses, you may take any class up | 9 |
| ART 405 | Senior Studio Drawing ${ }^{1}$ |  |
| ART 406 | Senior Studio Painting ${ }^{1}$ |  |
| ART 407 | Senior Studio Photography ${ }^{1}$ |  |
| ART 408 | Senior Studio Printmaking ${ }^{1}$ |  |
| ART 409 | Senior Studio Metalsmithing ${ }^{1}$ |  |
| ART 410 | Senior Studio Sculpture ${ }^{1}$ |  |
| ART 411 | Senior Studio Fiber Art ${ }^{1}$ |  |
| ART 412 | Senior Studio Ceramics ${ }^{1}$ |  |
| ART 413 | Senior Studio Graphic Design ${ }^{1}$ |  |
| ART 414 | Senior Studio Digital Media ${ }^{1}$ |  |
| Art Electives |  |  |
| Select from 300-400 level courses ${ }^{1}$ |  | 9 |
| Total Hours |  | 78 |

1 Course counts for $50 \%$ of Major requirements and Major GPA.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Student leadership development
5. Service opportunities (e.g., Empty Bowls program)
6. Career education and development
7. Internships
8. Student exhibitions
9. Field Experiences

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information
on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
ART - BFA (5305)
Concentration in Photography (PHOT)
This program is effective as of Fall 2020.
Revised 03.09.2021
UCC 12.3.2019

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ART 100 | 2-D Design | 3 |
| ART 105 | Basic Studio Drawing | 3 |
| ART 225 | Overview of Western Art | 3 |
|  | Hours | 15 |
| Spring |  |  |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| ART 101 | 3-D Design | 3 |
| ART 1XX | Basic Studio (Concentration) | 3 |
| ART 1XX | Basic Studio | 3 |
|  | Hours | 15 |
| Second Year |  |  |
|  |  |  |
| POLS 235 | Civil Discourse and Democracy | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
| ART 226 | Overview of World Art | 3 |
| ART 1XX | Basic Studio | 3 |
| ART 2XX | Intermediate Studio | 3 |
| Declare a Thematic Thread ${ }^{1}$ |  |  |
|  | Hours | 15 |
| Spring |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Social Science Inquiry (p. 1378) |  |  |
| ART 2XX | Intermediate Studio | 3 |
| ART 2XX | Intermediate Studio | 3 |
| ART 2XX | Intermediate Studio (Concentration) | 3 |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| SCI 101 | Science of Life | 3 |
| ART 30X | Art History | 3 |
| ART 3XX | Advanced Studio | 3 |
| ART 3XX | Advanced Studio | 3 |
| ART 30X or 40X ART Elective |  | 3 |
|  | Hours | 15 |

## Spring

Thematic Thread Requirement (p. 1378)

| ART 3XX | Art History | 3 |
| :--- | :--- | ---: |
| ART 3XX | Advanced Studio | 3 |
| ART 3XX | Advanced Studio (Concentration) | 3 |
| ART 300 | Art Seminar | 3 |
|  | Hours | $\mathbf{1 5}$ |

## Fourth Year

Fall
Thematic Thread Requirement (p. 1378) 3
Thematic Thread Requirement (p. 1378) 3

| ART 4XX | Senior Studio | 3 |
| :--- | :--- | :--- |
| ART 4XX | Senior Studio (Concentration) | 3 |

ART 30X or 40X ART Elective 3

|  | Hours | $\mathbf{1 5}$ |
| :--- | :--- | ---: |
| Spring |  |  |
| Thematic Thread |  |  |
| ART 30X or 40X |  |  |
| ART $4 \times$ Electiven (p. 1378) | Senior Studio | 3 |
| ART 4xX | Senior Project (Concentration) | 3 |
| Elective |  | 3 |
|  | Hours | 3 |
|  | Total Hours** | $\mathbf{1 5}$ |

1 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/ ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UldNTi4u)to declare a thread.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

ART - BFA (5305)
Concentration in Photography (PHOT)
Revised: 01.28.2021

## Art, Bachelor of Fine Arts (BFA) Concentration in Printmaking

## Program Learning Outcomes

- Critical Thinking: Art majors will locate, analyze and synthesize art historical information and context within their own work.
- Degree Program Writing Competency: Students will be able to effectively communicate in writing for purposes of the discipline.
- Direction: Art majors develop a personal direction through their choice of medium, idea and/or style. Students will demonstrate intellectual and artistic curiosity while committing to improvement.
- Professional Proficiency: Art majors will perceive, discuss and demonstrate professional proficiency upon graduation by applying their knowledge and skills of fine art.
- Technique: Art majors will demonstrate technical aptitude. The department assesses the technical quality of student production. Each medium varies with its technical demands.


## Related Links

Art - Printmaking, BFA Program Page (https://www.sru.edu/academics/ majors-and-minors/art-bfa-printmaking/)

Art Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/art/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

Code Title Hours
Rock Studies Requirements 42
Other Basic Requirements 0-3
Computer Competency 0-3
Major/Concentration Requirements 78

* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p.1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p.1378) |  | 3 |
| Natural Science Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Science Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |
| Thematic Thread |  |  |


| Select 12 Credits $(\mathrm{p} .1378)^{2}$ | 12 |
| :--- | :--- |
| Total Hours | 42 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 from at least 3 Categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major Requirements

- 39 major credits must be taken at SRU or PASSHE
- 39 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| ART 100 | 2-D Design ${ }^{1}$ | 3 |
| ART 101 | 3-D Design ${ }^{1}$ | 3 |
| ART 105 | Basic Studio Drawing ${ }^{1}$ | 3 |
| ART 225 | Overview of Western Art ${ }^{1}$ | 3 |
| ART 226 | Overview of World Art ${ }^{1}$ | 3 |
| ART 300 | Art Seminar ${ }^{1}$ | 3 |

Art History Electives
Select two of the following: 6

| ART 325 | North American Art History ${ }^{1}$ |
| :--- | :--- |
| ART 335 | The Renaissance Tradition ${ }^{1}$ |
| ART 345 | Foundations of Modern Art ${ }^{1}$ |
| ART 355 | Early Modern Art ${ }^{1}$ |
| ART 365 | Art Since 1945 ${ }^{1}$ |
| ART 420 | Art History Seminar ${ }^{1}$ |

Printmaking Concentration ( 15 Credits)

Concentration courses count towards BFA Studio requirements. (200-400 level courses are repeatable - see below for course details).
Select 12 credits from the following:

| ART 108 | Basic Studio Printmaking ${ }^{1}$ | 0-3 |
| :---: | :---: | :---: |
| ART 208 | Intermediate Studio Printmaking ${ }^{1}$ | 0-6 |
| ART 308 | Advanced Studio Printmaking ${ }^{1}$ | 0-9 |
| ART 408 | Senior Studio Printmaking ${ }^{1}$ | 0-6 |
| Printmaking 1st Concentration Required - Capstone Course |  |  |
| ART 428 | Senior Project Printmaking | 3 |

Additional Studio Requirements
100 Level Electives
Select three of the following courses, no class may be repeated: 9

| ART 106 | Basic Studio Painting ${ }^{1}$ |
| :---: | :---: |
| ART 107 | Basic Studio Photography ${ }^{1}$ |
| ART 108 | Basic Studio Printmaking ${ }^{1}$ |
| ART 109 | Basic Studio Metalsmithing ${ }^{1}$ |
| ART 110 | Basic Studio Sculpture ${ }^{1}$ |
| ART 111 | Basic Studio Fiber Art ${ }^{1}$ |
| ART 112 | Basic Studio Ceramics ${ }^{1}$ |
| ART 113 | Basic Studio Graphic Design ${ }^{1}$ |
| 00 Level Electives |  |
| ect four | wing courses, you may take any class |

Select four of the following courses, you may take any class
twice:

| ART 205 | Intermediate Studio Drawing ${ }^{1}$ |
| :---: | :---: |
| ART 206 | Intermediate Studio Painting ${ }^{1}$ |
| ART 207 | Intermediate Studio Photography ${ }^{1}$ |
| ART 208 | Intermediate Studio Printmaking ${ }^{1}$ |
| ART 209 | Intermediate Studio Metalsmithing ${ }^{1}$ |
| ART 210 | Intermediate Studio Sculpture ${ }^{1}$ |
| ART 211 | Intermediate Studio Fiber Art ${ }^{1}$ |
| ART 212 | Intermediate Studio Ceramics ${ }^{1}$ |
| ART 213 | Intermediate Studio Graphic Design ${ }^{1}$ |
| ART 214 | Intermediate Studio Digital Media ${ }^{1}$ |
| 300 Level Electives |  |
| Select four three times | owing courses, you may take any class up to | three times:


| ART 305 | Advanced Studio Drawing ${ }^{1}$ |
| :---: | :---: |
| ART 306 | Advanced Studio Painting ${ }^{1}$ |
| ART 307 | Advanced Studio Photography ${ }^{1}$ |
| ART 308 | Advanced Studio Printmaking ${ }^{1}$ |
| ART 309 | Advanced Studio Metalsmithing ${ }^{1}$ |
| ART 310 | Advanced Studio Sculpture ${ }^{1}$ |
| ART 311 | Advanced Studio Fiber Art ${ }^{1}$ |
| ART 312 | Advanced Studio Ceramics ${ }^{1}$ |
| ART 313 | Advanced Studio Graphic Design ${ }^{1}$ |
| ART 314 | Advanced Studio Digital Media ${ }^{1}$ |
| 400 Level Electives |  |
| Select three | owing courses, you may take any class up |

to two times:

| ART 405 | Senior Studio Drawing ${ }^{1}$ |
| :--- | :--- |
| ART 406 | Senior Studio Painting ${ }^{1}$ |
| ART 407 | Senior Studio Photography ${ }^{1}$ |


| ART 408 | Senior Studio Printmaking ${ }^{1}$ |  |
| :---: | :---: | :---: |
| ART 409 | Senior Studio Metalsmithing ${ }^{1}$ |  |
| ART 410 | Senior Studio Sculpture ${ }^{1}$ |  |
| ART 411 | Senior Studio Fiber Art ${ }^{1}$ |  |
| ART 412 | Senior Studio Ceramics ${ }^{1}$ |  |
| ART 413 | Senior Studio Graphic Design ${ }^{1}$ |  |
| ART 414 | Senior Studio Digital Media ${ }^{1}$ |  |
| Art Electives |  |  |
| Select from 300-400 level courses ${ }^{1}$ |  | 9 |
| Total Hours |  | 78 |

1 Course counts for $50 \%$ of Major requirements and Major GPA.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Student leadership development
5. Service opportunities (e.g., Empty Bowls program)
6. Career education and development
7. Internships
8. Student exhibitions
9. Field Experiences

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
ART - BFA (5305)
Concentration in Printmaking (PRNT)
This program is effective as of Fall 2020.
Revised 03.09.2021
UCC 12.3.2019

## Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall | University Seminar ${ }^{1}$ |  |
| SUBJ 139 | Critical Writing | 3 |
| ENGL 102 |  | 3 |


| ART 100 | 2-D Design | 3 |
| :---: | :---: | :---: |
| ART 105 | Basic Studio Drawing | 3 |
| ART 225 | Overview of Western Art | 3 |
|  | Hours | 15 |
| Spring |  |  |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| ART 101 | 3-D Design | 3 |
| ART 1X X | Basic Studio (Concentration) | 3 |
| ART 1XX | Basic Studio | 3 |
|  | Hours | 15 |
| Second Year |  |  |
| Fall |  |  |
| POLS 235 | Civil Discourse and Democracy | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
| ART 226 | Overview of World Art | 3 |
| ART 1XX | Basic Studio | 3 |
| ART 2XX | Intermediate Studio | 3 |
| Declare a Thematic Thread ${ }^{1}$ |  |  |
|  | Hours | 15 |
| Spring |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Social Science Inquiry (p. 1378) |  | 3 |
| ART 2XX | Intermediate Studio | 3 |
| ART 2XX | Intermediate Studio | 3 |
| ART 2XX | Intermediate Studio (Concentration) | 3 |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| SCI 101 | Science of Life | 3 |
| ART 30X | Art History | 3 |
| ART 3XX | Advanced Studio | 3 |
| ART 3XX | Advanced Studio | 3 |
| ART 30X or 40X ART Elective |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| ART 3XX | Art History | 3 |
| ART 3XX | Advanced Studio | 3 |
| ART 3XX | Advanced Studio (Concentration) | 3 |
| ART 300 | Art Seminar | 3 |
|  | Hours | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| ART 4XX | Senior Studio | 3 |
| ART 4XX | Senior Studio (Concentration) | 3 |
| ART 30X or 40X ART Elective |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| Thematic Th | uirement (p. 1378) | 3 |


| ART 30X or 40X Art Elective | 3 |  |
| :--- | :--- | ---: |
| ART $4 x X$ | Senior Studio | 3 |
| ART $4 x X$ | Senior Project (Concentration) | 3 |
| Elective |  | 3 |
|  | Hours | $\mathbf{1 5}$ |
|  | Total Hours** | $\mathbf{1 2 0}$ |

1 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/ ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UldNTi4u)to declare a thread.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

ART - BFA (5305)
Concentration in Printmaking (PRNT)
Revised: 01.28.2021

## Art, Bachelor of Fine Arts (BFA) Concentration in Psychology Program Learning Outcomes

- Critical Thinking: Art majors will locate, analyze and synthesize art historical information and context within their own work.
- Degree Program Writing Competency: Students will be able to effectively communicate in writing for purposes of the discipline.
- Direction: Art majors develop a personal direction through their choice of medium, idea and/or style. Students will demonstrate intellectual and artistic curiosity while committing to improvement.
- Professional Proficiency: Art majors will perceive, discuss and demonstrate professional proficiency upon graduation by applying their knowledge and skills of fine art.
- Technique: Art majors will demonstrate technical aptitude. The department assesses the technical quality of student production. Each medium varies with its technical demands.


## Related Links

Art - Psychology, BFA Program Page (https://www.sru.edu/academics/ majors-and-minors/art-bfa-psychology-(pre-art-therapy)/)

Art Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/art/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

The Art BFA with a Concentration in Psychology gives Bachelor of Fine Arts majors the option to declare a concentration in Psychology. The program will serve as a preparation for Art Therapy Graduate programs.

\section*{Curriculum Guide <br> GPA Requirement <br> Major GPA: 2.00 or higher Overall GPA: 2.00 or higher 2.00 or higher in Psychology <br> Summary* <br> | Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 78 |
| Concentration Requirements | 15 | <br> * All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.}

## Rock Studies Requirements



## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one | following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal A |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |

Total Hours

## Major Requirements

- 39 major credits must be taken at SRU or PASSHE
- 39 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| ART 100 | 2-D Design ${ }^{1}$ | 3 |
| ART 101 | 3-D Design ${ }^{1}$ | 3 |
| ART 105 | Basic Studio Drawing ${ }^{1}$ | 3 |
| ART 225 | Overview of Western Art ${ }^{1}$ | 3 |
| ART 226 | Overview of World Art ${ }^{1}$ | 3 |
| ART 300 | Art Seminar ${ }^{1}$ | 3 |
| Subtotal |  | 18 |
| Art History Electives |  |  |
| Select two of the follow | wing: | 6 |
| ART 325 | North American Art History ${ }^{1}$ |  |
| ART 335 | The Renaissance Tradition ${ }^{1}$ |  |
| ART 345 | Foundations of Modern Art ${ }^{1}$ |  |
| ART 355 | Early Modern Art ${ }^{1}$ |  |
| ART 365 | Art Since $1945{ }^{1}$ |  |
| ART 420 | Art History Seminar ${ }^{1}$ |  |
| Subtotal |  | 6 |
| 100 Level Electives |  |  |
| Select three of the follo | lowing courses, no class may be repeated: | 9 |
| ART 106 | Basic Studio Painting ${ }^{1}$ |  |
| ART 107 | Basic Studio Photography ${ }^{1}$ |  |
| ART 108 | Basic Studio Printmaking ${ }^{1}$ |  |
| ART 109 | Basic Studio Metalsmithing ${ }^{1}$ |  |
| ART 110 | Basic Studio Sculpture ${ }^{1}$ |  |
| ART 111 | Basic Studio Fiber Art ${ }^{1}$ |  |


| ART 112 | Basic Studio Ceramics ${ }^{1}$ |  |
| :---: | :---: | :---: |
| ART 113 | Basic Studio Graphic Design ${ }^{1}$ |  |
| ART 114 | Basic Studio Digital Media ${ }^{1}$ |  |
| Subtotal |  | 9 |
| 200 Level Electives |  |  |
| Select four of the follo twice: | owing courses, you may take any class | 12 |
| ART 205 | Intermediate Studio Drawing ${ }^{1}$ |  |
| ART 206 | Intermediate Studio Painting ${ }^{1}$ |  |
| ART 207 | Intermediate Studio Photography ${ }^{1}$ |  |
| ART 208 | Intermediate Studio Printmaking ${ }^{1}$ |  |
| ART 209 | Intermediate Studio Metalsmithing ${ }^{1}$ |  |
| ART 210 | Intermediate Studio Sculpture ${ }^{1}$ |  |
| ART 211 | Intermediate Studio Fiber Art ${ }^{1}$ |  |
| ART 212 | Intermediate Studio Ceramics ${ }^{1}$ |  |
| ART 213 | Intermediate Studio Graphic Design ${ }^{1}$ |  |
| ART 214 | Intermediate Studio Digital Media ${ }^{1}$ |  |
| Subtotal |  | 12 |

## 300 Level Electives

Select four of the following courses, you may take any class up to 12 three times:

| ART 305 | Advanced Studio Drawing ${ }^{1}$ |
| ---: | :--- |
| ART 306 | Advanced Studio Painting ${ }^{1}$ |
| ART 307 | Advanced Studio Photography ${ }^{1}$ |
| ART 308 | Advanced Studio Printmaking ${ }^{1}$ |
| ART 309 | Advanced Studio Metalsmithing ${ }^{1}$ |
| ART 310 | Advanced Studio Sculpture ${ }^{1}$ |
| ART 311 | Advanced Studio Fiber Art ${ }^{1}$ |
| ART 312 | Advanced Studio Ceramics ${ }^{1}$ |
| ART 313 | Advanced Studio Graphic Design ${ }^{1}$ |
| ART 314 | Advanced Studio Digital Media ${ }^{1}$ |

400 Level Electives
Select three of the following courses, you may take any class up 9 to two times:

| ART 405 | Senior Studio Drawing ${ }^{1}$ |  |
| :---: | :---: | :---: |
| ART 406 | Senior Studio Painting ${ }^{1}$ |  |
| ART 407 | Senior Studio Photography ${ }^{1}$ |  |
| ART 408 | Senior Studio Printmaking ${ }^{1}$ |  |
| ART 409 | Senior Studio Metalsmithing ${ }^{1}$ |  |
| ART 410 | Senior Studio Sculpture ${ }^{1}$ |  |
| ART 411 | Senior Studio Fiber Art ${ }^{1}$ |  |
| ART 412 | Senior Studio Ceramics ${ }^{1}$ |  |
| ART 413 | Senior Studio Graphic Design ${ }^{1}$ |  |
| ART 414 | Senior Studio Digital Media ${ }^{1}$ |  |
| Subtotal |  | 9 |
| SR Project |  |  |
| Select one of the following: |  | 3 |


| ART 425 | Senior Project Drawing ${ }^{1,2}$ |
| :---: | :---: |
| ART 426 | Senior Project Painting ${ }^{1,2}$ |
| ART 427 | Senior Project Photography ${ }^{1,2}$ |
| ART 428 | Senior Project Printmaking ${ }^{1,2}$ |
| ART 429 | Senior Project Metalsmithing ${ }^{1,2}$ |



Course counts for $50 \%$ of Major requirements and Major GPA.
2400 level pre-req or permission of instructor.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Concentration Requirements

Code Title Hours

Psychology Concentration

| PSYC 105 | Introduction to Psychology 1,2 | 3 |
| :---: | :---: | :---: |
| PSYC 244 | Developmental Psychology ${ }^{\text {1,2 }}$ | 3 |
| PSYC 276 | Introduction to Abnormal Psychology 1,2 | 3 |
| PSYC 208 | Personality ${ }^{1,2}$ | 3 |
| Select one of the following: |  | 3 |
| PSYC 205 | Environmental Psychology ${ }^{1,2}$ |  |
| PSYC 233 | Sensation \& Perception ${ }^{1,2}$ |  |
| PSYC 240 | Human Sexual Behavior ${ }^{1,2}$ |  |
| PSYC 300 | Psychology of Women, Gender and Culture 1,2 |  |
| PSYC 315 | Psychology of Sexual and Gender Diversity 1,2 |  |
| PSYC 377 | Social Psychology ${ }^{1,2}$ |  |
| Subtotal |  | 15 |
| Total Hours |  | 15 |

Course counts for 50\% of Major requirements and Major GPA.
2 Grade C or higher required.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

International study programs (short-term, semester)
High-Impact Practice (HIP) designated classes
Student-faculty creative projects
Student leadership development
Service opportunities (e.g., Empty Bowls program)
Career education and development
Internships
8. Student exhibitions
9. Field Experiences

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
ART - BFA (5305)
Concentration in Psychology (PSYC)
This program is effective as of Fall 2020.
Revised 02.2020
UCC 12.3.2019
Recommended Four-Year Plan
$\left.\begin{array}{llr}\text { Course } & \text { Title } & \text { Hours } \\ \text { First Year } & & \\ \text { Fall } & & \\ \text { ART 100 } & \text { 2-D Design } & 3 \\ \text { ART 105 } & \text { Basic Studio Drawing } & 3 \\ \text { ART 225 } & \begin{array}{l}\text { Overview of Western Art (Creative \& } \\ \\ \text { SUBJ 139 }\end{array} & \text { University Seminar * }\end{array}\right] 3$

## Second Year

Fall

| ART 226 | Overview of World Art (Concentration <br> Course ) | 3 |
| :--- | :--- | :--- |
| ART 1XX | Basic Studio | 3 |
| ART 2XX | Intermediate Studio | 3 |
| POLS 235 | Civil Discourse and Democracy | 3 |
| Concentration Course $^{1}$ | 3 |  |
| ${\text { Declare a Thematic } \text { Thread }^{2}}^{2}$ |  |  |


|  | Hours | $\mathbf{1 5}$ |
| :--- | :--- | :--- |
| Spring |  |  |
| ART 3XX | Art History | 3 |
| SCI 101 | Science of Life | 3 |
| ART 2XX | Intermediate Studio | 3 |


| ART 2XX | Intermediate Studio | 3 |
| :---: | :---: | :---: |
| ART 2XX | Intermediate Studio | 3 |
| Concentration Course ${ }^{1}$ |  | 3 |
|  | Hours | 18 |
| Third Year |  |  |
| Fall |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| ART 3XX | Advanced Studio | 3 |
| ART 3XX | Advanced Studio | 3 |
| ART 3XX | ART Elective | 3 |
| Concentration Course ${ }^{1}$ |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 18 |
| Spring |  |  |
| ART 300 | Art Seminar | 3 |
| ART 3XX | Advanced Studio | 3 |
| ART 3XX | Advanced Studio | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
| Concentration Course ${ }^{1}$ |  | 3 |
|  | Hours | 15 |

## Fourth Year

Fall

| ART 4XX | Senior Studio | 3 |
| :--- | :--- | ---: |
| ART 4XX | Senior Studio | 3 |
| ART 3XX or 4XX | ART Elective | 3 |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| Thematic Thread Requirement (p. 1378) |  | $\mathbf{3}$ |
| Hours |  | $\mathbf{1 5}$ |


| Spring |  |  |
| :--- | :--- | ---: |
| ART 3xx | Art History | 3 |
| ART 30X or 40X | Art Elective | 3 |
| ART 4XX | Senior Studio | 3 |
| ART 4XX | Senior Project | 3 |
| Thematic Thread Requirement (p. 1378) | 3 |  |
|  | Hours | $\mathbf{1 5}$ |
|  | Total Hours** | $\mathbf{1 2 9}$ |

1 Concentration Courses (select 4 from the following): PSYC 205, PSYC 208, PSYC 233, PSYC 240, PSYC 244, PSYC 276, PSYC 315, PSYC 377
2
Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/ ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UIdNTi4u)to declare a thread.

* Course offered in multiple subjects; cannot take course in first major subject.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to


## registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year. <br> ART - BFA (5305) <br> Concentration in Psychology (PSYC)

Revised: 01.28.2021

## Art, Bachelor of Fine Arts (BFA) Concentration in Sculpture Program Learning Outcomes

- Critical Thinking: Art majors will locate, analyze and synthesize art historical information and context within their own work.
- Degree Program Writing Competency: Students will be able to effectively communicate in writing for purposes of the discipline.
- Direction: Art majors develop a personal direction through their choice of medium, idea and/or style. Students will demonstrate intellectual and artistic curiosity while committing to improvement.
- Professional Proficiency: Art majors will perceive, discuss and demonstrate professional proficiency upon graduation by applying their knowledge and skills of fine art.
- Technique: Art majors will demonstrate technical aptitude. The department assesses the technical quality of student production. Each medium varies with its technical demands.


## Related Links

Art - Sculpture, BFA Program Page (https://www.sru.edu/academics/ majors-and-minors/art-bfa-concentration-in-sculpture/)

Art Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/art/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major/Concentration Requirements | 78 |
|  |  |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |


| MATH 117 Quantitative Reasoning | 3 |
| :---: | :---: |
| Select one of the following: | 3 |
| COMM 200 Civil Discourse: Theory \& Practice |  |
| PHIL 110 Ethics and Civil Discourse |  |
| POLS 235 Civil Discourse and Democracy |  |
| Subtotal | 15 |
| Integrated Inquiry |  |
| Creative and Aesthetic Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Humanities Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Social Science Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Natural Science Inquiry |  |
| SCI 101 Science of Life | 3 |
| Physical Science Inquiry |  |
| SCI 102 Understanding the Physical World | 3 |
| Subtotal | 15 |
| Thematic Thread |  |
| Select 12 Credits (p. 1378) ${ }^{2}$ | 12 |
| Total Hours | 42 |


| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| ART 100 | 2-D Design ${ }^{1}$ | 3 |
| ART 101 | 3-D Design ${ }^{1}$ | 3 |
| ART 105 | Basic Studio Drawing ${ }^{1}$ | 3 |
| ART 225 | Overview of Western Art ${ }^{1}$ | 3 |
| ART 226 | Overview of World Art ${ }^{1}$ | 3 |
| ART 300 | Art Seminar ${ }^{1}$ | 3 |

## Art History Electives

Select two of the following: 6

| ART 325 | North American Art History ${ }^{1}$ |
| :--- | :--- |
| ART 335 | The Renaissance Tradition ${ }^{1}$ |
| ART 345 | Foundations of Modern Art ${ }^{1}$ |
| ART 355 | Early Modern Art ${ }^{1}$ |
| ART 365 | ${\text { Art Since } 19455^{1}}^{1}$ |
| ART 420 | Art History Seminar $^{1}$ |

## Sculpture Concentration ( 15 Credits)

Concentration courses count towards BFA Studio requirements.
(200-400 level courses are repeatable - see below for course details).
Select 12 credits from the following:

| ART 110 | Basic Studio Sculpture ${ }^{1}$ | 0-3 |
| :---: | :---: | :---: |
| ART 210 | Intermediate Studio Sculpture ${ }^{1}$ | 0-6 |
| ART 310 | Advanced Studio Sculpture ${ }^{1}$ | 0-9 |
| ART 410 | Senior Studio Sculpture ${ }^{1}$ | 0-6 |
| Sculpture 1st Concentration Required - Capstone Course |  |  |
| ART 430 | Senior Project Sculpture ${ }^{1}$ | 3 |

## Additional Studio Requirements

100 Level Electives
Select three of the following courses, no class may be repeated: 9

| ART 106 | Basic Studio Painting $^{1}$ |
| :--- | :--- |
| ART 107 | Basic Studio Photography $^{1}$ |
| ART 108 | Basic Studio Printmaking $^{1}$ |
| ART 109 | Basic Studio Metalsmithing $^{1}$ |
| ART 110 | Basic Studio Sculpture $^{1}$ |
| ART 111 | Basic Studio Fiber Art $^{1}$ |
| ART 112 | Basic Studio Ceramics $^{1}$ |
| ART 113 | Basic Studio Graphic Design $^{1}$ |
| 200 Level Electives |  |
| Select four of the following courses, you may take any class | 12 |

twice:

| ART 205 | Intermediate Studio Drawing ${ }^{1}$ |
| :--- | :--- |
| ART 206 | Intermediate Studio Painting ${ }^{1}$ |
| ART 207 | Intermediate Studio Photography ${ }^{1}$ |
| ART 208 | Intermediate Studio Printmaking ${ }^{1}$ |
| ART 209 | Intermediate Studio Metalsmithing ${ }^{1}$ |
| ART 210 | Intermediate Studio Sculpture ${ }^{1}$ |
| ART 211 | Intermediate Studio Fiber Art ${ }^{1}$ |
| ART 212 | Intermediate Studio Ceramics ${ }^{1}$ |
| ART 213 | Intermediate Studio Graphic Design ${ }^{1}$ |
| ART 214 | Intermediate Studio Digital Media ${ }^{1}$ |
| 300 Level Electives |  |

Select four of the following courses, you may take any class up to three times:

| ART 305 | Advanced Studio Drawing ${ }^{1}$ |  |
| :---: | :---: | :---: |
| ART 306 | Advanced Studio Painting ${ }^{1}$ |  |
| ART 307 | Advanced Studio Photography ${ }^{1}$ |  |
| ART 308 | Advanced Studio Printmaking ${ }^{1}$ |  |
| ART 309 | Advanced Studio Metalsmithing ${ }^{1}$ |  |
| ART 310 | Advanced Studio Sculpture ${ }^{1}$ |  |
| ART 311 | Advanced Studio Fiber Art ${ }^{1}$ |  |
| ART 312 | Advanced Studio Ceramics ${ }^{1}$ |  |
| ART 313 | Advanced Studio Graphic Design ${ }^{1}$ |  |
| ART 314 | Advanced Studio Digital Media ${ }^{1}$ |  |
| 400 Level |  |  |
| Select three to two time | lowing courses, you may take any class up | 9 |
| ART 405 | Senior Studio Drawing ${ }^{1}$ |  |
| ART 406 | Senior Studio Painting ${ }^{1}$ |  |
| ART 407 | Senior Studio Photography ${ }^{1}$ |  |
| ART 408 | Senior Studio Printmaking ${ }^{1}$ |  |
| ART 409 | Senior Studio Metalsmithing ${ }^{1}$ |  |
| ART 410 | Senior Studio Sculpture ${ }^{1}$ |  |
| ART 411 | Senior Studio Fiber Art ${ }^{1}$ |  |
| ART 412 | Senior Studio Ceramics ${ }^{1}$ |  |
| ART 413 | Senior Studio Graphic Design ${ }^{1}$ |  |
| ART 414 | Senior Studio Digital Media ${ }^{1}$ |  |
| Art Electives |  |  |
| Select from 300-400 level courses ${ }^{1}$ |  | 9 |
| Total Hours |  | 78 |

1 Course counts for 50\% of Major requirements and Major GPA.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Student leadership development
5. Service opportunities (e.g., Empty Bowls program)
6. Career education and development
7. Internships
8. Student exhibitions
9. Field Experiences

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum
and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
ART - BFA (5305)
Concentration in Sculpture (SCLP)
This program is effective as of Fall 2020.
Revised 03.09.2021
UCC 12.3.2019

## Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall |  |  |
| SUBJ 139 | University Seminar 1 | 3 |
| ENGL 102 | Critical Writing | 3 |
| ART 100 | 2-D Design | 3 |
| ART 105 | Basic Studio Drawing | 3 |
| ART 225 | Overview of Western Art | 3 |
|  | Hours | $\mathbf{1 5}$ |
| Spring | Critical Reading |  |
| ENGL 104 | Quantitative Reasoning | 3 |
| MATH 117 | 3-D Design | 3 |
| ART 101 | Basic Studio (Concentration) | 3 |
| ART 1X X | Basic Studio | 3 |
| ART 1XX | Hours | 3 |
|  | $\mathbf{1 5}$ |  |

## Second Year

Fall
POLS 235 Civil Discourse and Democracy 3
Humanities Inquiry (p. 1378) 3

| ART 226 | Overview of World Art | 3 |
| :--- | :--- | :--- |
| ART 1XX | Basic Studio | 3 |

ART 2XX Intermediate Studio 3

| Declare a Thematic Thread $^{1}$ |  |
| :---: | :---: |
| Hours | 15 |


| Spring |  |  |
| :--- | :--- | ---: |
| SCI 102 | Understanding the Physical World | 3 |
| Social Science Inquiry (p. 1378) | 3 |  |
| ART 2XX | Intermediate Studio | 3 |
| ART 2XX | Intermediate Studio | 3 |
| ART 2XX | Intermediate Studio (Concentration) | 3 |
|  | Hours | $\mathbf{1 5}$ |

## Third Year

Fall

| SCI 101 | Science of Life | 3 |
| :--- | :--- | :--- |
| ART 30X | Art History | 3 |
| ART 3XX | Advanced Studio | 3 |
| ART 3XX | Advanced Studio | 3 |


| ART 30X or 40X ART Elective | 3 |  |
| :--- | :--- | ---: |
|  | Hours | $\mathbf{1 5}$ |
| Spring |  | 3 |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| ART 3XX | Art History | 3 |
| ART 3XX | Advanced Studio | 3 |
| ART 3XX | Advanced Studio (Concentration) | 3 |
| ART 300 | Art Seminar | $\mathbf{1 5}$ |

## Fourth Year

Fal

| Thematic Thread Requirement (p. 1378) | 3 |  |
| :--- | ---: | ---: |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| ART 4XX $\quad$ Senior Studio | 3 |  |
| ART 4XX | Senior Studio (Concentration) | 3 |
| ART 30X or 40X ART Elective | 3 |  |
| Hours | $\mathbf{1 5}$ |  |


| Spring |  |  |
| :--- | :--- | ---: |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| ART 30X or 40X Art Elective | 3 |  |
| ART 4xX | Senior Studio | 3 |
| ART 4xX | Senior Project (Concentration) | 3 |
| Elective |  | 3 |
|  | Hours | $\mathbf{1 5}$ |
|  | Total Hours** | $\mathbf{1 2 0}$ |

1 Work with your Academic Adviser to declare a Thematic
Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/ ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UIdNTi4u)to declare a thread.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

ART - BFA (5305)
Concentration in Sculpture (SCLP)
Revised: 01.28.2021

## Art, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Art, Minor Program Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/art/programs/)

Art Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/art/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.00 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

| Code <br> Basic 2D Studio Course | Hours |  |
| :--- | :--- | ---: |
| Select one of the following: | 3 |  |
| ART 105 | Basic Studio Drawing |  |
| ART 106 | Basic Studio Painting |  |
| ART 107 | Basic Studio Photography |  |
| ART 108 | Basic Studio Printmaking |  |
| ART 114 | Basic Studio Digital Media |  |

Basic 3D Studio Course
Select one of the following:

| ART 109 | Basic Studio Metalsmithing |
| :--- | :--- |
| ART 110 | Basic Studio Sculpture |
| ART 111 | Basic Studio Fiber Art |
| ART 112 | Basic Studio Ceramics |

## Art History Course

Select one of the following:

| ART 225 | Overview of Western Art |
| :--- | :--- |
| ART 226 | Overview of World Art |
| ART 325 | North American Art History |
| ART 335 | The Renaissance Tradition |
| ART 345 | Foundations of Modern Art |
| ART 355 | Early Modern Art |
| ART 365 | Art Since 1945 |
| ART 420 | Art History Seminar |

## Art Synthesis Courses

Select two of the following:

| ART 205 | Intermediate Studio Drawing |
| :--- | :--- |
| ART 206 | Intermediate Studio Painting |
| ART 207 | Intermediate Studio Photography |
| ART 208 | Intermediate Studio Printmaking |
| ART 209 | Intermediate Studio Metalsmithing |
| ART 210 | Intermediate Studio Sculpture |
| ART 211 | Intermediate Studio Fiber Art |
| ART 212 | Intermediate Studio Ceramics |
| ART 213 | Intermediate Studio Graphic Design |
| ART 214 | Intermediate Studio Digital Media |

Advanced Studio Courses
Select two of the following:

## 6

| ART 305 | Advanced Studio Drawing |
| :--- | :--- |
| ART 306 | Advanced Studio Painting |
| ART 307 | Advanced Studio Photography |
| ART 308 | Advanced Studio Printmaking |


| ART 309 | Advanced Studio Metalsmithing |
| :--- | :--- |
| ART 310 | Advanced Studio Sculpture |
| ART 311 | Advanced Studio Fiber Art |
| ART 312 | Advanced Studio Ceramics |
| ART 313 | Advanced Studio Graphic Design |
| ART 314 | Advanced Studio Digital Media |
| Total Hours | $\mathbf{2 1}$ |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN ART - GENERAL ART TRACK (04A)
This program is effective as of Fall 2006
Revision date: 8-2019

## Art: Design, Certificate

To access Certificate Requirements, please view the Curriculum Guide tab.

Students obtaining a Certificate in Art: Design will develop an understanding of the design process, and will learn how to compose technical, non-technical and expressive information into attractive and visually clear and concise forms. Students from a wide range of degree programs will focus on the presentation of discipline-based subject matter using digital and traditional methods of representation of facts. Artwork will range from an expressive response to subject matter to a creative representation of facts. The skills developed in this program will augment students' communication skills and enhance possible career opportunities.

The Certificate in Art: Design will also be attractive to individuals not currently affiliated with SRU. Design skills will help a candidate organize visual information in any field of study, and will be useful in the pursuit of a wide variety of personal projects and/or career directions.

## Related Links

Art - Design, Certificate Program Page (https://www.sru.edu/academics/ certificates/art-design-certificate/)

Art Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/art/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)


* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
CERTIFICATE IN ART: DESIGN (5DSN)
This program is effective as of Spring 2016.
Revision date: 10-2019

## Art: Digital Media, Certificate

To access Certificate Requirements, please view the Curriculum Guide tab.

Students obtaining a Certificate in Art: Digital Media will have the opportunity to explore a wide range of digitally based or enhanced methods of artistic production. Through the prescribed sequence of courses, students will study historical and contemporary approaches to Digital Art, as well as develop skills and understandings applicable to twodimensional, three-dimensional, time-based and potentially other forms of Digital Art. Students will compile a focused Digital Art portfolio as they develop a personal artistic stance and enact their individual artistic visions.

## Related Links

Art - Digital Media, Certificate Program Page (https://www.sru.edu/ academics/certificates/art-digital-media-certificate/)

Art Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/art/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Certificate GPA: 2.0 or higher
Certificate Requirements
Code Title Hours

## Required Courses

Select twelve credits of the following:

| ART 114 | Basic Studio Digital Media |
| :---: | :--- |
| ART 214 | Intermediate Studio Digital Media <br> (repeatable one time) |
| ART 314 | Advanced Studio Digital Media (repeatable <br> one time) |
| ART 414 | Senior Studio Digital Media (repeatable two <br> times ) |
| ART 434 | Senior Project Digital Media (Capstone <br> course for BFA students, with permission <br> of instructor) |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
CERTIFICATE IN ART: DIGITAL MEDIA (5DGM)
This program is effective as of Spring 2015.
Revision date: 10-2019

## Art: Graphic Design, Certificate

To access Certificate Requirements, please view the Curriculum Guide tab.

The ability to compose technical and non-technical information into an attractive and visually clear and concise form will help in the design and presentation of a wide range of conceptual and/or subjectspecific projects. Candidates will gain an understanding of designrelated concepts and experience with graphic design software in the
communication of ideas. The skills developed in this program, and in the inclusion of projects produced in the program in an application portfolio, will improve a candidate's qualifications and job prospects.

## Related Links

Art - Graphic Design, Certificate Program Page (https://www.sru.edu/ academics/certificates/art-graphic-design-certificate/)

Art Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/art/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Certificate GPA: 2.00 or higher

## Certificate Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| Select one of the following: |  | 3 |
| ART 100 | 2-D Design (permission required for non-art majors) |  |
| ART 213 | Intermediate Studio Graphic Design (repeatable one time) |  |
| ART 114 | Basic Studio Digital Media | 3 |
| COMM 232 | Publication Production | 3 |
| COMM 334 | Publication Production | 3 |
| Elective Courses |  |  |
| Select one | wing: | 3 |


| ART 207 | Intermediate Studio Photography |
| :--- | :--- |
| ART 213 | Intermediate Studio Graphic Design <br> (repeatable one time) |
| ART 214 | Intermediate Studio Digital Media |
| ART 307 | Advanced Studio Photography |
| ART 313 | Advanced Studio Graphic Design |
| ART 314 | Advanced Studio Digital Media |
| ART 407 | Senior Studio Photography |
| ART 413 | Senior Studio Graphic Design |
| ART 414 | Senior Studio Digital Media |
| Total Hours |  |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information
on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
CERTIFICATE IN ART: GRAPHIC DESIGN (5GDS)
This program is effective as of Spring 2016.
Revision date: 5-2019
UCC 3.5.2019

## Art: Photography, Certificate

To access Certificate Requirements, please view the Curriculum Guide tab.

Students obtaining a Certificate in Art: Photography will have the opportunity to explore a wide range of analog and digital approaches to fine art photography. Photographic skills, techniques and concepts will be expanded, honed and potentially utilized with other media as students follow individual artistic directions. Students will develop and maintain a cohesive photographic portfolio suitable for public presentation.

## Related Links

Art - Photography, Certificate Program Page (https://www.sru.edu/ academics/certificates/art-photography-certificate/)

Art Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/art/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Certificate GPA: 2.0 or higher
Certificate Requirements
Code Title Hours

Select twelve credits of the following: 12

| ART 107 | Basic Studio Photography |
| :---: | :--- |
| ART 207 | Intermediate Studio Photography <br> (repeatable one time) |
| ART 307 | Advanced Studio Photography (repeatable <br> one time) |
| ART 407 | Senior Studio Photography (repeatable two <br> times) |
| ART 427 | Senior Project Photography (Capstone <br> course for BFA students, with permission <br> of instructor) |

## Total Hours

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

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categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
CERTIFICATE IN ART: PHOTOGRAPHY (5PHT)
This program is effective as of Spring 2015.
Revision date: 10-2019

## Nonprofit Management in Art, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Non-profit Management in Art, Minor Program Page (https:// www.sru.edu/academics/majors-and-minors/nonprofit-management-in-art-(minor)/)

Art Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/art/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  |  |
| ART 113 | Basic Studio Graphic Design | 3 |
| ART 450 | Internship | 3 |
| ENGL 429 | Grant and Proposal Writing | 3 |
| NLPA 220 | Introduction to Nonprofit Management | 3 |
| NLPA 305 | Financial Best Practices for Decision | 3 |
| NLPA 320 | Makers | $\mathbf{3}$ |
| Total Hours |  | $\mathbf{1 8}$ |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to
ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN NONPROFIT MANAGEMENT IN ART (04E)
Effective Summer 2020
Revised 12-2019
UCC 12.03.2019

## Asian Studies

Chair<br>Sunita Peacock<br>\section*{Department Phone}<br>(724)738-2354

## The Rock Difference

The Asian Studies Minor and Program at Slippery Rock University offers students the opportunity to learn about Asian cultures, history, geography, politics and languages, and supports study abroad programs in China, Japan, Korea, and India. The Asian Studies Program is an interdisciplinary program that includes courses and faculty from several disciplines, including Asian Studies, Modern Languages and Cultures (Chinese and Japanese), History, Geography, Political Science, English, Philosophy and Anthropology (Interdisciplinary Programs). The Asian Studies Program seeks to prepare students to understand a region that includes some of the oldest civilizations on our planet, the world's second and third largest economies (Japan and China), and 60\% percent of the global population

## Faculty

Wei Bian, George Brown, Aksel Casson, Xianfeng Chen, Andrew Colvi, Margaret Denning, Richard Findler, Yukako Ishimaru, J. Sunita Peacock, Armand Policicchio, Pragati Rawat, Jialing Wang, and visiting professors from China, India, Japan, and Korea.

## Programs

All first-year students who enter SRU in the Summer and Fall terms of 2019 and after will follow Rock Studies. Students who entered SRU before Spring 2019 will follow Liberal Studies. All new transfer students beginning Summer 2019 and after will follow Liberal Studies. We anticipate that transfer students will begin to enter under Rock Studies during the Summer/Fall term of 2021.

## Minors

- Asian Studies, Minor (p. 979)


## Cognitive Science and Leadership

\(\left.$$
\begin{array}{lll}\text { Chair } & \text { Secretary } & \text { Location }\end{array}
$$ \begin{array}{l}Department <br>

Phone\end{array}\right]\)| Dr. Christopher | Kathleen | 211 Spotts World $724-738-2450$ |
| :--- | :--- | :--- |
| Niebauer | Dombeck | Culture Building |

## Faculty

Scott Mensch

Professor
Cognitive Sci \& Leadership
Ph.D., Capella University
M.B.A., Point Park University
B.A., Indiana University of PA

## Programs

All first-year students who enter SRU in the Summer and Fall terms of 2019 and after will follow Rock Studies. Students who entered SRU before Spring 2019 will follow Liberal Studies. All new transfer students beginning Summer 2019 and after will follow Liberal Studies. We anticipate that transfer students will begin to enter under Rock Studies during the Summer/Fall term of 2021.

## Minors

- Cognitive Science, Minor (p. 777)
- Leadership, Minor (p. 778)


## Courses

## CSLD 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its small seminar setting and strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## CSLD 144 - Introduction to Cognitive Studies

The goal of Cognitive Studies is to understand the mind using insights from a variety of fields including Psychology, Computer Science, Linguistics, Philosophy, Anthropology, Sociology, and Neuroscience. Cognitive Science is by definition an interdisciplinary field. The class will cover mental processes such as perception, reasoning, memory, attention, imagery, language, intelligence, thinking, decision-making, and consciousness using an interdisciplinary approach that fits within a liberal arts perspective.

Credits: 3
Term(s) Typically Offered: Offered Summer \& Winter Terms
Thematic Thread(s): Mind \& Brain, Transfer Thread Completion Course

## CSLD 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CSLD 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## CSLD 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## CSLD 215 - Introduction to Consciousness

This class will survey theories of consciousness and self through the scope of a broad range of fields: Neurophysiology, Cognitive Psychology, Philosophy, Artificial Intelligence, Evolutionary Psychology and Physics. Consciousness and the sense of self will he explored and viewed from a number of different disciplines using an interdisciplinary approach.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Mind \& Brain, Transfer Thread Completion Course
CSLD 244 - Artificial Intelligence in Cognitive Studies and Film
Artificial intelligence (Al) is the study of how to realize human intelligence on a computer. Philosophically, it is concerned with replicating consciousness and self-recognition in machines. The goal of Al is to make a computer that can learn, plan, and solve problems. This course will cover fundamental knowledge for understanding AI. We will introduce the history of Al in Cognitive Science and how it has been explored in various popular films.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): The Future, Mind \& Brain, Revolutions, Transfer Thread Completion Course, Who Do We Think We Are

## CSLD 251 - Leadership Theory

A survey of the nature, purpose and leadership of human institutions: why and how people organize; organizational environments, forms, structures, processes, leadership, communication, ethical, and societal impacts.

## Credits: 3

Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): Leadership Development, Transfer Thread Completion Course

## CSLD 252 - Leadership Practicum

Students will participate in leadership and campus student organization and/or sanctioned activities and will keep a journal relating their activities to leadership and organizational development theory studied in the Introduction to Leadership course. The course instructor will supervise the students and certify that they met the requirements in the following areas: leadership development, group service and field-work experience.

Prerequisites: INDP $251^{\text {D }}$ or PROF $250^{\text {D }}$ or CSLD $251^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms

## CSLD 253 - Online Practical Research

Students will participate in a leadership workshop online where they will examine 10 leaders via case studies and keep a portfolio with a summation of their findings regarding the various leaders and their actions with respect to the organizational development theory studies in the Introduction to Leadership Course. The course instructor will supervise the students and certify that they met the requirements in the following areas: leadership development, group service, and field-work experience.

Prerequisites: INDP $251^{\text {C }}$ or CSLD $251^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2.

## CSLD 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CSLD 295-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## CSLD 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CSLD 315 - Mindfulness and Brain

Cognitive Science is the interdisciplinary study of the mind, perception, and sense of self. Many practices in Mindfulness can impact both the mind and body. The several books and research projects on the topic reflect this connection. This class will explore how meditation, mindfulness, Tai Chi and Yoga can affect the brain using an interdisciplinary approach within a liberal arts perspective.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Leadership Development, Transfer Thread
Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CSLD 344 - Left and Right Brain: From Neuron to Culture

This class will explore the differences between the left and right sides of the brain. The class begins with differences in anatomy and physiology and will conclude with how these differences affect personality, culture, art, music, science, and politics. The emphasis will be an interdisciplinary approach within a Liberal Arts framework.

Credits: 3
Thematic Thread(s): Creating Art, Mind \& Brain, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CSLD 350 - Multicultural Leadership

Multicultural Leadership compares leadership across cultures and countries, explores the relationship between culture and leadership styles, ideas of cultural diversity and globalization, and a variety of considerations with implications for leading within and across national borders and global regions. This course also explores the challenging but increasingly important task of working across cultures in teams composed of persons from different cultures, ethnicities, racial identifications, and religious and social backgrounds.

## Credits: 3

Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): Comparative Perspectives of Justice \& Society, Leadership Development, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CSLD 352 - Self Leadership

Before an individual can lead other people or organizations, they must first be able to lead themselves effectively. Self Leadership is a course designed to introduce students to processes, tools and strategies to overcome obstacles and to achieve goals.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Leadership Development, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CSLD 353 - Teambuilding for Leaders

Teambuilding for Leaders exposes students to the techniques, processes and tools to effectively build, lead and motivate multifaceted group of individuals and galvanize them into a functional and effective team oriented on achieving mutually supporting goals.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CSLD 354 - Strategic Planning and Decision Making for Leaders

Strategic Planning and Decision Making for Leaders introduces students to a process of planning that helps leaders apply thoroughness, clarity, sound judgment, logic, and professional knowledge to understand situations, develop options to solve problems, and reach decisions. This process helps leaders, their staffs, and others think critically and creatively while planning.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CSLD 355 - Leadership Development Course

Strategic Planning and Decision Making for Leaders introduces students to a process of planning that helps leaders apply thoroughness, clarity, sound judgment, logic, and professional knowledge to understand situations, develop options to solve problems, and reach decisions. This process helps leaders, their staffs, and others think critically and creatively while planning.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CSLD 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered Every Term
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CSLD 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CSLD 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CSLD 450 - Internship

Supervised placement in selected professional agencies.
Credits: 1-12
Term(s) Typically Offered: Offered Every Term
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CSLD 456 - Research in Cognitive Science

The goal of Cognitive Science is to understand the mind using insights from a variety of fields including Psychology, Computer Science. Linguistics, Philosophy, Anthropology, Sociology, and Neuroscience. Cognitive Studies is by definition an interdisciplinary field. Interdisciplinary research comprises a major component to the field. In this course, students will gain experience by conducting a research project.

Prerequisites: (INDP $144^{C}$ or CSLD $144^{C}$ ) and INDP $318^{C}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CSLD 490 - Independent Study

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CSLD 495-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CSLD 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Cognitive Science, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Cognitive Science, Minor Department Page (https://www.sru.edu/ academics/majors-and-minors/cognitive-science-interdisciplinaryprograms/)

Cognitive Science, Minor Program Page (https://www.sru.edu/ academics/majors-and-minors/cognitive-science-interdisciplinaryprograms/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.0 or higher

## Minor Requirements

## Code Title

## Hours

## Core Courses

Oral and Written Communication
Select one of the following:

| CSLD 144 | Introduction to Cognitive Studies |
| :--- | :--- |
| CSLD 215 | Introduction to Consciousness |

Interpersonal Skills and Civic Responsibility
Select one of the following:

| CSLD 244 | Artificial Intelligence in Cognitive Studies and Film |
| :---: | :---: |
| CSLD 315 | Mindfulness and Brain |
| CSLD 344 | Left and Right Brain: From Neuron to Culture |
| Analytical, Quantitative \& Critical Thinking Skills |  |
| Select one of the following: |  |
| INDP 317 | Statistics for the Social Sciences |
| INDP 318 | Research Methods in Interdisciplinary Studies |
| CSLD 456 | Research in Cognitive Science |
| Emphasis Area |  |
| Students must take at least one course from each area |  |
| Mind and Brain |  |
| Select one of the following: |  |
| BIOL 102 | Human Biology |
| INDP 202 | Introduction to Anthropology |
| INDP 211 | Biological Anthropology |
| CSLD 315 | Mindfulness and Brain |
| CSLD 344 | Left and Right Brain: From Neuron to Culture |
| PHIL 351 | Philosophy of Natural Science |
| Intelligence, Perception and Technology |  |
| Select one of the following: |  |


| CPSC 130 | Introduction to Computing and Programming |
| :---: | :---: |
| CPSC 146 | Programming Principles |
| CPSC 300 | Challenges of Computer Technology |
| ENGL 230 | Introduction to Linguistics and Grammar |
| CSLD 244 | Artificial Intelligence in Cognitive Studies and Film |
| PHIL 113 | Formal Logic |
| Consciousness, Self and Others |  |
| Select one of the following: |  |
| COMM 217 | Intercultural Communication |
| COMM 314 | Interpersonal Communication |
| CSLD 215 | Introduction to Consciousness |
| CSLD 350 | Multicultural Leadership |
| INDP 326 | Society, Culture and Self |
| INDP 327 | Religion and Society |
| CSLD 352 | Self Leadership |
| PHIL 123 | Ethics |
| PHIL 343 | Asian Philosophy |
| Total Hours |  |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report
and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN COGNITIVE SCIENCE (80J)
This program is effective as of Summer 2018
Revised 04.09.2020

## Leadership, Minor

The Leadership Minor is comprised of six courses (18crhs.) from various departments that better prepares students to advance in their professional field as leadership touches all aspects of business and industry. The Leadership Minor serves as an excellent resume builder and will impact EVERYONE'S life after graduation, while gaining an understanding and knowledge for future endeavors. Leadership is an extremely broad and ever-growing demand across businesses, organizations, teams, cultures, and our society.

The goal of the Leadership Minor is to focus on helping students gain an initial understanding of those communication and relationship processes they will face while developing their professional lives. Additionally, students will begin to evaluate themselves and their competencies through reflection and problem-solving issues that will positively impact and enhance one's professional growth regardless of your academic major as leadership touches all aspects of life.

## Why select the Leadership Minor?

- You seek to create a culture and drive change.
- You want to develop yourself as a professional and continue to grow.
- You want to inspire, motivate, and build teams that are effective.
- You want to LEAD, and you CARE!

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Leadership, Minor Program Page (https://www.sru.edu/academics/ majors-and-minors/leadership-studies/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

| Code Title | Hours |  |
| :--- | ---: | ---: |
| Oral and Written Communication |  |  |
| Select one of the following: | 3 |  |
| CSLD 251 | Leadership Theory |  |


| MS 102 | Principles of Leadership |
| :---: | :--- |
| MS 301 | Fundamentals of Tactical Op |
| Interpersonal Skills and Civic Responsibility |  |
| Select one of the following: |  |
| CSLD 350 | Multicultural Leadership |
| CSLD 352 | Self Leadership |
| CSLD 353 | Teambuilding for Leaders |
| MS 201 | Basic Military Skills |

Analytical, Quantitative and Critical Thinking Skills
Select one of the following:

| CSLD 252 | Leadership Practicum |
| :--- | :--- |
| INDP 317 | Statistics for the Social Sciences |
| INDP 318 | Research Methods in Interdisciplinary <br> Studies |

MS 302 Advanced Military Skills

## Emphasis Area

Select nine credits from the categories below, one course in three 9
area:
Self Leadership
Select three credits of the following:

| COMM 314 | Interpersonal Communication |
| :--- | :--- |
| CSLD 215 | Introduction to Consciousness |
| CSLD 352 | Self Leadership |
| CSS 354 | Risk Assessment and Fraud Prevention |
| INDP 326 | Society, Culture and Self |
| NLPA 305 | Financial Best Practices for Decision <br> Makers |
| PHIL 123 | Ethics |
| MS 201 | Basic Military Skills |
| MS 202 | Intermediate Military Skills |
| Group Leadership |  |
| Select three credits of the following: |  |
| COMM 215 | Small Group Communication <br> CSLD 344 |


| CSLD 350 | Multicultural Leadership |
| :--- | :--- |
| CSLD 353 | Teambuilding for Leaders |
| INDP 310 | Cultural Area Studies |
| INDP 321 | Minority Groups |
| INDP 339 | Gender Roles and Society |
| MGMT 351 | Organizational Behavior |
| MS 301 | Fundamentals of Tactical Operations |
| MS 302 | Advanced Military Skills |
| PCRM 342 | Group Facilitation and Leadership |

Organizational Leadership
Select three credits of the following:

| COMM 217 | Intercultural Communication |
| :--- | :--- |
| COMM 315 | Organizational Communication |
| CSLD 144 | Introduction to Cognitive Studies |
| CSLD 354 | Strategic Planning and Decision Making for <br> Leaders |
| CSS 352 | Law \& Ethics in the Workplace |
| INDP 348 | Sociology of Organizations |


| MGMT 341 | Organizational Leadership |
| :--- | :--- |
| MS 401 | Leadership Dimensions and Concepts |
| MS 402 | Officership and the Profession of Arms |
| NLPA 120 | Civic Engagement and Community <br> Decision-Making |
| Leadership Experience |  |
| Select three credits of the following: |  |
| CSLD 252 | Leadership Practicum |
| CSLD 355 | Leadership Development Course  <br> INDP 450 Internship |
| MS 250 | ROTC Basic Leadership Practicum |
| MS 350 | ROTC Advanced Leadership Practicum |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Experiential Learning Activities

Must complete 40 hours of experiential learning activities which are fulfilled by section $D$ above or an approved substitution by the Academic Adviser. Please consult with your Adviser for details of the options available.

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Select courses designated as a Service Learning Component on |  |
| the Master Class Schedule. Please see adviser or department |  |
| chairperson for information. |  |
| Experiential Learning Activities | 40 |
| Total Hours | $\mathbf{4 0}$ |

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Minor in Leadership (98C)
This program is effective as of Fall 2018
Revised 07.29.21
UCC 04.13.21

## Criminology and Criminal Justice

\(\left.$$
\begin{array}{lll}\text { Chair } & \text { Secretary } & \text { Location }\end{array}
$$ \begin{array}{l}Department <br>

Phone\end{array}\right\}\)|  | Kathleen | 211 Spotts World |
| :--- | :--- | :--- |
| Dr. Rebecca | Dombeck | Culture Building |

Department Web Site URL (https://www.sru.edu/academics/colleges-and-departments/cla/departments/criminology-and-criminal-justice/)

Department Fact Sheet URL (https://www.sru.edu/documents/programs/ factsheets/undergraduate/crim-fs.pdf)

## Faculty

## David Champion

Professor
Criminology \& Criminal Justice
Ph.D., Indiana University of Pennsylvania
M.A., Ball State University
B.A., State University of New York at Buffalo

## Kerry Edwards

Associate Professor
Criminology \& Criminal Justice
Ph.D., University of New Mexico
M.A., University of New Mexico
B.A., University of New Mexico

## Sarah Kuehn

Associate Professor
Criminology \& Criminal Justice
Ph.D., Simon Fraser University
M.A., Simon Fraser University

Jonathan McLister
Instructor
Criminology \& Criminal Justice
M.A., Indiana University
B.A., Indiana University

Rebecca Ridener
Associate Professor
Criminology \& Criminal Justice
Ph.D., University of Cincinnati
M.S., University of Cincinnati
B.A., Emory University

## Jeffrey Roth

Assistant Professor
Criminology \& Criminal Justice
Ph.D., Indiana University of Pennsylvania
M.S., Tiffin University
B.A., Patrick Henry College

## Youngyol Schanz

Professor
Criminology \& Criminal Justice
Ph.D., Indiana University of Pennsylvania
M.A., Wichita State University
B.S., Dankook University (Korea)

## Programs

All first-year students who enter SRU in the Summer and Fall terms of 2019 and after will follow Rock Studies. Students who entered SRU before Spring 2019 will follow Liberal Studies. All new transfer students beginning Summer 2019 and after will follow Liberal Studies. We anticipate that transfer students will begin to enter under Rock Studies during the Summer/Fall term of 2021.

## Majors

- Criminology and Criminal Justice, Bachelor of Arts (BA) (p. 785)
- Criminology and Criminal Justice, Bachelor of Arts (BA) Concentration in Community Corrections (p. 789)


## Minors

- Criminology, Minor (p. 793)


## Certificates

- Criminal Justice and Spanish Cultural \& Language Competency, Certificate (p. 784)


## Courses

## CRIM 105 - Human Diversity

An orientation to living and working with diverse populations within modern American society, including examination of the strengths and stresses associated with diversities.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): 21 st Century Healthcare, Transfer Thread
Completion Course
CRIM 110-Introduction to Criminology \& Criminal Justice Systems
This course covers the basic principles of the criminal justice system and criminological theory. Students will be introduced to policing, corrections, the criminal court process, legal procedures, and criminological theories, among other fundamentals of the criminology discipline.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Comparative Perspectives of Justice \& Society,
Demystifying Crime \& Justice, Fighting Social Problems, Transfer Thread Completion Course

## CRIM 115 - Proseminar

This is a writing intensive course that prepares criminology/criminal justice students for standard academic and professional expectations for the field. This class encompasses writing requirements and style for criminal justice and basic library research skills.

Credits: 1
Term(s) Typically Offered: Offered Spring Terms
Enrollment is limited to students with a program in Criminology \& Criminal Justice or Criminology.

## CRIM 120 - Crime: Why Do We Do It?

This course examines different theoretical explanations of criminal behavior and how to test them using social science research methods. Further, the course explores how to translate these theories into public policy and draws attention to the interdisciplinary nature of the field of criminology.

## CRIM 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## CRIM 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## CRIM 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## CRIM 198-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CRIM 253 - American Policing

This course covers the introductory elements of US policing and law enforcement. Topics of study include operations, legal aspects, ethics, diversity and other key issues.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## CRIM 263 - Introduction to Criminal Procedure

This course covers the processes of criminal procedure. It includes landmark legal cases, search and seizure requirements, use of force, arrest, interrogation and court structures.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Enrollment limited to students with the ROCK STUDIES STUDENT
attribute.

## CRIM 273 - American Corrections

Examines the legally sanctioned methods of dealing with lawbreakers. The correctional methods studied will include institutional and community corrections, and the newer dispositions such as community service, restitution, and electronic monitoring. Current issues examined will include prison gangs, the problem of AIDS, women in prison, and prison privatization.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment is limited to students with a program in Criminology \&
Criminal Justice or Criminology.

## CRIM 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CRIM 295-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## CRIM 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CRIM 301 - Theoretical Criminology

A critical review of pure and applied theory within the field of criminology, including coverage of classical, biological, psychological, sociological, economic, political, and integrated theories of the causes of crime.
Prerequisite: CRIM $110^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Criminology \& Criminal Justice.

## CRIM 302-Sexual Violence

This course will explore multiple aspects of sexual violence including typologies and legal classifications of sex crimes, the motivations of offenders, victimology/trauma, studies of convicted rapists, social/ cultural/media effects and context, and the criminal investigation of sex offenses.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Transfer Thread Completion Course, Violence
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

CRIM 317 - Statistical Methods in Criminology and Criminal Justice
This course is designed to introduce students to basic principles of probability theory, data analysis and data interpretation. Using SPSS, students will engage in basic data analysis, including descriptive and inferential statistics. More specifically, this course will cover univariate and bivariate measures, analyses of cross classified data, correlation, $t$ tests, analysis of variance, regression and related measures. Emphasis will be placed on how to use, interpret and understand some of the basic techniques used by criminal justice researchers and practitioners.

Prerequisite: CRIM $110^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Criminology \& Criminal Justice.
CRIM 318 - Research Methods in Criminology and Criminal Justice
This course is an introduction to criminological research that is intended to develop the student's research and analytical skills. Specifically, the course will focus on the theory of inquiry, research design, data gathering methods (surveys, secondary data and unobtrusive methods, field observation), evaluation research analysis, sampling and research reporting. Students will also learn how to use library resources as well as electronic resources.

Prerequisite: CRIM $110^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Criminology \& Criminal Justice.
CRIM 321 - Criminal Justice interventions 1
A review of basic theories, philosophies, methods, and skills that underlie successful community and correctional-based interventions with individuals serviced by the federal, state, and/or local criminal justice systems. Coverage will include the overrepresentation of minorities within the American correctional system and service provision to culturally diverse populations.

Prerequisites: CRIM $110^{\text {D }}$ and CRIM $273^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Criminology \& Criminal Justice.

## CRIM 322 - Criminal Justice Interventions 2

A review of basic theories, philosophies, methods, and skills that underlie successful community and correctional-based interventions with an emphasis on groups and families serviced by the federal, state, and/or local criminal justice systems. Topic coverage also includes examining the overrepresentation of minorities under correctional supervision and service provision to culturally diverse populations.

Prerequisites: CRIM $110^{\mathrm{D}}$ and CRIM $273^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CRIM 326 - Victimology

This course will present the student with a detailed understanding of the scope of victimology and the extent of criminal victimization by examining specific crimes types, the impact of crime on victims and society, the role of victims within the criminal justice system, specific remedies, and victim rights and services.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Demystifying Crime \& Justice, Transfer Thread Completion Course, Violence
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
CRIM 327 - Criminal Justice and the Multicultural Community
This course will examine current issues and social problems relating to the administration of justice in a culturally diverse society. The focus of the course will be on the changing ethnicity of communities and related changes in social and institutional public policy.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Comparative Perspectives of Justice \& Society, Transfer Thread Completion Course, Violence
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CRIM 328- Transnational Crime \& Justice

This course focuses on the historical development and current status of various forms of transnational crime from the perspective of the international criminal justice community. This course explores the roots and operations of organized crime and how globalization has facilitated the emergence of transnational organized crime in the U.S. and in various regions throughout the world. Particular emphasis is given to issues of drug trafficking, illegal arms trade, money laundering, human trafficking and sex trafficking. This course also examines the current strategies for the containment and control of such activities.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): International Business, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CRIM 333 - Crime, Justice and Society

An exploration of the major theories of crime with an emphasis of those contemporary theories that explore the relationship of race, gender, and crime. Topics may include prostitution, rape, hate crimes, and crimes against the gay community.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Building a Healthy Society, Comparative
Perspectives of Justice \& Society, Demystifying Crime \& Justice, Fighting Social Problems, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CRIM 343 - Criminal Investigations

This course provides an introduction to criminal evidence and investigations. The topics include how evidence is collected and developed, the different types of evidence, the role of evidence in investigation, and basic investigative principles.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CRIM 345 - Juvenile Delinquency

The behaviors of adolescents in modern societies have resulted in the need for society to exert various methods of social control. The reasons for these formal and informal control strategies are examined from a sociological view of institutional changes.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Transfer Thread Completion Course, Well-Being of Children and Youth
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CRIM 360 - Police and Society

This class examines the role of law enforcement and policing in contemporary society.This course also covers the history of policing, policing theory, police culture, different law enforcement agencies, and the social role of modern police agencies.

Prerequisite: CRIM $110^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Criminology \&
Criminal Justice or Criminology.

## CRIM 368 - Comparative Criminal Justice Abroad

This course examines similarities and differences between the United States' criminal justice system and another country's criminal justice system. The course requires a travel abroad activity that will include experiential learning regarding criminal justice components, such as police, courts, and corrections programs.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2 or Sophomore 2.

## CRIM 370 - Inside Out Views of Criminal Justice Issues

This course creates a partnership between institutions of higher learning and correctional systems in order to deepen the conversation about criminal justice issues and transform our approaches to understanding crime, society's response to it, justice, inequality, and other issues of social concerns. This semester-long class brings together college students and incarcerated men or women to study as peers behind prison walls.

Prerequisite: CRIM $110^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Criminology \& Criminal Justice.

## CRIM 380 - Women \& the Criminal Justice System

This course will focus on theoretical and contemporary issues involving female practitioners, victims and offenders in the criminal justice system. Students will have the opportunity to become acquainted with and evaluate the political, legal and social issues of crime relating to women. This course will also examine diversity issues. More specifically, this course will examine how gender, race/ethnicity and class are related to the way they are treated in the criminal justice system in the U.S.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Gender and Diversity, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CRIM 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CRIM 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CRIM 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisite: CRIM $110^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CRIM 402 - Forensic Behavior:Crime and the Individual

This course explores aspects of mental illness, cognitions, psychopathology, mental disorders and other psychological aspects of criminal behavior and their relation to theories of crime. This is a crosslisted course that will fulfill either graduate or undergraduate credit.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## CRIM 404 - Applied Criminal Procedures

This course addresses the history, legalities, trends and controversies in law adjudication as it pertains to issues of crime and justice. Students will examine the topics of criminal law, landmark cases, prosecution, defense, court procedures and decision-making and their interaction with our society.

Prerequisite: CRIM $110^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CRIM 405 - White Collar Crime

This course explores the complex issues surrounding white collar crime. In terms of white collar crime, the topics addressed may include: the complexities of defining it, theoretical explanations for it, the economical, physical and social costs that result from these types of crimes, and the issues the criminal justice system faces in trying to control it.

Prerequisite: CRIM $110^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CRIM 408 - Capstone: Ethics and Criminal Justice

This course examines the traditional schools of ethical thought and how they are applicable to the field of criminology, crime, and justice. Students will study formal works in ethics and morality and develop understanding of their role in the criminal justice professions as well as issues of crime, law, and society. This course is designed as a writing intensive course.

Prerequisite: CRIM $115^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2, Junior 1,
Junior 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students with department of Criminology \& Criminal Justice.

## CRIM 414 - Criminal Justice Policy

This course explores the contemporary criminal justice system, major systems of social control and their policies and practices; as well as policies related to courts, victimology, juvenile justice and comparative criminal justice. These policies will be studied through the lenses of individual liberties, collective formalized controls, multicultural factors and issues related to race, gender and diversity.

Prerequisite: CRIM $110^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Criminology \& Criminal Justice.

## CRIM 416 - Community Corrections

The course explores the origins of community corrections and its role in the American criminal justice system. Starting with pre-arrest diversion, the course covers the major issues and topics associated with community correction programs. Students are required to complete a service learning component.

Prerequisites: CRIM $110^{\text {D }}$ and CRIM $273^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CRIM 422 - The Death Penalty

An examination of the problems and issues related to the death penalty in the United States, including the history of capital punishment, important Supreme court decisions, how the various jurisdictions deal with capital cases, the comparative costs of incarceration and executions, miscarriages of justices in capital cases, the impact of minority status and how the criminal justice responds to these issues.

Prerequisite: CRIM $110^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

CRIM 450 - Internship
Supervised placement in selected professional agencies.
Credits: 1-12
Term(s) Typically Offered: Offered Every Term
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CRIM 468 - Crime \& Media

This course will examine images of crime and criminal justice as portrayed and presented by the mass media including popular media (fictional television show, music, novels, etc.) as well as "news" programming and print media. More specifically, the course will analyze how crime and criminals, and criminal justice systems (police, courts and corrections) are portrayed by the mass media. This course will analyze the media's relationship to criminological theories as well as to criminal justice policies and practices. This course will also examine how gender, race and class are related to the way crime is depicted in the mass media.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Demystifying Crime \& Justice, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CRIM 490 - Independent Study

Independent research under the guidance of a faculty member. Prerequisite: Permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. (repeatable up to 6 credits) Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CRIM 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## CRIM 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisite: CRIM $110^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Criminal Justice and Spanish Cultural \& Language Competency, Certificate

The Certificate in Criminal Justice and Spanish Cultural \& Language Competency prepares students to speak conversational Spanish and gain competency in Spanish cultures and literature. This certificate represents a valuable credential for those seeking to enter a criminal justice profession that often demands practical skills in understanding and working with diverse cultures.

To access Certificate Requirements, please view the Curriculum Guide tab.

## Related Links

Criminal Justice and Spanish Cultural and Language Competency, Certificate Program Page (https://www.sru.edu/academics/certificates/ criminal-justice-and-spanish-cultural-and-language-competencycertificate/)

Criminology and Criminal Justice Department Page (https:// www.sru.edu/academics/colleges-and-departments/cla/departments/ criminology-and-criminal-justice/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Certificate GPA: 2.0 or higher

## Certificate Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| Select fifteen credits of the following: |  | 15 |
| SPAN 103 | Spanish Language \& Culture III ${ }^{1}$ |  |
| or SPAN 104 | Situational Spanish |  |
| SPAN 200 | Writing in Spanish for the Professions I ${ }^{1}$ |  |
| SPAN 201 | Speaking in Spanish for the Professions I ${ }^{1}$ |  |
| SPAN 215 | Topics in Hispanic Culture |  |
| SPAN 220 | Understanding Hispanic Cultures Through Reading ${ }^{1}$ |  |
| CRIM 343 <br> \& CRIM 360 | Criminal Investigations and Police and Society |  |
| CRIM 380 <br> \& CRIM 404 | Women \& the Criminal Justice System and Applied Criminal Procedures |  |

## Total Hours

1 A grade of " C " or better is required.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
CERTIFICATE CRIMINAL JUSTICE AND SPANISH CULTURAL AND
LANGUAGE COMPETENCY (5CJS)
This program is effective as of Fall 2020.
Revision date: 07.08.2020

## UCC 03.05.2020

## Criminology and Criminal Justice, Bachelor of Arts (BA)

## Program Learning Outcomes

- Demonstrate professional proficiency in the academic study of crime, justice, and criminology.
- Develop competence in the history, theory and practice of the administration of criminal justice and its established content areas of law enforcement, courts and corrections.
- Demonstrate understanding and application of criminological theories of crime causation, offenders, victims, and typologies.
- Explain and understand the basic principles of research and the use and interpretation of statistics as they apply to criminological theory, existing crime data, and Criminal Justice policy evaluations.
- Community corrections specialization students will be able to demonstrate knowledge of the history, philosophy, policy and practice of balanced and restorative justice, alternative sentencing, diversionary adjudication, human services and the principles of offender treatment in a community setting.
- Achieve acceptable levels of critical thinking, synthesis and analysis of informational sources about the study of crime and justice.
- Critically evaluate criminological literature and scholarship.
- Apply critical analysis to current controversies and topics in criminal justice.
- Synthesize disparate informational sources about criminal justice issues, policies or theories into synergistic and cogent understandings.
- Recognize and understand the various perspectives of controversial issues in crime and justice.
- Understand and explain the importance of the study of and
application of ethics, morals and values in Criminal Justice.
- Formulate applications of the general field of ethical study to specific, criminal justice-related topics.
- Employ ethical reflection and judgment to quickly emerging situations commonly found in the practice of law enforcement, correctional and court workgroup duties.
- Develop familiarity with professional codes of ethics employed in the field.
- Learn and appreciate the role of human diversity in Criminal Justice.
- Demonstrate how diversity in human experience and culture applies to the professional practice of criminal justice in law enforcement, court processes, and corrections.
- Recognize the historical and contemporary roles of racial, ethnic, religious, gender/sex identity, LGBTQ + , and lifestyle intolerance in human violence and aggression.
- Examine and increase awareness of diversity challenges such as racial profiling, violence against women, and hate crime legislation and enforcement.


## Related Links

Criminology and Criminal Justice, BA Program Page (https:// www.sru.edu/academics/majors-and-minors/criminology-and-criminaljustice/)

Criminology and Criminal Justice Department Page (https:// www.sru.edu/academics/colleges-and-departments/cla/departments/ criminology-and-criminal-justice/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher
Community Correction Concentration GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Modern Language Requirements | $0-9$ |
| Other Basic Requirments | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 40 |
| Electives | 38 |

* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.
Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Science Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Science Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |
| Thematic Thread |  |  |
| Select 12 Credits (p.1378) ${ }^{2}$ |  | 12 |
| Subtotal |  | 12 |
| Total Hours |  | 42 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 from at least 3 Categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete 0-9 credits | $0-9$ |  |
| Total Hours | $\mathbf{0 - 9}$ |  |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |

Total Hours
0-3

## Computer Competency

Code Title Hours

Demonstrate "computer competency" by one of the following: 0-3
Pass Computer Competency Exam OR
Select one of the following at SRU or another post-secondary institution:
CPSC 100 Introduction to Computing for Liberal Arts
CPSC 110 Computer Concepts
CPSC 130 Introduction to Computing and Programming
PE 202 Technology for Wellness
Total Hours
0-3

## Major Requirements

- 20 major credits must be taken at SRU or PASSHE
- 20 major credits must be taken at the 300 level or above

| Code <br> Core Courses | Title | Hours |
| :--- | :--- | :---: |
| CRIM 110 | Introduction to Criminology \& Criminal <br> Justice Systems ${ }^{1}$ | 3 |
| CRIM 115 | ${\text { Proseminar }{ }^{1}}^{\text {CRIM 253 }}$ | American Policing ${ }^{1}$ |

Select one of the following:
3

| or SOWK 105 | Human Diversity |  |
| :---: | :---: | :---: |
| SOWK 107 | Cultural Competency and Human Services 1 |  |
| CRIM 345 | Juvenile Delinquency ${ }^{1}$ | 3 |
| CRIM 408 | Capstone: Ethics and Criminal Justice ${ }^{1}$ | 3 |
| Subtotal |  | 31 |
| Major Electives |  |  |
| Select nine credits from the following: |  | 9 |
| CRIM 190 | Experimental ${ }^{1}$ |  |
| CRIM 198 | Selected Topics ${ }^{1}$ |  |
| CRIM 290 | Experimental ${ }^{1}$ |  |
| CRIM 298 | Selected Topics ${ }^{1}$ |  |
| CRIM 302 | Sexual Violence ${ }^{1}$ |  |
| CRIM 321 | Criminal Justice interventions $1^{1}$ |  |
| CRIM 322 | Criminal Justice Interventions $2^{1}$ |  |
| CRIM 326 | Victimology ${ }^{1}$ |  |
| CRIM 327 | Criminal Justice and the Multicultural Community ${ }^{1}$ |  |
| CRIM 328 | Transnational Crime \& Justice ${ }^{1}$ |  |
| CRIM 343 | Criminal Investigations ${ }^{1}$ |  |
| CRIM 360 | Police and Society ${ }^{1}$ |  |
| CRIM 368 | Comparative Criminal Justice Abroad ${ }^{1}$ |  |
| CRIM 370 | Inside Out Views of Criminal Justice Issues 1 |  |
| CRIM 380 | Women \& the Criminal Justice System ${ }^{1}$ |  |
| CRIM 390 | Experimental ${ }^{1}$ |  |
| CRIM 398 | Selected Topics ${ }^{1}$ |  |
| CRIM 402 | Forensic Behavior:Crime and the Individual 1 |  |
| CRIM 404 | Applied Criminal Procedures ${ }^{1}$ |  |
| CRIM 405 | White Collar Crime ${ }^{1}$ |  |
| CRIM 414 | Criminal Justice Policy ${ }^{1}$ |  |
| CRIM 416 | Community Corrections ${ }^{1}$ |  |
| CRIM 422 | The Death Penalty ${ }^{1}$ |  |
| CRIM 450 | Internship ${ }^{1}$ |  |
| CRIM 468 | Crime \& Media ${ }^{1}$ |  |
| CRIM 498 | Selected Topics ${ }^{1}$ |  |
| SOWK 334 | Clinical Perspectives on DSM Diagnoses ${ }^{1}$ |  |
| Subtotal |  | 9 |
| Total Hours |  | 40 |

1 Course counts for $50 \%$ of Major requirements and Major GPA.
2 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year long.
2. High-Impact Practice (HIP) designated classes (CRIM 343 and CRIM 370)
3. Student-faculty research
4. Student leadership opportunities -CRIM Club, Alpha Sigma Honors Society
5. Service-learning classes
6. Internships
7. Volunteering opportunities

CRIMINOLOGY \& CRIMINAL JUSTICE - BA (5 70)
w/optional Community Corrections Concentration (507C)
This program is effective as of Fall 2020.
Revised 07.08.20
UCC 03.05.20

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| Learning Community Cluster |  |  |
| CRIM 110 | Introduction to Criminology \& Criminal Justice Systems | 3 |
| CRIM 105 or SOWK 105 | Human Diversity or Human Diversity | 3 |
| INDS 101 | FYRST Seminar | 1 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
|  | Hours | 16 |
| Spring |  |  |
| CRIM 115 | Proseminar | 1 |
| CRIM 253 | American Policing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Social Science Inquiry (p. 1378) |  | 3 |


| Second Year |  |  |
| :---: | :---: | :---: |
| Fall |  |  |
| CRIM 263 | Introduction to Criminal Procedure | 3 |
| MODL 101 | Modern Language Requirement | 3 |
| SCI 101 | Science of Life | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
| Free elective (or Minor Class) |  | 3 |
| Declare a Thematic Thread ${ }^{3}$ |  |  |
|  | Hours | 15 |
| Spring |  |  |
| CRIM 273 | American Corrections | 3 |
| CRIM 301 | Theoretical Criminology | 3 |
| MODL 102 | Modern Language Requirement | 3 |
| SCI 102 | Understanding the Physical World | 3 |
| Free elective (or Minor Class) |  | 3 |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| CRIM 317 | Statistical Methods in Criminology and Criminal Justice | 3 |
| CRIM 345 | Juvenile Delinquency | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| MODL 103 | Modern Language Requirement | 3 |
| Free Elective (or Minor Class) |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| CRIM 318 | Research Methods in Criminology and Criminal Justice | 3 |
| CRIM Elective (1) ${ }^{2}$ |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Free Elective (or Minor class) |  | 6 |
|  | Hours | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| CRIM Elective (2) ${ }^{2}$ |  | 3 |
| CRIM Elective (3) ${ }^{2}$ |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Free Elective (or Minor Class) |  | 3 |
| Free Elective (or Minor Class) |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| CRIM 408 | Capstone: Ethics and Criminal Justice | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Free Elective (or Minor Class) |  | 9 |
|  | Hours | 15 |
|  | Total Hours** | 122 |

1 Course offered in multiple subjects; cannot take course in first major subject

2 Students' choice for CRIM electives are CRIM 190, CRIM 198,
CRIM 290, CRIM 298, CRIM 321, CRIM 322, CRIM 326, CRIM 327,
CRIM 328, CRIM 343, CRIM 360, CRIM 370, CRIM 380, CRIM 390,
CRIM 398, CRIM 402, CRIM 404, CRIM 405, CRIM 414, CRIM 416,
CRIM 422, CRIM 450, CRIM 468, CRIM 498 or SOWK 334
3
Work with your Academic Adviser to declare a Thematic
Thread by the end of your fall semester in your second
year. Click here (https://forms.office.com/Pages/
ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7Wtmwv-
VJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UIdNTi4u)to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.
- CRIM BA Major requires 40 Credit Hours (31 Core+9 Elective Credits)
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 570
Revised date: 09.13.2021

## Recommended Four-Year Plan - BA/MA Accelerated Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| Learning Community Cluster |  |  |
| CRIM 110 | Introduction to Criminology \& Criminal Justice Systems | 3 |
| CRIM 105 or SOWK 105 | Human Diversity or Human Diversity | 3 |
| INDS 101 | FYRST Seminar | 1 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
|  | Hours | 16 |
| Spring |  |  |
| CRIM 115 | Proseminar | 1 |
| CRIM 253 | American Policing | 3 |
| ENGL 104 | Critical Reading | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Humanities Inquiry (p. 1378) |  | 3 |
| Social Science Inquiry (p. 1378) |  | 3 |
|  | Hours | 16 |
| Summer |  |  |
| CRIM 273 | American Corrections | 3 |
| CRIM 301 | Theoretical Criminology | 3 |
| Free Elective (or Minor Class) |  | 3 |
|  | Hours | 9 |


| Second Year |  |  |
| :---: | :---: | :---: |
| Fall |  |  |
| CRIM 263 | Introduction to Criminal Procedure | 3 |
| CRIM 345 | Juvenile Delinquency | 3 |
| Modern Language 1 |  | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| SCI 101 | Science of Life | 3 |
|  | Hours | 15 |
| Spring |  |  |
| Modern Language 2 |  | 3 |
| SCI 102 | Understanding the Physical World | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Free Elective (or Minor Class) |  | 3 |
|  | Hours | 15 |
| Summer |  |  |
| CRIM Elective |  | 3 |
| CRIM Elective |  | 3 |
| Free Elective (or Minor Class) |  | 3 |
|  | Hours | 9 |
| Third Year |  |  |
|  |  |  |
| Modern Language 3 |  | 3 |
| CRIM 317 | Statistical Methods in Criminology and Criminal Justice | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Free Elective (or Minor Class) |  | 3 |
| Free Elective (or Minor Class) |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| CRIM 318 | Research Methods in Criminology and Criminal Justice | 3 |
| CRIM Elective |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Free Elective (or Minor Class) |  | 3 |
| Free Elective (or Minor Class) |  |  |
| Free Elective (or Minor Class) |  | 3 |
|  | Hours | 15 |
| Summer |  |  |
| CRIM 408 | Capstone: Ethics and Criminal Justice | 3 |
| Free Elective (or Minor Class) |  | 3 |
| Free Elective (or Minor Class) |  | 3 |
|  | Hours | 9 |
| Fourth Year |  |  |
| Fall |  |  |
| Credits toward MA |  |  |
| CRIM 610 | Administration of Justice | 3 |
| CRIM 615 | Advanced Criminological Theory | 3 |
| CRIM 620 | Critical Issues in Corrections | 3 |
| CRIM 630 | Statistical Methods in Criminal Justice | 3 |
|  | Hours | 12 |

## Spring

| Credits toward MA |  | 3 |
| :--- | :--- | :--- |
| CRIM 625 | Contemporary Issues in Policing | 3 |
| CRIM 635 | Criminological Research | 3 |
| CRIM 660 | Criminal Justice Ethics | 3 |
|  | Hours | $\mathbf{9}$ |

Summer

| Credits toward MA |  |  |
| :--- | :--- | ---: |
| CRIM 6XX | CRIM Elective | 6 |
| Select one of the following: | 6 |  |
| CRIM 6XX | Two CRIM Electives |  |
| CRIM 750 | Internship in Criminology |  |
| CRIM 800 | Master's Thesis | $\mathbf{9}$ |
|  | Hours | $\mathbf{1 4 9}$ |
|  | Total Hours** |  |

1 Course offered in multiple subjects; cannot take course in first major subject

* Students are encouraged to take INDS 101 as a Free Elective.
- CRIM BA Major requires 39 Credit Hours (33 Core + 6 Elective Credits)
- Community Corrections Specialization - CRIM 416, SOWK 355, SOWK 356 + Additional Courses.
- CRIM MA requires 30 Credit Hours.
- Template does not utilize Winter Intercession courses - although courses are likely to be available.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Revised Date: 01.27.2021

## Criminology and Criminal Justice, Bachelor of Arts (BA) - Concentration in Community Corrections

## Program Learning Outcomes

- Demonstrate professional proficiency in the academic study of crime, justice, and criminology.
- Develop competence in the history, theory and practice of the administration of criminal justice and its established content areas of law enforcement, courts and corrections.
- Demonstrate understanding and application of criminological theories of crime causation, offenders, victims, and typologies.
- Explain and understand the basic principles of research and the use and interpretation of statistics as they apply to criminological theory, existing crime data, and Criminal Justice policy evaluations.
- Community corrections specialization students will be able to demonstrate knowledge of the history, philosophy, policy and practice of balanced and restorative justice, alternative
sentencing, diversionary adjudication, human services and the principles of offender treatment in a community setting.
- Achieve acceptable levels of critical thinking, synthesis and analysis of informational sources about the study of crime and justice.
- Critically evaluate criminological literature and scholarship.
- Apply critical analysis to current controversies and topics in criminal justice.
- Synthesize disparate informational sources about criminal justice issues, policies or theories into synergistic and cogent understandings.
- Recognize and understand the various perspectives of controversial issues in crime and justice.
- Understand and explain the importance of the study of and application of ethics, morals and values in Criminal Justice.
- Formulate applications of the general field of ethical study to specific, criminal justice-related topics.
- Employ ethical reflection and judgment to quickly emerging situations commonly found in the practice of law enforcement, correctional and court workgroup duties.
- Develop familiarity with professional codes of ethics employed in the field.
- Learn and appreciate the role of human diversity in Criminal Justice.
- Demonstrate how diversity in human experience and culture applies to the professional practice of criminal justice in law enforcement, court processes, and corrections.
- Recognize the historical and contemporary roles of racial, ethnic, religious, gender/sex identity, LGBTQ+, and lifestyle intolerance in human violence and aggression.
- Examine and increase awareness of diversity challenges such as racial profiling, violence against women, and hate crime legislation and enforcement.


## Related Links

Criminology and Criminal Justice - Community Corrections, BA Program Page (https://www.sru.edu/academics/majors-and-minors/criminology-and-criminal-justice-community-corrections/)

Criminology and Criminal Justice Department Page (https:// www.sru.edu/academics/colleges-and-departments/cla/departments/ criminology-and-criminal-justice/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

| Summary* |  |
| :--- | ---: |
| Code $\quad$ Title | Hours |
| Rock Studies Requirements | 42 |
| Modern Language Requirements | $0-9$ |
| Other Basic Requirments | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 40 |

Concentration Requirements ..... 15 ..... 15
Electives
Electives

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Science Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Science Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |
| Thematic Thread |  |  |
| Select 12 Credits (p.1378) ${ }^{2}$ |  | 12 |
| Subtotal |  | 12 |
| Total Hours |  | 42 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 from at least 3 Categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete 0-9 credits | $0-9$ |  |
| Total Hours | $\mathbf{0 - 9}$ |  |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal A |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major Requirements

- 20 major credits must be taken at SRU or PASSHE
- 20 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :---: | :---: | :---: |
| Core Courses |  |  |
| CRIM 110 | Introduction to Criminology \& Criminal Justice Systems ${ }^{1}$ | 3 |
| CRIM 115 | Proseminar ${ }^{1}$ | 1 |
| CRIM 253 | American Policing ${ }^{1}$ | 3 |
| CRIM 263 | Introduction to Criminal Procedure ${ }^{1}$ | 3 |
| CRIM 273 | American Corrections ${ }^{1}$ | 3 |
| CRIM 301 | Theoretical Criminology ${ }^{1}$ | 3 |
| CRIM 317 | Statistical Methods in Criminology and Criminal Justice ${ }^{1}$ | 3 |
| CRIM 318 | Research Methods in Criminology and Criminal Justice ${ }^{1}$ | 3 |

Select one of the following: 3

| CRIM 105 or SOWK 105 | Human Diversity ${ }^{\text {1,2 }}$ |  |
| :---: | :---: | :---: |
|  | Human Diversity |  |
| SOWK 107 | Cultural Competency and Human Services 1 |  |
| CRIM 345 | Juvenile Delinquency | 3 |
| CRIM 408 | Capstone: Ethics and Criminal Justice ${ }^{1}$ | 3 |
| Subtotal |  | 31 |

## Major Electives

Select nine credits from the following:

| CRIM 190 | Experimental $^{1}$ |
| :--- | :--- |
| CRIM 198 | Selected Topics $^{1}$ |
| CRIM 290 $^{1}$ | Experimental $^{1}$ |
| CRIM 298 | Selected Topics $^{1}$ |
| CRIM 302 | Sexual Violence $^{1}$ |
| CRIM 321 | Criminal Justice interventions 1 $^{1}$ |
| CRIM 322 | Criminal Justice Interventions 2 $^{1}$ |
| CRIM 326 | Victimology $^{1}$ |


| CRIM 327 | Criminal Justice and the Multicultural Community ${ }^{1}$ |
| :---: | :---: |
| CRIM 328 | Transnational Crime \& Justice ${ }^{1}$ |
| CRIM 343 | Criminal Investigations ${ }^{1}$ |
| CRIM 360 | Police and Society ${ }^{1}$ |
| CRIM 368 | Comparative Criminal Justice Abroad ${ }^{1}$ |
| CRIM 370 | Inside Out Views of Criminal Justice Issues 1 |
| CRIM 380 | Women \& the Criminal Justice System ${ }^{1}$ |
| CRIM 390 | Experimental ${ }^{1}$ |
| CRIM 398 | Selected Topics ${ }^{1}$ |
| CRIM 402 | Forensic Behavior:Crime and the Individual 1 |
| CRIM 404 | Applied Criminal Procedures ${ }^{1}$ |
| CRIM 405 | White Collar Crime ${ }^{1}$ |
| CRIM 414 | Criminal Justice Policy ${ }^{1}$ |
| CRIM 416 | Community Corrections ${ }^{1}$ |
| CRIM 422 | The Death Penalty ${ }^{1}$ |
| CRIM 450 | Internship ${ }^{1}$ |
| CRIM 468 | Crime \& Media ${ }^{1}$ |
| CRIM 498 | Selected Topics ${ }^{1}$ |
| SOWK 334 | Clinical Perspectives on DSM Diagnoses ${ }^{1}$ |
| Subtotal |  |
| Total Hours |  |

1 Course counts for 50\% of Major requirements and Major GPA.
2 Course can be counted as a Rock Studies Requirement, but earns credit only once toward your 120-credits total.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

Community Corrections Concentration (Optional)

| Code | Title | Hours |
| :--- | :--- | ---: |
| Core Courses |  |  |
| CRIM 416 | Community Corrections | 3 |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |
| or SOWK 334 | Clinical Perspectives on DSM Diagnoses |  |
| SOWK 355 | Social Work Practice with Individuals | 3 |
| SOWK 356 |  <br> Families | 3 |
| PSYC 321 | Drugs and Behavior | 3 |
| Total Hours |  | $\mathbf{1 5}$ |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year long.
2. High-Impact Practice (HIP) designated classes (CRIM 343 and CRIM 370)
3. Student-faculty research
4. Student leadership opportunities -CRIM Club, Alpha Sigma Honors Society
5. Service-learning classes
6. Internships
7. Volunteering opportunities

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
CRIMINOLOGY \& CRIMINAL JUSTICE - BA (5 70)
w/optional Community Corrections Concentration (507C)
This program is effective as of Fall 2020.
Revised 10.29.2021
UCC 03.05.20

## RECOMMENDED FOUR-YEAR PLAN

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| Learning Community Cluster |  |  |
| CRIM 110 | Introduction to Criminology \& Criminal Justice Systems | 3 |
| CRIM 105 or SOWK 105 | Human Diversity or Human Diversity | 3 |
| INDS 101 | FYRST Seminar | 1 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
|  | Hours | 16 |
| Spring |  |  |
| CRIM 115 | Proseminar | 1 |
| CRIM 253 | American Policing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Social Science Inquiry (p. 1378) |  | 3 |
|  | Hours | 16 |


| Second Year |  |  |
| :---: | :---: | :---: |
| Fall |  |  |
| CRIM 263 | Introduction to Criminal Procedure | 3 |
| MODL 101 | Modern Language Requirement | 3 |
| SCI 101 | Science of Life | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
| Free elective (or Minor Class) |  | 3 |
| Declare a Thematic Thread ${ }^{3}$ |  |  |
|  | Hours | 15 |
| Spring |  |  |
| CRIM 273 | American Corrections | 3 |
| CRIM 301 | Theoretical Criminology | 3 |
| MODL 102 | Modern Language Requirement | 3 |
| SCI 102 | Understanding the Physical World | 3 |
| $\begin{aligned} & \text { PSYC } 276 \\ & \text { or SOWK } 334 \end{aligned}$ | Introduction to Abnormal Psychology or Clinical Perspectives on DSM Diagnoses | 3 |
|  | Hours | 15 |


| Third Year |  |  |
| :--- | :--- | ---: |
| Fall |  |  |
| CRIM 317 | Statistical Methods in Criminology and <br>  <br> Criminal Justice | 3 |
| CRIM 345 | Juvenile Delinquency | 3 |
| SOWK 355 | Social Work Practice with Individuals | 3 |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| MODL 103 | Modern Language Requirement | 3 |
|  | Hours | $\mathbf{1 5}$ |
| Winter |  |  |
| PSYC 321 | Drugs and Behavior | 3 |
|  | Hours | $\mathbf{3}$ |


| Spring |  |  |
| :--- | :--- | ---: |
| CRIM 318 | Research Methods in Criminology and <br> Criminal Justice | 3 |
| CRIM 416 | Community Corrections (CRIM Elective (1)) <br> 2 | 3 |
| SOWK 356 |  <br> Families | 3 |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| Free Elective (or Minor class) | 3 |  |
| Hours | $\mathbf{1 5}$ |  |

## Fourth Year

Fall
CRIM Elective (2) ${ }^{2}$ 3
CRIM Elective (3) ${ }^{2} \quad 3$
Thematic Thread Requirement (p. 1378) 3
Free Elective (or Minor Class) 3

| Free Elective (or Minor Class) | 3 |
| :---: | ---: |
| Hours | 15 |

Spring
CRIM $408 \quad$ Capstone: Ethics and Criminal Justice 3
Thematic Thread Requirement (p. 1378) 3

Free Elective (or Minor Class)

| Hours | 15 |
| :--- | ---: |
| Total Hours** | 125 |

1 Course offered in multiple subjects; cannot take course in first major subject
2 Students' choice for CRIM electives are CRIM 190, CRIM 198, CRIM 290, CRIM 298, CRIM 321, CRIM 322, CRIM 326, CRIM 327, CRIM 328, CRIM 343, CRIM 360, CRIM 370, CRIM 380, CRIM 390, CRIM 398, CRIM 402, CRIM 404, CRIM 405, CRIM 414, CRIM 416, CRIM 422, CRIM 450, CRIM 468, CRIM 498 or SOWK 334
3
Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/ ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UIdNTi4u)to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.
- CRIM BA Major requires 40 Credit Hours ( 31 Core+9 Elective Credits)
- Community Corrections Concentration
- CRIM 416, PSYC 276 OR SOWK 334, SOWK 355, SOWK 356, and PSYC 321
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 570
Revised date: 09.13.2021

## Criminology, Minor

The criminology minor is an 18-credit hour program, which provides students with an overview of criminology (the study of criminal behavior) and the criminal justice system. Specifically, it includes classes in criminological theory, policing, courts and adjudication, corrections, juvenile delinquency, and various elective courses (i.e., criminal investigations, police and society, the death penalty, crime and the media, victimology, and white-collar crime). This minor is an excellent accompaniment to majors in psychology, social work, parks and resource management, homeland security, corporate security, and chemistry.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Criminology, Minor Program Page (https://www.sru.edu/academics/ majors-and-minors/criminology-and-criminal-justice/)

Criminology and Criminal Justice Department Page (https:// www.sru.edu/academics/colleges-and-departments/cla/departments/ criminology-and-criminal-justice/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.
- Students graduating in December 2015 and thereafter may only use 6 credits from their academic major towards the completion of an academic minor.
- Minor students will require pre-requisite overrides for all 300-level CRIM courses and above. Please contact your CRIM Adviser.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Core Requirements |  |  |
| CRIM 110 | Introduction to Criminology \& Criminal Justice Systems | 3 |
| Select one of the following: |  | 3 |
| CRIM 253 | American Policing |  |
| CRIM 263 | Introduction to Criminal Procedure |  |
| CRIM 273 | American Corrections |  |
| CRIM 301 | Theoretical Criminology | 3 |
| CRIM 345 | Juvenile Delinquency | 3 |
| Electives |  |  |
| Select two of the following: |  | 6 |
| CRIM 190 | Experimental |  |
| CRIM 198 | Selected Topics |  |
| CRIM 290 | Experimental |  |
| CRIM 298 | Selected Topics |  |
| CRIM 317 | Statistical Methods in Criminology and Criminal Justice |  |
| CRIM 318 | Research Methods in Criminology and Criminal Justice |  |
| CRIM 321 | Criminal Justice interventions 1 |  |
| CRIM 322 | Criminal Justice Interventions 2 |  |
| CRIM 326 | Victimology |  |
| CRIM 327 | Criminal Justice and the Multicultural Community |  |
| CRIM 328 | Transnational Crime \& Justice |  |
| CRIM 343 | Criminal Investigations |  |
| CRIM 360 | Police and Society |  |
| CRIM 380 | Women \& the Criminal Justice System |  |
| CRIM 390 | Experimental |  |
| CRIM 398 | Selected Topics |  |
| CRIM 402 | Forensic Behavior:Crime and the Individ |  |
| CRIM 404 | Applied Criminal Procedures |  |
| CRIM 405 | White Collar Crime |  |
| CRIM 408 | Capstone: Ethics and Criminal Justice |  |
| CRIM 414 | Criminal Justice Policy |  |
| CRIM 416 | Community Corrections |  |
| CRIM 422 | The Death Penalty |  |


| CRIM 450 | Internship |
| :--- | :--- |
| CRIM 468 | Crime \& Media |
| CRIM 490 | Independent Study |
| CRIM 498 | Selected Topics |

## Total Hours

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN CRIMINOLOGY (80E)
This program is effective as of Fall 2020.
Revision date: 07.08.2020
UCC 03.05.2020

## Dance

| Chair | Secretary | Location | Department <br> Phone |
| :--- | :--- | :--- | :--- |
| Ms. Jennifer | Melanie Martin | 232 West <br> Keller | Performing Arts <br> Building |

Department Web Site URL (https://www.sru.edu/academics/colleges-and-departments/cla/departments/dance/)
Department Fact Sheet URL (https://www.sru.edu/documents/programs/ factsheets/undergraduate/dance-fs.pdf)

Slippery Rock University is an accredited member of the National Association of Schools of Dance and the only Department of Dance in the State System of Higher Education.

For more information on the degree programs in the Department of Dance (BA, BFA - Performance and Choreography, BFA - Business Administration) and procedures for admission, please click here (https:// www.sru.edu/academics/colleges-and-departments/cla/departments/ dance/programs/) and select the appropriate degree program.

## Faculty

Nora Ambrosio

## Professor

Dance
M.F.A., Smith College
B.A., University of Maryland

## Jesse Factor

Instructor
Dance
M.F.A., The University of Iowa
B.F.A., New York University

## Andrew Hasenpflug

Instructor
Dance
M.M., University of Cincinnati
B.F.A., SUNY

## Jennifer Keller-Birkes

Professor
Dance
M.F.A., Arizona State University
B.A., Connecticut College

## Jaya Mani

Instructor
Dance
M.S., Slippery Rock University
B.A., University of Madres

## Ursula Payne

Professor
Dance
M.F.A., Ohio State University
B.A., Slippery Rock University

Melissa Teodoro
Professor
Dance
M.F.A., University of Hawaii
M.A., University of California
B.A., Pontificia Universidad Javeriana

## Lindsay Viatori

Associate Professor
Dance
M.F.A., University of Iowa
B.F.A., University of North Carolina School of the Arts

## Programs

All first-year students who enter SRU in the Summer and Fall terms of 2019 and after will follow Rock Studies. Students who entered SRU before Spring 2019 will follow Liberal Studies. All new transfer students beginning Summer 2019 and after will follow Liberal Studies. We anticipate that transfer students will begin to enter under Rock Studies during the Summer/Fall term of 2021.

## Majors

- Dance, Bachelor of Arts (BA) (p. 800)
- Dance, Bachelor of Fine Arts (BFA) - Concentration in Performance and Choreography (p. 804)
- Dance, Bachelor of Fine Arts (BFA) - Concentration in Studio Ownership and Dance Entrepreneurship (p. 808)


## Minors

- Dance: Pedagogy, Minor (p. 810)
- Dance: Performance, Minor (p. 811)


## Courses

## DANC 100 - Dance: Art and Culture

This course will include a comprehensive overview of dance as an art form, entertainment, and social activity. A broad historic overview of dance will be presented, as well as information on the role of the dancer choreographer, and audience. Specific dance genres such as ballet, modern, jazz, and world dance will also be the focus of this course Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## DANC 101 - Wellness for Dancers

The first component of this course will cover body conditioning methods, injury prevention and basic concepts of anatomy and kinesiology. Additionally this course may include, but not be limited to, nutrition, weight management, fitness and strength practices specific to the needs of the dancer. The second component of this course will cover time/ stress management, study skills and an introductory approach to writing techniques and research methodologies. Students may be required to attend on-campus dance events and some may require a fee.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Dance.
DANC 125 - Experiencing Dance: Techniques and Styles
DANC 125 is an introduction to dance and movement techniques. It will focus on establishing a basic foundation in dance with emphasis on correct alignment, technique, and the unique stylistic components of a variety of dance genres. In this course, students will develop the ability to demonstrate and synthesize technical corrections, understand the elements of dance (space, time and energy), and perceive dance as an art form. This course may include dance genres such as Modern Dance, Jazz, Ballet, Improvisation, African-Based Dance, Social Dance, and dance-related practices such as Yoga and Pilates. In addition to the technical component of the course, students will examine the historic, cultural and social contexts in which these dance styles have been developed. DANC 125 is a blended course. The dance technique component takes place in the dance studio; the lecture/research/ reading/writing component takes place online. This course may be repeated up to nine credits. Prerequisites and Notes: Students may be required to attend dance events and some may require a fee.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Being American, Body and Self, Creating Art, Healthy Body, Mind \& Environment, Political Arts, Transfer Thread Completion Course

## DANC 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## DANC 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
DANC 195 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## DANC 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
DANC 199 - LMA/Performance Techniques
This course will focus on the theoretical and practical application of Laban Movement Analysis and dance performance skills. Students will be encouraged to explore the relationship between research, concept development and personal style through the performance of original solo choreography. Students may be required to attend on and off campus dance events; some may require of fee.

Prerequisites: DANC $200^{\text {D }}$ and DANC $224^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment is limited to students with a program in Dance, Dance

- Performance, Dance- Business Administration, Dance or Dance:

Performance.

## DANC 200 - Dance Composition I

This course will be an introduction to the elements of dance (space, time, and energy) and to the practice, theory, and art of dance composition. Experiences in solo and ensemble compositions will focus on improvisation, and lead to understanding content, aesthetics, creating, structuring, and ultimately choreography. Students will be required to attend certain dance events for this course; some may require a fee.

Prerequisite: DANC $224^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Enrollment limited to students with department of Dance.

## DANC 216 - Principles of Dance Production

This course provides knowledge and practical hands-On experience in the many aspects of dance production and performance. A broad range of topics will prepare students for producing their work and collaborating with other artists and disciplines. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment is limited to students with a program in Dance, Dance - Performance, Dance- Business Administration, Dance or Dance: Performance.

## DANC 220 - Modern Dance Technique: Level II

This second level course is a furthering and continuation of setting the foundation established in DANC 125, providing students with the information and the tools needed to extend technique, skills and performance quality. Course may be repeated for a maximum of 6 credits. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Dance.

## DANC 221 - Ballet II

This course advances students' technical and performance foundation and will allow students to expand their knowledge of ballet technique and vocabulary. Students will examine, analyze and apply technical and performance concepts relative to classical ballet and its history. This course may be repeated for a maximum of 6 credits. Course content will be different each semester. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Dance.

## DANC 222- Jazz Dance II

This course advances students' foundational knowledge of jazz dance by improving and refining their skills in performance, technique, and stylistic approaches to the genre. In addition to experiencing several jazz dance movement styles, students will identify, define, and analyze key concepts of jazz dance. This course may be repeated for a total of 6 credits. Course content will be different each semester. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with department of Dance.

DANC 223 - Creative Dance for Children
The intellectual and artistic impact of Creative Dance for Children, in both academic and studio settings serves as the primary focus of this course. Laban-based movement principles will be explored through creative and improvisational experiences leading to lesson and unit plans in dance addressing a variety of academic areas suitable for use by classroom teachers and dance specialists. Students will gain an appreciation for dance as an art form and an understanding of how dance can address several academic disciplines most appropriate for inclusion in a grade K-5 curriculum. State and national dance standards will be addressed with additional experiences in lesson planning, pedagogy and peer teaching. Additionally, basic knowledge in anatomy and body mechanics, nutrition and wellness, and an awareness of safe/unsafe practices in the home, school and community will be provided. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Education, Transfer Thread Completion Course, WellBeing of Children and Youth

## DANC 224 - Improvisation

This course provides the student opportunities to explore the processes of discovering, creating and performing movement spontaneously through experimental practice, creative research, and writing. Course content will vary each semester. Students will be required to attend certain dance events for this course; some may require a fee. The course may be repeated for a maximum of 6 credits.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with department of Dance.

## DANC 271 - Dance Technology

This hands-on course will explore the interactive possibilities between the live dancer and the projected image, as well as thetemporal and spatial possibilities of dance on film. Students will direct, shoot and edit original video compositions using current technology, as well as perform in a multi-media work.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment is limited to students with a program in Dance, Dance

- Performance, Dance- Business Administration, Dance or Dance: Performance.


## DANC 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## DANC 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## DANC 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.
Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-3
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with department of Dance.

## DANC 299 - Dance Rehearsal and Production

This course provides dance majors and minors the opportunity to receive credit for the numerous hours spent in rehearsals and performances. Students will select specific activities and then develop a contract for completion of responsibilities and evaluation. Tasks may include choreographer, rehearsal assistant, rehearsal and performance as a dancer, publicity or as member of the technical support staff during performance (stage manager, running crew, usher, lighting). This course requires an audition and/or permission of the faculty member of record. Both 299 and 499 may be repeated up to 4 credits.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment is limited to students with a program in Dance, Dance

- Performance, Dance- Business Administration, Dance or Dance: Performance.


## DANC 300 - Dance Composition II

This second level of dance composition will include creating choreography based on specific forms of movement and music, emotion oriented and movement oriented dances, dances utilizing props and sets, and site-specific dance. Students will be required to attend certain dance events for this course; some may require a fee.

Prerequisite: DANC $200^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Enrollment is limited to students with a program in Dance, Dance

- Performance, Dance- Business Administration, Dance or Dance:

Performance.

## DANC 305 - Society and Social Dance

This course will examine the relationship between social dance and the social, political and cultural climate of the society in which the specific dance forms were created and performed. Emphasis will be placed on 20th century American social dance forms and styles. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Building a Healthy Society, Body and Self, Creating Art, Transfer Thread Completion Course

## DANC 318 - Dance in the Political World

Through various critical lenses, this course analyzes the choreographic production of influential dance makers in a variety of geographic areas through the present day. This course is anchored on the term choreography and its multiple meanings, ranging from orchestrated movement performed on a proscenium stage to organized movements and actions of bodies in everyday life. This course is structured to permit the student to view dance through a variety of theoretical lenses. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Political Arts, Transfer Thread Completion Course, Transnational Culture

## DANC 320 - Modern Dance Technique: Level III

This third level course requires the student with an established foundation in modern dance to extend their knowledge and acquire additional understanding of technical material and performance quality. Course may be repeated for a maximum of 6 credits. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1 may not enroll.
Enrollment limited to students with department of Dance.
DANC 321 - Ballet III
This course advances the competencies gained in DANC 221; movements and combinations increase in complexity and difficulty to further extend technique and performance ability. In addition to classical ballet, contemporary ballet vocabulary and aesthetics will be introduced, along with examining theories of classical and contemporary ballet. This course may be repeated for a maximum of 6 credits. Course content will be different each semester. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1 may not enroll.
Enrollment limited to students with department of Dance.
DANC 322 - Jazz Dance III
This course advances the competencies gained in DANC 222; movements combinations build in complexity and difficulty through experiencing a broad range of jazz dance periods and styles. Students will analyze the technique and choreography of key jazz dance figures and aesthetics within the larger jazz dance continuum. This course may be repeated for a total of 6 credits. Course content will be different each semester. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1 may not enroll.
Enrollment limited to students with department of Dance.

## DANC 323-Teaching of Dance

This course is designed to introduce students to the theory and practice of sound dance teaching and ethical teaching practices. Information on critical thinking, teaching and learning styles, imagery, diversity, and assessment will be explored. Students' abilities and strengths as teachers will be assessed and evaluated throughout the semester. This course must be taken with Field Experience, DANC 350, which allows the students to have practical teaching experiences. Students will be required to attend certain dance events for this course; some may require a fee.

Prerequisites: DANC $223^{\mathrm{D}}$ and DANC $350^{* D}$ and DANC $326^{\mathrm{D}}$ (may be taken concurrently).
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students with department of Dance.

## DANC 324 - Music for Dance

This course is designed to provide students with information regarding music for dance performance, production, and accompaniment. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1 or Freshman 2 may not enroll.
Enrollment is limited to students with a program in Dance, Dance

- Performance, Dance- Business Administration, Dance or Dance:

Performance.

## DANC 326 - Dance Kinesiology

This course includes the study of human movement specific to dance, with emphasis on the anatomical principles and the laws of physics as they apply to dance technique and performance. The course includes structural and neuromuscular analyses including individual analysis of alignment, muscular imbalances, body types, conditioning needs and movement behavior. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Dance.

## DANC 350 - Field Experience in Dance Technique

Field Experience provides the opportunity for students to teach in private studios, recreation centers and/or the public/private school systems. To be taken concurrently with DANC 323. Students will be required to attend certain dance events for this course; some may require a fee.

Prerequisites: DANC $223^{\mathrm{D}}$ and DANC $323^{* D}$ and DANC $326^{\mathrm{D}}$ (may be taken concurrently).
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students with department of Dance.

## DANC 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## DANC 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## DANC 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## DANC 399-Repertory

This course provides students with an in-depth experience in an aspect of scholarly research, performance experience and/or creative process. This course may be repeated for a total of 6 credits. Course content will vary each semester the course is offered. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment is limited to students with a program in Dance, Dance

- Performance, Dance- Business Administration, Dance or Dance:

Performance.

## DANC 419 - Dance in Contemporary Times

This course examines specific genres and historical developments in dance in the 20th and 21 st centuries. The aesthetics and philosophies of leading dance artists will be explored. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Dance, Dance

- Performance, Dance- Business Administration, Dance or Dance:

Performance.

## DANC 420 - Modern Dance Technique: Level IV

This fourth level course is for the student who demonstrates a strong technical foundation, and accurately performs dance movements and combinations consistently. Course may be repeated for a maximum of 6 credits. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Dance.

## DANC 421 - Ballet IV

This fourth level pre-professional course advances the competencies gained in DANC 321 and is for the student who demonstrates a strong technical foundation and accurately performs both classical and contemporary ballet material with consistency while implementing artistic choices. Students will connect and evaluate their understanding of the history of ballet to contemporary issues. This course may be repeated for a maximum of 6 credits. Course content will be different each semester. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Dance.

## DANC 422 - Jazz Dance IV

This fourth level pre-professional course advances the competencies gained in DANC 322 and is for the student who demonstrates a strong technical foundation and accurately performs a broad range of jazz dance styles and repertory with consistency, personal style, and implementing artistic choices. Students will analyze the political and social undercurrent of jazz dance in America. This course may be repeated for a total of 6 credits. Course content will be different each semester. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1 or Freshman 2 may not enroll.
Enrollment limited to students with department of Dance.
DANC 424 - Contemporary Partnering
This course investigates the techniques of Contact Improvisation to develop contemporary partnering. Students will be required to attend certain dance events for this course; some may require a fee.

Prerequisite: DANC $224^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 2
Term(s) Typically Offered: Offered Fall Terms Even
Students with a semester level of Freshman 1 or Freshman 2 may not enroll.

Enrollment is limited to students with a program in Dance, Dance

- Performance, Dance- Business Administration, Dance or Dance: Performance.


## DANC 425 - Senior Capstone I: Dance Research

Advanced level research, writing, and discussions will lead to the development and presentation of the student's senior project. Readings and discussions on dance philosophy, aesthetics, leadership, and arts advocacy will be the basis of this course. Practical experiences in resume and grant writing, graduate school applications, interviews, and career planning will be covered.

Prerequisite: DANC $326^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2, Junior 1, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students in the BA 5153, BFA 5353, BFA 5354 or BFA 5355 programs.

## DANC 426 - Modern Dance Technique: Level V

This fifth level course is for students who can demonstrate total integration of technique and performance, including sensitivity to aesthetic concepts. Students will focus on the following: a continual refinement and advancement in the level and knowledge of technique, quality of performance, and aesthetic concepts; a clear understanding of dance as a profession and demonstrated professionalism and maturity. Course may be repeated for a maximum of 6 credits. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Dance.

## DANC 428 - Modern Dance Technique: Level VI

This sixth level modern dance course is for the student who can execute technique and performance at an advanced level and knows, understands, and can demonstrate dance theory and concepts. This course is for the dancer who is at the pre-professional level. Course may be repeated for a maximum of 6 credits. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students with department of Dance.

## DANC 430 - BFA Capstone II: Performance, Choreography, and Entrepreneurship

This BFA capstone course will include advanced-level research, writing, and discussions, and will lead to the development, production, and presentation of the student's senior project. The course will include practical, theoretical, philosophical, and artistic resources applicable to a professional career in dance or related field, and include an emphasis on the University's Student Learning Outcomes.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment limited to students in the BFA 5353, BFA 5354 or BFA 5355 programs.

## DANC 450 - Dance Internship

Supervised placement and research in an appropriate agency. For further information, contact the Department of Dance. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-9
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Dance, Dance

- Performance, Dance- Business Administration, Dance or Dance: Performance.


## DANC 490 - Independent Study

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## DANC 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## DANC 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.
Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Dance, Dance - Performance, Dance- Business Administration, Dance or Dance: Performance.

DANC 499- Dance Rehearsal and Production
This course provides dance majors and minors the opportunity to receive credit for the numerous hours spent in rehearsals and performances. Students will select specific activities and then develop a contract for completion of responsibilities and evaluation. Tasks may include choreographer, rehearsal assistant, rehearsal and performance as a dancer, publicity or as member of the technical support staff during performance (stage manager, running crew, usher, lighting). This course requires an audition and/or permission of the faculty member of record. Both 299 and 499 may be repeated up to 4 credits.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students with department of Dance.

## Dance, Bachelor of Arts (BA) Dance - Bachelor of Arts

The Bachelor of Arts degree in Dance provides superior education in performance, choreography, and teaching, with additional components of wellness for dance, dance technology, and intercultural experience, preparing students for their chosen profession and entrepreneurial role in society.

This nationally renowned and rigorous program provides a comprehensive dance education that is compatible with other academic disciplines for students desiring a double major. The BA in dance can be completed in four years or on a compressed 3-year accelerated schedule.

## Bachelor of Arts in Dance: 40-42 credits

The BA program attracts a diverse population of students who are interested in a well-rounded program that allows for multiple performance and choreography opportunities, including both live and virtual (dance for the camera) performances. In addition to the many performing and choreography opportunities, Dance BA students will learn to expand and perfect artistic and research abilities through various courses in technique, performance, choreography, dance history, wellness for dance and teaching. Dance BA students complete a capstone course in the senior year, ensuring a well-rounded education relevant for dance professionals in the $21^{\text {st }}$ century. Our graduates are enjoying multilayered careers in dance, including dance company members, dance teachers and professors, independent dance artists, wellness and fitness specialists, art administrators, adaptive dance instructors, costume and lighting designers, and other related careers.

The application and synthesis of practice and theory competencies are required for employment in the dance field. It is recommended that BA students be enrolled in a minimum of one technique class per semester. Competency based assessments will be used to determine level of proficiency, advancement in technique and performance, and synthesis of knowledge. The systematic assessment procedures developed by the dance faculty were created in conjunction with the National Association of Schools of Dance standards for professional degree programs. By the end of the final year, BA dance students must demonstrate the following technical proficiency requirements:

[^23]
## Program Learning Outcomes

- Choreography: Create and organize movement into artistic and aesthetic choreography.
- Communication and Critical Thinking: Demonstrate the ability to communicate and think critically in the areas of performance, choreography, and teaching
- Cultural Diversity: Synthesize the social, political, and artistic role of dance in world cultures.
- Degree Program Writing Competency: Demonstrate writing that is clear, cohesive, and relevant to the dance field, utilizing appropriate vocabulary, grammar, research, and citation methods.
- Teaching: Organize the knowledge, skills, aesthetics and art of dance into effective, ethical and responsible teaching practices.
- Technique: Demonstrate mastery of the core concepts in dance technique and performance in DANC 420 (modern dance technique IV)
- Wellness: Students will apply dance wellness principles in the areas of performance, teaching, and choreography.


## Related Links

Dance, BA Program Page (https://www.sru.edu/academics/majors-and-minors/dance-bachelor-of-arts/)

Dance Department Page (http://www.sru.edu/academics/colleges-anddepartments/cla/departments/dance/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher Overall GPA: 2.0 or higher

## Summary*

| Title | Hours |
| :--- | ---: |
| Code | 42 |
| Rock Studies Requirements | $0-9$ |
| Modern Language Requirement | $0-3$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $41-42$ |
| Major Requirements | 36 |
| Electives |  |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: | 3 |  |

[^24]

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete 0-9 credits | $0-9$ |  |
| Total Hours | $\mathbf{0 - 9}$ |  |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | $\mathbf{0 - 3}$ |

## Computer Competency

Code Title Hours

Demonstrate "computer competency" by one of the following: 0-3
Pass Computer Competency Exam OR
Select one of the following at SRU or another post-secondary institution:

CPSC 100 Introduction to Computing for Liberal Arts
CPSC 110 Computer Concepts
CPSC 130 Introduction to Computing and
Programming

PE 202
Technology for Wellness
Total Hours

## Major Requirements

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :---: | :---: | :---: |
| Dance Core |  |  |
| DANC 101 | Wellness for Dancers ${ }^{1}$ | 3 |
| DANC 199 | LMA/Performance Techniques ${ }^{1}$ | 3 |
| DANC 200 | Dance Composition ${ }^{1}$ | 3 |
| DANC 216 | Principles of Dance Production ${ }^{1}$ | 3 |
| DANC 223 | Creative Dance for Children ${ }^{1}$ | 3 |
| DANC 224 | Improvisation ${ }^{1}$ | 3 |
| DANC 298 | Selected Topics ${ }^{1}$ | 2 |
| DANC 323 | Teaching of Dance ${ }^{1}$ | 3 |
| DANC 324 | Music for Dance ${ }^{1}$ | 3 |
| DANC 326 | Dance Kinesiology ${ }^{1}$ | 3 |
| DANC 350 | Field Experience in Dance Technique ${ }^{1}$ | 1 |
| DANC 419 | Dance in Contemporary Times ${ }^{1}$ | 3 |
| DANC 420 | Modern Dance Technique: Level IV ${ }^{1}$ | 2 |
| DANC 425 | Senior Capstone I: Dance Research ${ }^{1}$ | 3 |
| Subtotal |  | 38 |

## Additional Core Requirements

Select 3 or 4 credits from one of the following groups:
Group 1: Dance Theory and Practice (Technique)
Select two of the following courses bringing your total BA degree to 42 credit hours:


1 Course counts for $50 \%$ of Major requirements and Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Competency Based Requirements for the BA in Dance Degree Program of Study

Competency based assessments will be used to determine level of proficiency, advancement in technique and performance, and synthesis of knowledge. The systematic assessment procedures developed by the
dance faculty were created in conjunction with the National Association of Schools of Dance standards for liberal arts degree programs. By the end of the final year, BA dance students must demonstrate the following technical proficiency requirements:

- Level IV in Modern Dance (required)
- Level III in Ballet (recommended)
- Level III in Jazz Dance (recommended)


## Co-Curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Career education and development
2. Field experiences
3. Guest artist residencies and repertory experiences
4. High-impact practice (HIP) courses and activities
5. International study programs (short-term, semester)
6. Internships
7. Residential dance companies
8. Service opportunities
9. Student-faculty research and creative projects
10. Student leadership development and opportunities
11. Summer dance intensives and workshops

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Dance - BA (5153)
This program is effective as of Fall 2020.
Revision date: 07.09.2021
UCC 03.02.2021

## Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall | Wellness for Dancers |  |
| DANC 101 | Modern Dance Technique: Level II $^{1}$ | 3 |
| DANC 220 | Ballet II $^{1}$ | 2 |
| DANC 221 | Jazz Dance II (Or Computer Competency $^{\text {Requirement) }}$ | 2 |
| DANC 222 | University Seminar |  |


| Spring |  |  |
| :---: | :---: | :---: |
| DANC 224 | Improvisation | 3 |
| DANC 216 | Principles of Dance Production | 3 |
| DANC 220 | Modern Dance Technique: Level II ${ }^{1}$ | 2 |
| DANC 221 | Ballet II ${ }^{1}$ | 2 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| ENGL 104 | Critical Reading | 3 |
| Determine additional 3-4 credits of core requirements from one of these groups: |  | 3-4 |
| Dance Theory and Practice (Technique); Composition and Technology Social and Historical Perspectives. These courses will be listed as electives in upcoming semesters ${ }^{5}$ |  |  |
|  | Hours | 19-20 |
| Second Year |  |  |
| Fall |  |  |
| DANC 200 | Dance Composition I | 3 |
| DANC 298 | Selected Topics | 2 |
| DANC 320 | Modern Dance Technique: Level III ${ }^{1}$ | 2 |
| Select one of the following: |  | 2-3 |
| DANC 271 | Dance Technology ${ }^{6}$ |  |
| DANC 222 | Jazz Dance II |  |
| DANC 321 | Ballet III |  |
| MATH 117 | Quantitative Reasoning | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
| Social Science Inquiry (p. 1378) |  | 3 |
| Note: Taking more than 18 credits requires an additional fee |  |  |
| Declare a Thematic Thread ${ }^{3}$ |  |  |
|  | Hours | 18-19 |
| Spring |  |  |
| DANC 199 | LMA/Performance Techniques | 3 |
| DANC 223 | Creative Dance for Children | 3 |
| $\begin{aligned} & \text { DANC } 299 \\ & \text { or DANC } 499 \end{aligned}$ | Dance Rehearsal and Production or Dance Rehearsal and Production | 1 |
| DANC 320 | Modern Dance Technique: Level III ${ }^{1}$ | 2 |
| DANC 324 | Music for Dance | 3 |
| Select one of the following: |  | 3 |
| DANC 305 | Society and Social Dance (Thread) |  |
| DANC 318 | Dance in the Political World (Thread) |  |
| SCI 101 | Science of Life | 3 |
|  | Hours | 18 |
| Third Year |  |  |
| Fall |  |  |
| DANC 420 | Modern Dance Technique: Level IV | 2 |
| Select one of the following: |  | 2 |
| DANC 222 | Jazz Dance II (Elective) ${ }^{1}$ |  |
| DANC 321 | Ballet III (Elective) ${ }^{1}$ |  |
| Select one of the following: |  | 3-5 |
| DANC 399 | Repertory (Elective) |  |
| DANC 499 | Dance Rehearsal and Production (Elective) |  |
| DANC 271 | Dance Technology ${ }^{6}$ |  |


| DANC 300 | Dance Composition II |  |
| :---: | :--- | ---: |
| DANC 318 | Dance in the Political World $^{4}$ |  |
| DANC 424 | Contemporary Partnering $^{4}$ |  |
| SCI 102 | Understanding the Physical World | 3 |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| Language Requirement | 3 |  |
| Hours | $\mathbf{1 6 - 1 8}$ |  |

## Spring

| DANC 326 | Dance Kinesiology | 3 |
| :--- | :--- | :--- |
| DANC 419 | Dance in Contemporary Times | 3 |

DANC 420 Modern Dance Technique: Level IV ${ }^{1} 2$
Language Requirement 3
Thematic Thread Requirement (p. 1378) 3

Thematic Thread Requirement (p. 1378) 3

| DANC 499 | Dance Rehearsal and Production (Elective) | $\mathbf{1}$ |
| :--- | :--- | ---: |
| Hours | $\mathbf{1 8}$ |  |

## Fourth Year

Fall

| DANC 323 | Teaching of Dance | 3 |
| :---: | :---: | :---: |
| DANC 350 | Field Experience in Dance Technique | 1 |
| DANC 425 | Senior Capstone I: Dance Research | 3 |
| DANC 499 | Dance Rehearsal and Production (Elective) | 1 |
| Select a Dance Technique Elective (Ballet, Contemporary Partnering, Jazz Modern) |  |  |
| Language Requirement or Dance Elective |  |  |
| Thematic Thread Requirement (p. 1378) |  |  |
| December Graduation |  |  |
|  | Hours | 16 |
|  | Total Hours** |  |

1

Proficiency Requirement
Course offered in multiple subjects; cannot take course in first major subject.
Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread.
DANC 318 and DANC 424 offered every other year

- 2nd year spring offerings: Technique OR DANC 305
- 3rd year fall offerings: Upper Division Technique OR DANC 318 OR DANC 271/DANC 300
- 3rd year spring offerings: Upper Division Technique OR DANC 305
- 4th year fall offerings: Upper Division Technique OR DANC 318 OR DANC 271/DANC 300

If DANC 271 is taken, an additional 2 upper division credits must be completed in order to meet the 20 upper division required credits.

- The BA in dance 1 st majors will need to make sure they take a Rock Studies Thread that has DANC 305 or DANC 318. Students will need to register for DANC 305 or DANC 318 and this will count in Rock Studies and the major. *If dance is a student's second major then they need to select group 3: Social and Historical Perspectives to complete their requirements.
- Proficiency Requirements allows the student to develop and demonstrate progression toward reaching departmental technique proficiency requirements and meeting performance competency
accreditation standards for dance majors pursuing an undergraduate liberal arts degree.
- Students must successfully complete DANC 420 Modern IV level competency in order to graduate.
- Dance Elective courses provides opportunities for students to choose the coursework appropriate to their individual needs and interests; while remaining consistent with the goals and objectives of the liberal arts degree program being followed.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 5153
Revision date: 08.03.2021

## Dance, Bachelor of Fine Arts (BFA) - Concentration in Performance and Choreography

The BFA (Performance and Choreography) is for the student who aspires to be a dance performer and choreographer in concert dance or the entertainment industry. In addition, this degree will prepare you for teaching different levels of students and populations in various settings. This degree provides excellent dance education and advanced training in performance, choreography, and teaching, along with additional areas of wellness for dancers, cultural dance, and dance technology.

## Bachelor of Fine Arts in Dance (Performance and Choreography): Core Credits: 65 <br> Business Concentration Credits: 15

The BFA program with a concentration in Performance and Choreography attracts a diverse population of students who are interested in a wellrounded program that allows for multiple performance and choreography opportunities, including both live and virtual (dance for the camera) performances. In addition to the many performing and choreography opportunities, Dance BFA students will complete courses up to the advanced level in performance, choreography, teaching, and various dance techniques. In addition, courses such as Wellness for Dancers, Dances of Selected Cultures, Dance Technology, Dance History courses, and two Senior Capstone courses ensure a well-rounded education relevant for dance professionals in the 21 st century. Our graduates are enjoying a variety of careers in dance, including dance company members, dance teachers and professors, and independent dance artists. This program will prepare BFA majors for a wide range of dance careers in performance and choreography.

All BFA students must be enrolled in a minimum of one technique class per day each semester. Competency based assessments will be used to determine level of proficiency, advancement in technique and performance, and synthesis of knowledge. The systematic assessment procedures developed by the dance faculty were created in conjunction with the National Association of Schools of Dance standards for professional degree programs. By the end of the final year,

BFA Performance and Choreography students must demonstrate the following technical proficiency requirements:

## - Level VI in Modern Dance

- Level IV in Ballet and Jazz Dance


## Program Learning Outcomes

- Business Proficiency for BFA students with Concentration in Business Administration: Demonstrate proficiency in dance business enterprises.
- Choreography: Create and organize movement into artistic and aesthetic choreography.
- Communication and Critical Thinking: Demonstrate the ability to communicate and think critically in the areas of performance, choreography, and teaching.
- Cultural Diversity: Synthesize the social, political, and artistic role of dance in world cultures.
- Degree Program Writing Competency: Demonstrate writing that is clear, cohesive, and relevant to the dance field, utilizing appropriate vocabulary, grammar, research, and citation methods.
- Teaching: Organize the knowledge, skills, aesthetics, and art of dance into effective, ethical and responsible teaching practices.
- Technique: Demonstrate mastery of the core concepts in dance technique and performance in DANC 428 (modern dance technique VI).
- Wellness: Apply dance wellness principles in the areas of performance, teaching, and choreography.


## Related Links

Dance - Performance and Choreography, BFA Program Page (https:// www.sru.edu/academics/majors-and-minors/dance-bachelor-of-finearts/)

Dance Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/dance/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 3.0 or higher
Overall GPA: 2.0 or higher

## Summary*

Code Title Hours
Rock Studies Requirements 42
Other Basic Requirements 0-3
Computer Competency 0-3
Major/Concentration Requirements 78

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

| Rock Studies Requirements |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: |  | 3 |


| COMM 200 | Civil Discourse: Theory \& Practice |
| :---: | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |
| Subtotal |  |

Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378)
Humanities Inquiry
Select 3 Credits (p. 1378) 3
Social Science Inquiry
Select 3 Credits (p. 1378) 3

| Natural Sciences Inquiry |  |
| :--- | :--- |
| SCI $101 \quad$ Science of Life |  |

Physical Sciences Inquiry
SCI $102 \quad 3$
Subtotal 15

## Thematic Thread

| Select 12 Credits $(\mathrm{p} .1378)^{2}$ | 12 |
| :--- | :--- |
| Total Hours | $\mathbf{4 2}$ |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |

PE 202
Technology for Wellness
Total Hours

## Major/Concentration Requirements

- 40 major credits must be taken at SRU or PASSHE
- 40 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :---: | :---: | :---: |
| Dance Core |  |  |
| DANC 101 | Wellness for Dancers ${ }^{1}$ | 3 |
| DANC 199 | LMA/Performance Techniques ${ }^{1}$ | 3 |
| DANC 200 | Dance Composition I ${ }^{1}$ | 3 |
| DANC 216 | Principles of Dance Production ${ }^{1}$ | 3 |
| DANC 223 | Creative Dance for Children ${ }^{1}$ | 3 |
| DANC 224 | Improvisation ${ }^{1}$ | 3 |
| DANC 300 | Dance Composition II ${ }^{1}$ | 3 |
| DANC 301 | Dance of Selected Cultures ${ }^{1}$ | 2 |
| DANC 323 | Teaching of Dance ${ }^{1}$ | 3 |
| DANC 324 | Music for Dance ${ }^{1}$ | 3 |
| DANC 326 | Dance Kinesiology ${ }^{1}$ | 3 |
| DANC 350 | Field Experience in Dance Technique ${ }^{1,2}$ | 1 |
| DANC 419 | Dance in Contemporary Times ${ }^{1}$ | 3 |
| DANC 420 | Modern Dance Technique: Level IV ${ }^{1}$ | 2 |
| DANC 424 | Contemporary Partnering ${ }^{1}$ | 2 |
| DANC 425 | Senior Capstone I: Dance Research ${ }^{1}$ | 3 |
| DANC 426 | Modern Dance Technique: Level ${ }^{1}$ | 2 |
| DANC 428 | Modern Dance Technique: Level VI ${ }^{1}$ | 2 |
| DANC 430 | BFA Capstone II: Performance, Choreography, and Entrepreneurship ${ }^{1}$ | 3 |

Additional Advanced Technique Proficiency
DANC $421 \quad$ Ballet IV ${ }^{1} \quad 2$
DANC 422 Jazz Dance IV ${ }^{1} \quad 2$

Subtotal ..... 4

Historical Perspectives and Experimental Approaches:
Select two of the following: ${ }^{3}$

| DANC 271 | Dance Technology $^{1}$ |
| :--- | :--- |
| DANC $^{1} 305$ | Society and Social Dance $^{1}$ |
| DANC 318 | Dance in the Political World $^{1}$ |
| DANC 390 | Experimental $^{1}$ |

Subtotal

## Performance and Choreography Concentration:

Select up to 18 credits from a combination of the following courses (at least 2 credits must come from the Rehearsal and Production and Repertory block): ${ }^{4}$
Modern III-VI

| DANC 320 | Modern Dance Technique: Level III ${ }^{5}$ |
| ---: | :--- |
| DANC 420 | Modern Dance Technique: Level IV ${ }^{5}$ |
| DANC 426 | Modern Dance Technique: Level V ${ }^{5}$ |
| DANC 428 | Modern Dance Technique: Level VI ${ }^{5}$ |
| Ballet III-IV |  |
| DANC 321 | Ballet III $^{5}$ |
| DANC 421 | Ballet IV $^{5}$ |


| DANC 322 | Jazz Dance III ${ }^{5}$ |  |
| :---: | :---: | :---: |
| DANC 422 | Jazz Dance IV ${ }^{5}$ |  |
| Rehearsal and Performance, and Repertory |  |  |
| At least 2 credits must come from this block: |  |  |
| DANC 299 | Dance Rehearsal and Production (Repeatable up to 4 credits) |  |
| DANC 399 | Repertory (Repeatable up to 4 credits) |  |
| DANC 499 | Dance Rehearsal and Production (Repeatable up to 4 credits) |  |
| Electives: |  |  |
| DANC 271 | Dance Technology |  |
| DANC 305 | Society and Social Dance |  |
| DANC 318 | Dance in the Political World |  |
| DANC 450 | Dance Internship |  |
| DANC 490 | Independent Study |  |
| DANC 495 | Workshop |  |
| Subtotal |  | 18 |
| Total Hours |  | 78 |

1 Course counts for $50 \%$ of Major requirements and Major GPA
2 Taken concurrently with DANC 323.
3 One must be DANC 305 or DANC 318.
4 One must be DANC 430.
5 May only count once in this block

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

Note: All BFA-Performance/Choreography students are encouraged to take NLPA 220 Intro to Non-Profit Leadership; BIOL 216 Anatomy \& Physiology I/Lab as Rock Studies courses.

## Concentration in Performance and Choreography (PECH)

All BFA students must be enrolled in a minimum of one technique class per day each semester. Competency based assessments will be used to determine level of proficiency, advancement in technique and performance, and synthesis of knowledge. The systematic assessment procedures developed by the dance faculty were created in conjunction with the National Association of Schools of Dance standards for professional degree programs. By the end of the final year, BFA Performance and Choreography students must demonstrate the following technical proficiency requirements:

## - Level VI in Modern Dance

- Level IV in Ballet and Jazz Dance


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Career education and development
2. Field Experiences
3. Guest artist residencies and repertory experiences
4. High-Impact Practice (HIP) courses and activities
5. International study programs (short-term, semester)
6. Internships
7. Residential Dance Companies
8. Service opportunities
9. Student-faculty research and creative projects
10. Student leadership development and opportunities
11. Summer dance intensives and workshops

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Dance - BFA (5355)
Concentration in Performance and Choreography (PECH)
This program is effective as of Fall 2020.
Revision date: 1.14.2022
UCC 10.16.2021

## Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall | Wellness for Dancers |  |
| DANC 101 | Modern Dance Technique: Level II | 3 |
| DANC 220 | Ballet II | 2 |
| DANC 221 | Jazz Dance II | 2 |
| DANC 222 | Critical Writing | 2 |
| ENGL 102 | University Seminar ${ }^{1}$ | 3 |
| SUBJ 139 | Hours | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) | $\mathbf{3}$ |  |
|  | $\mathbf{1 8}$ |  |

## Spring

| DANC 216 | Principles of Dance Production | 3 |
| :--- | :--- | :--- |
| DANC 220 | Modern Dance Technique: Level II | 2 |
| DANC 221 | Ballet II | 2 |
| DANC 224 | Improvisation | 3 |
| DANC 299 | Dance Rehearsal and Production | 1 |
| ENGL 104 | Critical Reading | 3 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |


| Computer Competency Requirement | $0-1$ |
| :---: | ---: |
| Hours | $17-18$ |

## Second Year

Fall
DANC 200
Dance Composition I

| DANC 298 | Selected Topics | 2 |
| :--- | :--- | :--- |
| DANC 320 | Modern Dance Technique: Level III | 2 |
| DANC 321 | Ballet III (Elective) | 2 |
| MATH 117 | Quantitative Reasoning | 3 |
| Humanities Inquiry (p. 1378) | 3 |  |
| Social Science Inquiry (p. 1378) $^{\text {Declare a Thematic Thread }}{ }^{\text {2 }}$ | 3 |  |


|  | Hours | $\mathbf{1 8}$ |
| :--- | :--- | ---: |
| Spring |  |  |
| DANC 199 | LMA/Performance Techniques | 3 |
| DANC 320 | Modern Dance Technique: Level III | 2 |
| DANC 321 | Ballet III | 2 |
| DANC 322 | Jazz Dance III | 2 |
| DANC 324 | Music for Dance | 3 |
| SCI 101 | Science of Life | 3 |
| Select one of the following: ${ }^{3}$ | $1-3$ |  |


| DANC 305 | Society and Social Dance (Possible Thread <br> Requirement) |
| :--- | :--- |
| DANC 390 | Experimental |
|  | Hours |

Third Year
Fall

| DANC 300 | Dance Composition II | 3 |
| :--- | :--- | ---: |
| DANC 399 | Repertory (Elective) | 2 |
| DANC 420 | Modern Dance Technique: Level IV | 2 |
| DANC 421 | Ballet IV (Concentration Requirement) | 2 |
| DANC 424 | Contemporary Partnering | 2 |
| DANC 499 | Dance Rehearsal and Production | 1 |
| SCI 102 | Understanding the Physical World | 3 |
| Select one of the following: ${ }^{3}$ | $1-3$ |  |


| DANC 271 | Dance Technology |  |
| :---: | :---: | :---: |
| DANC 318 | Dance in the Political World (Possible Thread Requirement) |  |
|  | Hours | 16-18 |
| Spring |  |  |
| DANC 321 or DANC 421 | Ballet III or Ballet IV | 2 |
| DANC 322 or DANC 422 | Jazz Dance III or Jazz Dance IV | 2 |
| DANC 223 | Creative Dance for Children | 3 |
| DANC 326 | Dance Kinesiology | 3 |
| DANC 419 | Dance in Contemporary Times | 3 |
| DANC 420 | Modern Dance Technique: Level IV | 2 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 18 |

## Fourth Year

Fall

| DANC 271 | Dance Technology (May fulfill <br> concentration elective) | 3 |
| :--- | :--- | ---: |
| DANC 323 | Teaching of Dance | 3 |
| DANC 350 | Field Experience in Dance Technique | 1 |
| DANC 421 | Ballet IV (Advanced Technique Proficiency <br> Requirement) | 2 |


| DANC 425 | Senior Capstone I: Dance Research | 3 |
| :---: | :---: | :---: |
| DANC 426 | Modern Dance Technique: Level V | 2 |
| DANC 499 | Dance Rehearsal and Production | 1 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 8 |
| Spring |  |  |
| DANC 421 | Ballet IV (Recommended Elective) | 2 |
| DANC 422 | Jazz Dance IV (Advanced Technique Proficiency Requirement) | 2 |
| DANC 428 | Modern Dance Technique: Level VI (Advanced Technique Proficiency Requirement) | 2 |
| DANC 430 | BFA Capstone II: Performance, Choreography, and Entrepreneurship | 3 |
| DANC 499 | Dance Rehearsal and Production (Elective) |  |
| Select one of the following: |  |  |
| DANC 450 | Dance Internship |  |
| DANC 490 | Independent Study |  |
| DANC 495 | Workshop |  |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 6 |
|  | Total Hours** |  |
| Course offered in m subject. |  |  |
| Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread. |  |  |
| In addition, majors must complete two of the following courses: DANC 271, DANC 305, DANC 318, and/or DANC 390. NOTE:is offered in the Spring semester only. is offered in Fall semesters of even years only. Please work with your academic adviser to plan accordingly. |  |  |
| The BFA in dance major will need to make sure they take a Rock Studies Thread that has DANC 305 or DANC 318. Students will need to register for DANC 305 or DANC 318 and this will count in Rock Studies and the dance major program. NOTE: DANC 305 is offered in Spring Semesters; DANC 318 is offered in Fall semesters of even years. |  |  |
| - All BFA students must progressively develop technical competencies and reach proficiency standards in Modern Dance to the highest Level of DANC 428-Modern VI in order to graduate. Additionally, BFAPECH students must reach level IV proficiency in Ballet and Jazz techniques. |  |  |
| - Dance Elective courses provides opportunities for students to choose the coursework appropriate to their individual needs and interests; while remaining consistent with the goals and objectives of the professional undergraduate degree program being followed. |  |  |

Major Code: 5153
Concentration Code: PECH
Revision date: 01.19.2021
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to
registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Dance, Bachelor of Fine Arts (BFA) Concentration in Studio Ownership and Dance Entrepreneurship

The BFA (Studio Ownership and Dance Entrepreneurship) is for the student who aspires to be a dance studio owner and operator, work as a dance company manager, public relations or marketing specialist, or other dance administrative position. In addition, this degree can lead you to any entrepreneurial endeavor in concert dance or entertainment. This degree provides excellent dance education and advanced training in the business of dance, performance, choreography, and teaching, along with additional areas of wellness for dancers, cultural dance, and dance technology.

## Bachelor of Fine Arts in Dance (Dance Studio Ownership and Dance Entrepreneurship): <br> Credits: 69 <br> Business Concentration Credits: 9

The BFA program with a concentration in Studio Ownership and Dance Ownership attracts a diverse population of students who are interested in a well-rounded program that has a strong business component and allows for multiple performance and choreography opportunities. In addition to business courses, Dance BFA students will complete courses up to the advanced level in performance, choreography, teaching, and various dance techniques. In addition, courses such as Wellness for Dancers, Dances of Selected Cultures, Dance Technology, Dance History courses, and two Senior Capstone courses ensure a well-rounded education relevant for dance professionals in the 21 st century. Our graduates are enjoying a variety of careers in dance, including arts administrators, dance studio owners, dance teachers, and independent dance artists. This program will prepare BFA majors for a wide range of dance entrepreneurial careers.

All BFA students must be enrolled in a minimum of one technique class per day each semester. Competency based assessments will be used to determine level of proficiency, advancement in technique and performance, and synthesis of knowledge. The systematic assessment procedures developed by the dance faculty were created in conjunction with the National Association of Schools of Dance standards for professional degree programs. By the end of the final year, BFA Dance Studio Ownership and Dance Entrepreneurship students must demonstrate the following technical proficiency requirements:

- Level VI in Modern Dance
- Level IV in Ballet or Jazz Dance


## Program Learning Outcomes

- Choreography: Create and organize movement into artistic and aesthetic choreography.
- Communication and Critical Thinking: Demonstrate the ability to communicate and think critically in the areas of performance, choreography, and teaching.
- Cultural Diversity: Synthesize the social, political, and artistic role of dance in world cultures.
- Degree Program Writing Competency: Demonstrate writing that is clear, cohesive, and relevant to the dance field, utilizing appropriate vocabulary, grammar, research, and citation methods.
- Teaching: Organize the knowledge, skills, aesthetics, and art of dance into effective, ethical and responsible teaching practices.
- Technique: Demonstrate mastery of the core concepts in dance technique and performance in DANC 428 (modern dance technique VI).
- Wellness: Apply dance wellness principles in the areas of performance, teaching, and choreography.


## Related Links

Dance - Studio Ownership and Dance Entreprensurship, BFA Program Page (https://www.sru.edu/academics/majors-and-minors/dance-bachelor-of-fine-arts/)

Dance Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/dance/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## CURRICULUM GUIDE

GPA REQUIREMENT
Major GPA: 3.0 or higher
Overall GPA: 2.7 or higher

## SUMMARY*

Code Title Hours
Rock Studies Requirements 42
Other Basic Requirements 0-3
$\begin{array}{ll}\text { Computer Competency } & \text { 0-3 }\end{array}$
$\begin{array}{ll}\text { Major/Concentration Requirements } & 78\end{array}$

* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## ROCK STUDIES REQUIREMENTS

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |


| Select 3 Credits (p. 1378) |
| :---: |
| Social Science Inquiry |
| Select 3 Credits (p. 1378) |
| Natural Sciences Inquiry |
| SCI 101 Science of Life |
| Physical Sciences Inquiry |
| SCI 102 Understanding the Physical World |
| Subtotal |
| Thematic Thread |
| Select 12 Credits (p.1378) ${ }^{2}$ |
| Total Hours |
| 1 Course offered in multiple subjects; cannot take course in first major subject. |
| ${ }^{2}$ From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above. |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate "computer competency" by one of the following: |  | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |

## Total Hours

## MAJOR/CONCENTRATION REQUIREMENTS

- 40 major credits must be taken at SRU or PASSHE
- 40 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :---: | :---: | :---: |
| Dance Core |  |  |
| DANC 101 | Wellness for Dancers ${ }^{1}$ | 3 |
| DANC 199 | LMA/Performance Techniques ${ }^{1}$ | 3 |
| DANC 200 | Dance Composition ${ }^{1}$ | 3 |
| DANC 216 | Principles of Dance Production ${ }^{1}$ | 3 |
| DANC 223 | Creative Dance for Children ${ }^{1}$ | 3 |
| DANC 224 | Improvisation ${ }^{1}$ | 3 |
| DANC 300 | Dance Composition II ${ }^{1}$ | 3 |
| DANC 301 | Dance of Selected Cultures | 2 |


| DANC 323 | Teaching of Dance ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| DANC 324 | Music for Dance ${ }^{1}$ | 3 |
| DANC 326 | Dance Kinesiology ${ }^{1}$ | 3 |
| DANC 350 | Field Experience in Dance Technique ${ }^{\text {1,2 }}$ | 1 |
| DANC 419 | Dance in Contemporary Times ${ }^{1}$ | 3 |
| DANC 420 | Modern Dance Technique: Level IV ${ }^{1}$ | 2 |
| DANC 424 | Contemporary Partnering ${ }^{1}$ | 2 |
| DANC 425 | Senior Capstone I: Dance Research ${ }^{1}$ | 3 |
| DANC 426 | Modern Dance Technique: Level ${ }^{1}$ | 2 |
| DANC 428 | Modern Dance Technique: Level $\mathrm{VI}^{1}$ | 2 |
| DANC 430 | BFA Capstone II:Performance, Choreography, \& Entrepreneurship | 3 |

Subtotal ..... 50

| Additional Advanced Technique Proficiency - choose one | $\mathbf{2}$ |  |
| :--- | :--- | :--- |
| DANC 421 | Ballet IV $^{1}$ |  |
| DANC 422 | Jazz Dance IV $^{1}$ | 2 |
| Subtotal |  | 2 |

Performance, Choreography \& Entrepreneurship Electives
Select up to 8 credits from any combination of the following
courses (at least 2 credits must be Rehearsal and Production (299/499) and/or Repertory (399):

| DANC 299 | Dance Rehearsal and Production ${ }^{1}$ |
| :--- | :--- |
| DANC 321 | Ballet III |
| DANC 322 | Jazz Dance III |
| DANC 399 | Repertory $^{1}$ |
| DANC 450 | Dance Internship |
| DANC 490 | Independent Study |
| DANC 495 | Workshop |
| DANC 499 | Dance Rehearsal and Production ${ }^{1}$ |

Subtotal 8

Historical Perspectives and Experimental Approaches:
Select two of the following:
DANC 271 Dance Technology ${ }^{1}$
DANC 305 Society and Social Dance ${ }^{1}$
DANC 318 Dance in the Political World ${ }^{1}$
DANC 390 Experimental ${ }^{1}$
Subtotal
6
Studio Ownership and Dance Entrepreneurship Concentration:
Select three of the following:

| ACCT 209 | Financial Accounting |
| :--- | :--- |
| BUSA 370 | Sustainable Entrepreneurship and <br> Innovation |
| COMM 231 | Introduction to Public Relations and IMC |
| COMM 307 | Social Media |
| MGMT 341 | Organizational Leadership |
| MGMT 351 | Organizational Behavior |
| MRKT 230 | Principles of Marketing |
| NLPA 305 | Financial Best Practices for Decision <br> Makers |
| Subtotal |  |
| Elective | Principles of Creative Advertising |


| COMM 235 | Introduction to Digital Design |
| :--- | :--- |
| COMM 407 | Social Media 2: Analytics and Strategies |
| ENGL 429 | Grant and Proposal Writing |
| MRKT 332 | Business Marketing |
| MRKT 333 | Consumer Behavior |
| NLPA 325 | Social and Ethical Issues in Philanthropy <br> and Fundraising |

## Total Hours

Course counts for $50 \%$ of Major requirements and Major GPA
2 Taken concurrently with DANC 323.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## CO-CURRICULAR AND EXPERIENTIAL LEARNING

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Career education and development
2. Field Experiences
3. Guest artist residencies and repertory experiences
4. High-Impact Practice (HIP) courses and activities
5. International study programs (short-term, semester)
6. Internships
7. Residential Dance Companies
8. Service opportunities

Student-faculty research and creative projects
10. Student leadership development and opportunities
11. Summer dance intensives and workshops

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Dance - BFA (5355)
Concentration in Studio Ownership and Dance Entrepreneurship (SODE)
This program is effective as of Fall 2021
Revised 02.16.2022
UCC 09.21.2021

## Dance: Pedagogy, Minor

The Dance Pedagogy Minor prepares you to integrate the teaching of dance into educational scenarios in the public or private sectors. Courses such as Wellness for Dancers, Creative Dance for Children, Teaching of Dance and Dance Composition, among other courses, will equip you with the necessary tools to be an effective, safe, and knowledgeable dance
teacher. Graduates with this minor may pursue careers in dance studios, pre-schools, elementary and middle schools, specialized arts camps, fitness centers, and youth and community centers. Students who major in Education, Psychology, Exercise Science, Theatre, Communication, Business Administration, Art and Music, among others, have successfully completed the Dance Pedagogy Minor and integrated their skills and knowledge into their professions. An audition is required for acceptance to the Dance Pedagogy Minor.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Dance: Pedagogy, Minor Program Page (https://www.sru.edu/academics/ majors-and-minors/dance-pedagogy-(minor)/)

Dance Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/dance/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Minor GPA: 2.00 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Core Requirements |  |  |
| DANC 100 | Dance: Art and Culture | 3 |
| or DANC 305 | Society and Social Dance |  |
| DANC 101 | Wellness for Dancers | 3 |
| DANC 125 | Experiencing Dance: Techniques and Styles | 3 |
| DANC 200 | Dance Composition I | 3 |
| DANC 223 | Creative Dance for Children | 3 |
| DANC 224 | Improvisation | 3 |
| DANC 323 | Teaching of Dance ${ }^{1}$ | 3 |
| DANC 350 | Field Experience in Dance Technique | 1 |
| Electives |  |  |
| Select 2 credits from | the following: | 2 |
| DANC 220 | Modern Dance Technique: Level II |  |
| DANC 221 | Ballet II |  |
| DANC 222 | Jazz Dance II |  |
| DANC 298 | Selected Topics |  |
| DANC 320 | Modern Dance Technique: Level III |  |
| DANC 321 | Ballet III |  |
| DANC 322 | Jazz Dance III |  |
| Total Hours |  | 24 |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

1 Highly recommended that students register for a dance technique class (DANC 220, DANC 221, DANC 222, DANC 298, DANC 320, DANC 321, or DANC 322) while completing this requirement.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN DANCE: PERFORMANCE (62B)
This program is effective as of Fall 2020
Revision date: 09.29.20
UCC 09.01.20

## Dance: Performance, Minor

The Dance Performance Minor enhances knowledge and execution of dance technique and performance. Studio practice classes in Modern Dance, Jazz Dance, Ballet, Improvisation, and Classical Indian Dance, among others, will prepare the student with a foundation of technical and creative tools needed to succeed in Musical Theatre and other areas. This minor is open to any student interested in furthering their technical and performance level in dance, and is particularly popular among BFA students in Musical Theatre. Graduates with this minor may pursue careers in Musical Theatre and other performance opportunities, dance studio teaching, and dance in the community. An audition is required for acceptance to the Dance Performance Minor.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Dance: Performance, Minor Program Page (https://www.sru.edu/ academics/majors-and-minors/dance-performance-(minor)/)

Dance Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/dance/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Minor GPA: 2.00 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Core Requirements |  | 3 |
| DANC 100 | Dance: Art and Culture | 3 |
| DANC 125 | Experiencing Dance: Techniques and Styles | 3 |
| DANC 224 | Improvisation | 3 |
| DANC 305 | Society and Social Dance | 8 |
| Electives |  |  |
| Select eight credits from the following: |  |  |
| DANC 220 | Modern Dance Technique: Level II |  |
| DANC 221 | Ballet II |  |
| DANC 222 | Jazz Dance II |  |
| DANC 298 | Selected Topics |  |
| DANC 320 | Modern Dance Technique: Level III |  |
| DANC 321 | Ballet III |  |
| DANC 322 | Jazz Dance III |  |
| DANC 399 | Repertory | $\mathbf{2 0}$ |
| DANC 422 | Jazz Dance IV |  |
| DANC 499 | Dance Rehearsal and Production |  |
| Total Hours |  |  |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN DANCE: PERFORMANCE (62A)
This program is effective as of Fall 2020
Revision date: 08.21.20
UCC 04.21.20

## English

| Chair | Assistant | Secretary | Location | Department <br> Phone |
| :--- | :--- | :--- | :--- | :--- |
| Chair |  |  |  |  |

Department Web Site URL (http://www.sru.edu/academics/colleges-anddepartments/cla/departments/english/)
Department Fact Sheet URL (https://www.sru.edu/documents/programs/ factsheets/undergraduate/english-fs.pdf)

Email: sruenglish@sru.edu

## Faculty

Melissa Borgia-Askey
Instructor
English
Ph.D., Indiana University of PA
M.S., Mercyhurst College
B.A., Edinboro University

## William Covey

Professor
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Ph.D., Purdue University
M.A., Northern Illinois University
B.A., Northern Illinois University

## Danette Dimarco

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Ph.D., Duquesne University
M.A., Duquesne University
B.A., Duquesne University

## Elizabeth Geib

Assistant Professor
English
Jessica Jopp
Instructor
English
M.F.A., University of Massachusetts
B.A., SUNY-Binghamton

Nicholas Katsiadas
Instructor
English
M.A., Slippery Rock University
B.A., Slippery Rock University

Christopher Kreiser
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Ph.D., Texas A \& M University
M.A., Texas A \& M University
B.A., Tulane University

## Joshua Lee

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Ph.D., University of Kentucky
M.A., Virginia Tech University
B.A., Virginia Tech University

Patrick McGinty
Instructor
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M.F.A., Portland State University
B.A., Denison University

## Julie Naviaux

Assistant Professor
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Ph.D., University of Kentucky
M.A., University of Louisville

## B.A., Bellarmine University

## Mark O'Connor

Associate Professor
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Ph.D., University of Houston
M.A., University of Houston
B.A., Georgetown University

Timothy Oldakowski
Associate Professor
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## Joan Peacock

Professor
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Ph.D., Southern Illinois University
M.A., University of North Texas
B.A., University of Madras (India)

## Derrick Pitard

Professor
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Ph.D., University of Rochester
M.A., University of Rochester
M.Phil., University of Oxford (England)
B.A., Washington and Lee University

## Timothy Ruppert

Assistant Professor

## English

Ph.D., Duquesne University
M.A., Duquesne University
B.A., Duquesne University

Lauren Shoemaker
Assistant Professor
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Ph.D., Indiana University
M.A., Gannon University
B.S., Slippery Rock University

John Silvestro
Assistant Professor
English
Ph.D., Miami University
M.A., Northern Kentucky University
B.S., Ohio University

Ryan Stryffeler
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Ph.D., Ball State University
M.A., Northern Arizona University
B.A., Hillsdale College

## Jason Stuart

Assistant Professor
English
Ph.D., Case Western Reserve University
M.A., Slippery Rock University

## B.A., Immaculata University

## Frederick White

Associate Professor
English
Ph.D., University of California at Los Angeles
M.A., Azusa Pacific University
B.A., Azusa Pacific University

## Krista White

Instructor
English
M.A., Youngstown State University
B.A., Youngstown State University

## Programs

All first-year students who enter SRU in the Summer and Fall terms of 2019 and after will follow Rock Studies. Students who entered SRU before Spring 2019 will follow Liberal Studies. All new transfer students beginning Summer 2019 and after will follow Liberal Studies. We anticipate that transfer students will begin to enter under Rock Studies during the Summer/Fall term of 2021.

## Majors

- English Literature, Bachelor of Arts (BA) - Concentration in Language and Literature (p. 822)
- English Literature, Bachelor of Arts (BA) - Concentration in Literary, Film, and Cultural Studies (p. 825)
- English Writing, Bachelor of Science (BS) - Concentration in Creative Writing (p. 828)
- English Writing, Bachelor of Science (BS) - Concentration in Professional Writing (p. 831)


## Minors

- Film and Media Studies, Minor (p. 834)
- Literature, Minor (p. 835)
- Writing, Minor (p. 835)


## Certificates

- Creative Writing and Book Arts, Certificate (p. 821)


## Courses

## ENGL 101 - Introduction to College Writing

In this course, students will investigate the purposes, both academic and non-academic, for writing and reading. Students will learn to identify meaning and draw inferences from context cues. They will develop increased writing fluency, clarity, and coherence; a fuller understanding if rhetorical principles, including invention, organization, and audience; improved strategies for revising and editing their prose, emphasizing the standards of edited American English; and an understanding of writing and reading as tools for learning and communication. Students should take this course before taking 102 by advisement, by their own choice, of if any one of the following applies to them: if the SAT Verbal score is 399 or less. if the SAT Writing score is 399 or less, or if the ACT Writing score is 11 or less.

## ENGL 102 - Critical Writing

Students will develop an understanding of rhetorical principles, including invention, organization, and audience, along with strategies for revising and editing their prose that emphasize clarity, coherence, and support. They will learn to develop positions on selected issues and questions and compose strongly supported and reasoned arguments regarding those issues and questions. Finally, they will learn basic information literacy skills, which will include how to locate, evaluate, and incorporate a variety of sources into their writing. They will use these to conduct independent research and integrate it into a written essay.

## Credits: 3

## ENGL 103 - College Writing II

In this course, students will learn to read academic and persuasive discourse in an active, critical manner; develop deliberated positions on selected issues and questions; compose strongly supported and reasoned arguments regarding those issues and questions; acquire information literacy skills, learning efficient and productive strategies for research from both print and online sources; and complete documented essays which effectively integrate source materials into a persuasive whole.

Prerequisite: ENGL $101^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3

## ENGL 104-Critical Reading

Students will refine and extend understanding of the rhetorical principles introduced in Critical Writing, applying them through the critical reading and analysis of complex texts. The texts to be considered will be drawn from a variety of media, genres, historical periods and diverse cultures. Students will examine the methods authors use in developing and expressing ideas to meet the needs of particular audiences and historical moments. They will practice extracting implied meanings, analyzing purpose, tone and style, and assessing casual factors and rhetorical effects to critical reading. As a reading, intensive course, English 104 will reinforce and refine compositional skills introduced in Critical Writing.

Prerequisites: ENGL $102^{\text {C }}$ or ENGL $103^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
ENGL 139-University Seminar
University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

Credits: 3

## ENGL 150 - Writing to Discover

An intensive writers' workshop where participants and facilitators work individually and in small groups to fine-tune the craft of their writing. Course may be repeated up to 4 credits.

Credits: 1

## ENGL 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
ENGL 195-Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## ENGL 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ENGL 204 - Composition and Rhetoric

Students will study rhetorical theory and its application in expository and persuasive forms of writing.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{C}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\mathrm{C}}$ or ENGL $220^{\circ}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
ENGL 205 - Introduction to Professional Writing
This course will introduce students to a variety of documents typically produced by writers in professional workplace. It will build essential skills for communicating with varied audiences with whom one interacts in a professional capacity. Students will develop collaborative skills, learn effective rhetorical strategies for document design, and refine writing for clarity, conciseness, and usage. The concept of organizational communities of practice will be introduced, as well as ethical considerations and responsibilities that accompany professional discourse.

Prerequisites: (ENGL $102^{\mathrm{C}}$ or ENGL $103^{\mathrm{C}}$ ) and (ENGL $104^{\mathrm{C}}$ or ENGL $210^{\mathrm{D}}$ or ENGL $220^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Environmental Problems Toolkit, Innovation, Entrepreneurship, and Positive Change, Transfer Thread Completion Course

ENGL 214- Introduction to Film Analysis
This course surveys contemporary and classic films, and introduces the practices of film analysis.

Prerequisites: ENGL $102^{\text {D }}$ and ENGL $104^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Transfer Thread Completion Course
ENGL 220 - Introduction to Literary and Cultural Studies
Students will read and write critically about literary texts (written and visual), cultural theory, and avenues of inquiry that theoretical approaches open for interpretation. Students will also learn how to locate and evaluate the resources that literary, historical, philosophical, and cultural studies depend on, and how to use disciplinary-specific methods of presenting and documenting work.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{\text {C }}$ )
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Transfer Thread Completion Course

## ENGL 225 - Introduction to Creative Writing

Introduction to Creative Writing offers students the opportunity to develop their abilities to write poetry, fiction, and creative nonfiction. Original student work is read and discussed in class and in conferences with the instructor. Reading of classic and contemporary literature supplements the study of one's own writing.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{\mathrm{C}}$ ) and (ENGL $104^{\mathrm{C}}$ or ENGL $210^{\mathrm{D}}$ or ENGL $220^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms

## ENGL 230 - Introduction to Linguistics and Grammar

Students will study language structure, including grammar (consisting of phonology, morphology, syntax and semantics) within psycholinguistic and sociohistorical linguistic approaches.
Prerequisites: ENGL $102^{\mathrm{C}}$ and (ENGL $210^{\mathrm{D}}$ or ENGL $104^{\mathrm{D}}$ or ENGL $220^{\mathrm{D}}$ or minimum score of 1 in 'English Major')
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms

## ENGL 235 - Writing for Non-Print Media

This course gives students the opportunity to explore how to write for non-print text like digital and social media, blogs, and film. Students will examine the use of audience, tone and purpose in these types of communication and its application in classrooms as well as in virtual communities.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{\text {C }}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms

## ENGL 242 - African-American Literature

Students will be introduced to literature written by black Americans as it pertains to the American experience.

Prerequisites: (ENGL $103^{\mathrm{C}}$ or ENGL $102^{\mathrm{C}}$ ) and (ENGL $210^{\mathrm{D}}$ or ENGL $104^{\mathrm{C}}$ or ENGL $220^{\text {D }}$ or ENGL $025^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Thematic Thread(s): African-American Studies, Becoming America, Art \& Society, Being American, Political Arts, Transfer Thread Completion Course

ENGL 243 - Literature of the Women's Movement
Students will be introduced to literature written by women authors from various periods who offer multidimensional perspective on the world. Prerequisite: ENGL 101 and 210 or English Major status.

Prerequisites: (ENGL $103^{\text {C }}$ or ENGL $102^{\text {C }}$ ) and (ENGL $210^{\text {D }}$ or ENGL $104^{\text {C }}$ or ENGL $220^{\text {D }}$ or ENGL $025^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Thematic Thread(s): Art \& Society, Being American, Gender and Diversity, Political Arts, Transfer Thread Completion Course, Violence

## ENGL 244 - Native American Literature

Students will be introduced to literature written by Native Americans as it pertains to the American experience.

Prerequisites: (ENGL $103^{\mathrm{C}}$ or ENGL $102^{\mathrm{C}}$ ) and (ENGL $210^{\mathrm{D}}$ or ENGL $104^{\mathrm{C}}$ or ENGL $220^{\text {D }}$ or ENGL $025^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Thematic Thread(s): Becoming America, Art \& Society, Political Arts, Transfer Thread Completion Course, Violence

ENGL 246 - U.S. Latino/a Literatures
Students will be introduced to literature written in English by Latino Americans as it pertains to the American experience.

Prerequisites: (ENGL $103^{\mathrm{C}}$ or ENGL $102^{\mathrm{C}}$ ) and (ENGL $210^{\mathrm{D}}$ or ENGL $104^{\mathrm{C}}$ or ENGL $220^{\text {D }}$ or ENGL $025^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Odd
Thematic Thread(s): Art \& Society, Being American, Political Arts, Transfer Thread Completion Course

## ENGL 248-Asian Literature

Students will study of such standard works as the Bhagavad-Gita, the writings of Confucius, and the Bible, in addition to contemporary works from India, China, Japan, and additional regions in Asia.

Prerequisites: (ENGL $103^{C}$ or ENGL $102^{C}$ ) and (ENGL $210^{\text {D }}$ or ENGL $104^{\text {C }}$ or ENGL $220^{\text {D }}$ or ENGL $025^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Thematic Thread(s): Art \& Society, Transfer Thread Completion Course, Transnational Culture

## ENGL 249 - Life/Lit/Service

Life/Lit/Service will explore selected literary and linguistic concernse.g. representations of place, class, ethnicity and/or dialectal variationthrough a service learning experience, in this case, an intensive week-long trip/service project at an off-campus location (e.g. San Francisco). This course may be repeated for up to three credits.

Credits: 1

## ENGL 260 - Elementary College Latin I

This course introduces students to the Latin language, concentrating on the study of basic forms, grammar, and introductory readings.

Credits: 3

## ENGL 261 - Elementary College Latin II

This course provides students further study of the Latin language, concentrating on the study of advanced grammar and more complex readings.

Prerequisite: ENGL 260 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
ENGL 288 - Classic Theatre Tour
The study of classic drama, climaxed by a trip to the Stratford Shakespeare Festival in Ontario, Canada; the Shaw Festival Theater; or other appropriate theaters in Toronto. Offered in the summer. Travel fee required

Prerequisites: (ENGL $103^{\text {C }}$ or ENGL $102^{\text {C }}$ ) and (ENGL $210^{\text {D }}$ or ENGL $104^{\text {C }}$ or ENGL $220^{\text {D }}$ or ENGL $025^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3

## ENGL 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
ENGL 295 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## ENGL 298-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{\text {C }}$ ) and (ENGL $210^{\text {D }}$ or ENGL $104^{\mathrm{C}}$ or ENGL $220^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-3
Term(s) Typically Offered: Offered Fall Terms
ENGL 300 - Queer Literature and Film
Queer Literature and Film is a survey of LGBT+ texts highlighting "queer" as both a term of identity and as a practice of analysis and critique. Students will read, watch, discuss, and analyze a variety of media produced by and about diverse queer writers, filmmakers, and activists from pre-Stonewall to current creators employing an intersectional understanding of how differences in race, class, and ability also impact experiences of gender and sexuality.

Prerequisites: ENGL $102^{\mathrm{D}}$ and ENGL $104^{\mathrm{D}}$ and ENGL $220^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1, Senior 2 or Sophomore 2.

## ENGL 305 - Practicum: Teaching Writing

Students will learn to develop, respond to, evaluate, and grade student writing and related tasks. They will also be introduced to concepts important in the tutoring of student writers, as well as introductory theory used in the teaching of writing. Required for certification to teach English in the secondary schools.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{C}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students in the BSED1 224 program.
ENGL 307 - Writing About Electronic Media and Film
This course develops writing and theoretical skills in an examination of issues in electronic and digital media studies. Students analyze issues and individual examples relating to such topics as the Internet, texting, television, film, video games, print and visual journalism, media convergence, and mass media economics.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{\text {C }}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## ENGL 308-Advertising Copywriting

Work in the writing and production of advertising copy.
Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{C}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\mathrm{D}}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 311 - Chaucer and Medieval Culture

Students will study works by Chaucer and his contemporaries within the context of later medieval culture.

Prerequisites: (ENGL $103^{\mathrm{C}}$ or ENGL $102^{\mathrm{C}}$ ) and (ENGL $025^{\mathrm{D}}$ or ENGL $104^{\mathrm{C}}$ or ENGL $210^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 312- Introduction to Shakespeare

Students will study selected comedies, tragedies and histories within their literary and historical contexts.

Prerequisites: (ENGL $103^{\text {C }}$ or ENGL $102^{\text {C }}$ ) and (ENGL $210^{\text {D }}$ or ENGL $104^{\text {C }}$ or ENGL $025^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Revolutions, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## ENGL 314 - European Film

Students will critically analyze films from countries in the European Union with particular emphasis on those with high annual film productivity such as France, United Kingdom, Italy, Spain, and Germany. The emphasis in on contemporary films, with optional contrast to historical trend-setting films.

Prerequisites: (ENGL $102^{C}$ or ENGL $103^{C}$ ) and (ENGL $104^{C}$ or ENGL $210^{C}$ or ENGL $220^{\circ}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

ENGL 315 - The Cinematic Review: Historical and Critical Writing
This course surveys significant motion pictures with emphasis upon the techniques of film making and film reviewing.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{\circ}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 316 - Asian Film

Students will critically analyze films from India and East Asia, with emphasis is on contemporary films from China and Japan. Also meets requirements for the Asian Studies Minor.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{\circ}$ ) and (ENGL $104^{\text {C }}$ or ENGL $025^{\text {D }}$ or ENGL $210^{\circ}$ or ENGL $220^{\circ}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Odd
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 317 - British Literature I

This course provides a comprehensive study of authors and literary works from the Old English period through Milton.

Prerequisites: (ENGL $104^{\mathrm{C}}$ or ENGL $210^{\mathrm{D}}$ or ENGL $220^{\mathrm{D}}$ or minimum score of 1 in 'English Major')
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 318 - British Literature II

This course provides a comprehensive survey of authors and literary works from the Civil War and Restoration through the early 20th century.
Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{\circ}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\mathrm{D}}$ or ENGL 220 ${ }^{\text {D }}$ )
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 319 - American Literature I

This course provides a comprehensive survey of American literature from Puritan times through Melville.

Prerequisites: (ENGL $103^{\text {C }}$ or ENGL $102^{\text {C }}$ ) and (ENGL $210^{\text {D }}$ or ENGL $104^{\text {C }}$ or ENGL $220^{\text {D }}$ or ENGL $025^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 320 - American Literature II

This course provides a comprehensive survey of American literature from Whitman through modern times.

Prerequisites: (ENGL $103^{\text {C }}$ or ENGL $102^{\text {C }}$ ) and (ENGL $210^{\text {D }}$ or ENGL $104^{\text {C }}$ or ENGL $220^{\text {D }}$ or ENGL $025^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 327 - Healthcare Writing

Students will develop the advanced literacy and research skills needed for writing successfully in the healthcare field. Working individually and in teams typical of medical practice, students will explore strategies for effective written and spoken interaction with both patients and colleagues. Coursework relies heavily on learning to use medical databases and provide students with the theories and additional tools necessary to translate medical information into presentations for both medical professionals and the general public.

Prerequisite: ENGL $102{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): 21 st Century Healthcare, Transfer Thread
Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 328 - Young Adult Literature

This course surveys literature for adolescents and young adults and is intended to cultivate book appreciation, improve book knowledge, and provide curriculum enrichment in intermediate, junior and senior high school libraries.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{\text {C }}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Transfer Thread Completion Course, Well-Being of Children and Youth
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 330 - Literary Publications \& Design

This course offers students a deeper understanding of print and production practices for students with critical and creative writing backgrounds. Students will study theories and models - both historical and contemporary - for print design, layout, typography and production environment, while applying such theory to the practice of publishing literary artifacts.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{C}$ ) and (ENGL $210^{\text {D }}$ or ENGL $104^{\text {C }}$ or ENGL $220^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in English, English
Literature, Engl Lit-Language \& Literature, Engl Lit-Literary\&Cult Studies, English Writing, English Writing-Professional or English Writing-Creative.
ENGL 331 - Historical Development of the English Language
Students will examine each historical period to discover the structure of the language, its spelling, vocabulary, syntax, and the influences of social conditions upon it.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{\text {C }}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\text {D }}$ or minimum score of 1 in 'English Major')
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 332 - Modern English Grammar and Syntax

This course provides a brief history of the English language and thorough study of traditional and transformational grammar with emphasis on syntax. Differences between prescriptive and descriptive grammar and problems of current usage are also considered.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{\text {C }}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\text {D }}$ or minimum score of 1 in 'English Major')
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 334 - Writing Community Stories

The course will prepare students to research and engage local communities as well as write a range of professional writing genres to engage those communities, particularly professional writing narratives. Students will learn research methods for studying their local communities. They will learn to study the community's discourse, collective issues, social norms, and larger narratives. Students will then learn to research, draft, and revise a range of writing genres and narratives that enable the students to engage and/or support their local communities.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.

## ENGL 335 - Writing for Video Games

In this course, students will learn to create the two types of writing essential to contemporary video games: storytelling and technical writing. Students will learn the essential skills of plot, character, and dialogue writing, enabling them to create the stories that players experience in video games. Students will also learn the skills of usability, plain language, and explanation writing, which they will use to create instructions and documentation for video games. By the end of the course, students will have produced a video-game narrative, an introductory setup for a video game, and instructions on how to modify the video game using the platform used to create the game.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.

## ENGL 336 - Second Language Acquisition

This course acquaints the prospective teacher with theories of second language acquisition (SLA). SLA surveys the processes of acquiring/ learning language including the following issues: sound systemphonemic inventory; words-lexicon; semantics; syntax; critical period for second language learning; linguistic creativity, competence and performance.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{\text {C }}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\text {D }}$ or minimum score of 1 in 'English Major')
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 338 - Creative Writing: Creative Nonfiction

This writing workshop provides the opportunity for students to develop their abilities in writing creative nonfiction. Original student work is read and discussed in class and in conferences with the instructor. Students will also read and analyze classic and contemporary creative nonfiction. This course may be repeated for up to six credits.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{C}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\text {D }}$ or minimum score of 1 in 'English Major') and ENGL $225^{\text {D }}$
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Food, Wellness \& Environment Across Cultures, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 339-Creative Writing: Fiction

This writing workshop provides the opportunity for students to develop their abilities in writing fiction. Original student work is read and discussed in class and in conferences with the instructor. Students will also read and analyze classic and contemporary fiction. This course may be repeated for up to six credits.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{C}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\text {D }}$ or minimum score of 1 in 'English Major') and ENGL $225^{\text {D }}$
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 340 - Creative Writing: Poetry

This writing workshop provides the opportunity for students to develop their abilities in writing poetry. Original student work is read and discussed in class and in conferences with the instructor. Students will also read and classic and contemporary poetry is assigned. This course may be repeated for up to six credits.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{\text {C }}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\text {D }}$ or minimum score of 1 in 'English Major') and ENGL $225^{\text {D }}$
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 346 - Writing the Graphic Novel

This creative writing workshop provides an opportunity for students to develop their abilities in creating graphic novels. Original student work is read and discussed in class as well as critiqued in conference with the instructor. Students will also read and analyze historic and contemporary graphic novels. This course may be repeated for up to six (6) credits.

Prerequisites: ENGL $102^{\mathrm{D}}$ and (ENGL $104^{\mathrm{D}}$ or ENGL $220^{\mathrm{D}}$ ) and ENGL $225^{\mathrm{D}}$ and (ART $105^{\mathrm{D}}$ or ART $205^{\mathrm{D}}$ or ART $305^{\mathrm{D}}$ or ART $106^{\mathrm{D}}$ or ART $206^{\mathrm{D}}$ or ART $306^{D}$ or ART $107^{D}$ or ART $207^{D}$ or ART $307^{D}$ or ART $108^{D}$ or ART $208^{D}$ or ART $308^{D}$ or ART $114^{D}$ or ART $214^{D}$ or ART $314^{D}$ or ART $213^{D}$ or ART $313^{D}$ or ART $413^{D}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 349-Creative Writing:Screenplay

Students enrolled in Creative Writing:Screenplay will learn how to write the Hollywood narrative screenplay. Students will develop a workable story and characters that show growth. They will then write a screenplay and develop a marketing plan to sell it.

Prerequisites: (ENGL $102^{\mathrm{C}}$ or ENGL $103^{\mathrm{C}}$ ) and (ENGL $104^{\mathrm{C}}$ or ENGL $210^{\mathrm{D}}$ or ENGL $220^{\text {D }}$ or minimum score of 1 in 'English Major') and ENGL $225^{\text {D }}$
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even

## ENGL 360 - Latin Language and Literature

This course focuses on classical and medieval Latin verse and prose, with a continuing review of grammar as necessary.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{C}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\text {D }}$ or minimum score of 1 in 'English Major') and ENGL $260^{\text {D }}$ and ENGL $261^{\text {D }}$
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 365 - Writing for the World Wide Web

This course examines the structure, form and rhetoric or writing for web environments.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{C}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\text {D }}$ or minimum score of 1 in 'English Major')
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 389-Stratford Shakespeare Tour

Students will study of the works and time of Shakespeare in cultural context. The trip concludes with travel to the Stratford Shakespeare Festival in Stratford, Ontario, Canada. Offered in the summer only. Travel fee required.

Prerequisites: (ENGL $103^{\text {C }}$ or ENGL $102^{\text {C }}$ ) and (ENGL $210^{\text {D }}$ or ENGL $104^{\text {D }}$ or ENGL $220^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 402 - World Literature

Students will critically read and analyze selected works by global writers beyond the U.S. and Britain.

Prerequisites: (ENGL $103^{\text {C }}$ or ENGL $102^{\text {C }}$ ) and (ENGL $210^{\text {D }}$ or ENGL $104^{\text {D }}$ or ENGL $220^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Art \& Society, Revolutions, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 403 - Literary and Cultural Theory

Students will study select literary and cultural theory from Plato to the present day, with application to critical analysis of the literary arts.
Prerequisites: (ENGL $103^{\mathrm{C}}$ or ENGL $102^{\mathrm{C}}$ ) and (ENGL $210^{\mathrm{D}}$ or ENGL $104^{\mathrm{C}}$ or ENGL $220^{\circ}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 409 - Professional English

ENGL 409 instructs upper-level English majors in the goals, audiences, sources, and methods for professionalization. In this course, students reflect on and define their individual undergraduate experiences and create a personal narrative from their experiences. Students will then identify and define a career field. By the end of the course, students will develop strategies for connecting their individual narrative to their specific desires for possible career fields.

Prerequisites: (ENGL $102^{\mathrm{C}}$ or ENGL $103^{\mathrm{C}}$ ) and (ENGL $104^{\mathrm{C}}$ or ENGL $210^{\mathrm{D}}$ or ENGL $220^{\circ}$ or minimum score of 1 in 'English Major')
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 410 - Literature of the Environment

This course encourages those interested in the rhetoric of science, nature writing, and environmentalism to pose informed questions regarding the language, rhetoric, images, and ideas found in significant poetry and prose, fiction and nonfiction, that concern the environment.

Prerequisites: (ENGL $103^{\text {C }}$ or ENGL $102^{\text {C }}$ ) and (ENGL $210^{\text {D }}$ or ENGL $104^{\text {C }}$ or ENGL $220^{\circ}$ ) or minimum score of 1 in 'English Major'
${ }^{\mathrm{C}}$ Requires minimum grade of C .
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd
Thematic Thread(s): Sustainability, Transfer Thread Completion Course Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 411-Science Fiction

Science Fiction situates the genre as a form of critique of the concept of the future. The course provides a literary and historical path for comprehending the genre's evolution. It engages students in cross-disciplinary conversations about scientific and technological advancements that inform narratives as well as establishes how metaphors of the alien drive science fiction's forecasts. The course highlights how science fiction shapes particular ways of seeing and enacts such modes through the study of diverse texts and application of concepts in projects about our future lives.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): The Future, Transfer Thread Completion Course Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.

## ENGL 429 - Grant and Proposal Writing

Students will review the research and rhetoric associated with writing successful grants and proposals.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{\circ}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{D}$ or ENGL $220^{\circ}$ or minimum score of 1 in 'English Major')
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd
Thematic Thread(s): Innovation, Entrepreneurship, and Positive Change, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 450 - Internship

Students will gain applied writing experience at a venue outside of the classroom.

Prerequisites: (ENGL $102{ }^{\text {C }}$ or ENGL $103^{\circ}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\circ}$ or minimum score of 1 in 'English Major')
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-12
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

ENGL 480 - Literature Seminar
The seminar focuses on a major author or pair of authors, a single literary genre, or a specific literary period.

Prerequisites: (ENGL $103^{\text {C }}$ or ENGL $102^{\circ}$ ) and (ENGL $210^{\text {D }}$ or ENGL $104^{\text {C }}$ or ENGL $220^{\circ}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
ENGL 490 - Independent Study
A program of supervised independent study. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.
Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{C}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\text {D }}$ or minimum score of 1 in 'English Major')
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
ENGL 491 - Senior Writing Project
Creative or expository writing projects.
Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{\text {C }}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\text {D }}$ or minimum score of 1 in 'English Major')
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 498- Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.
Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{C}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\text {D }}$ or minimum score of 1 in 'English Major')
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Creative Writing and Book Arts, Certificate

To access Certificate Requirements, please view the Curriculum Guide tab.

## Related Links

Creative Writing and Book Arts, Certificate Program Page (https:// www.sru.edu/academics/certificates/creative-writing-and-book-artscertificate/)

English Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/english/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Certificate GPA: 2.0 or higher

## Certificate Requirements

| Code <br> Required Courses: | Title | Hours |
| :--- | :--- | ---: |
| ENGL 225 | Introduction to Creative Writing | 6 |
| ENGL 330 | Literary Publications \& Design (capstone <br> course) |  |
| Elective Courses: |  | 6 |
| ART 105 | Basic Studio Drawing 1 |  |
| ART 107 | Basic Studio Photography 1 |  |
| ART 108 | Basic Studio Printmaking ${ }^{1}$ |  |
| ENGL 298 | Selected Topics |  |
| GES 205 | Cultural Geography |  |
| GES 331 | Economic Geography | $\mathbf{1 2}$ |
| HIST 205 | The Historian's Craft |  |
| GNDR 115 | Introduction to Gender Studies |  |
| Total Hours |  |  |

1 Upper level studio art courses (ART 205, ART 207, ART 208, ART 211, ART 213, ART 305- ART 311) may be substituted at the discretion of the English Department Chair.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## English Literature, Bachelor of Arts (BA) - Concentration in Language and Literature

Students pursuing a B.S. in Secondary Education must take the following courses within the Language and Literature track to fulfill NCATE and PDE requirements. These courses include: ENGL 204, ENGL 305, ENGL 307, and ENGL 328. Secondary Education majors should work closely with their academic advisers.

Students pursuing a B.A. in English: Language and Literature without the B.S. in Secondary Education may take approved electives. Choose from the following: ENGL 248, ENGL 298, ENGL 311, ENGL 410 or any course listed below that has not already been taken. Approval by academic adviser and department chair is required.

## Program Learning Outcomes

## English Literature - Language and Literature, BA

- Interaction with Diverse Literary Texts: Display knowledge of discipline specific content through written and oral interaction with diverse literary and cultural texts.
- Methods of Discipline Specific Analysis: Apply principle methods of discipline specific analysis, and understand the basic assumptions and theoretical constructs that guide criticism
- Literature and Language as Cultural Artifacts: Express how literature and language, as cultural artifacts, respond to and record the value systems of diverse cultures and human experiences


## Universal Program Outcomes

- Research Tools and Resources: Use the research tools and resources of the profession, integrate them effectively into interpretive arguments, and properly document sources according to professional standards.
- Knowledge of Technology: Display knowledge of technologies that support both written and oral communication.
- Degree Program Writing Competency - Understanding of the Writing Process : Understand the writing process to communicate ideas effectively to a variety of audiences.


## Related Links

English Literature - Language and Literature, BA Program Page (https:// www.sru.edu/academics/majors-and-minors/english-language-andliterature/)

English Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/english/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

## Summary*

| Title | Hours |
| :--- | ---: |
| Code | 42 |
| Rock Studies Requirements | $0-9$ |
| Modern Language Requirement | $0-3$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | 39 |
| Major/Concentration Requirements | 38 |
| Electives |  |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Sciences Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Sciences Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |
| Thematic Thread |  |  |
| Select 12 Credits (p.1378) ${ }^{2}$ |  | 12 |
| Total Hours |  | 42 |

${ }^{1}$ Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

| Code | Title |
| :--- | ---: |
| Complete $0-9$ credits | Hours |

Total Hours

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one | following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal A |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major/Concentration Requirements

- 20 major credits must be taken at SRU or PASSHE
- 20 major credits must be taken at the 300 level or above
- Students pursuing a B.S. in Secondary Education must take this course option to fulfill NCATE and PDE requirements: ENGL 204, ENGL 305, ENGL 307, ENGL 328 (by advisement for Ed. Majors).
- Students pursuing a B.A. in Language and Literature without the B.S. in Secondary Education may take the other designated courses in lieu of these. For electives, choose from among: ENGL 248 (Eastern Lit), ENGL 298 (Selected Topics), ENGL 311 (Chaucer), ENGL 410 (Lit of the Env), a course listed above that you have not already taken, or another course approved by your adviser and the department chair.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| ENGL 204 | Composition and Rhetoric ${ }^{1}$ | 3 |
| or ENGL 220 | Introduction to Literary and Cultural Studies |  |
| ENGL 312 | Introduction to Shakespeare ${ }^{1}$ | 3 |
| or ENGL 389 | Stratford Shakespeare Tour |  |
| ENGL 317 | British Literature ${ }^{1}$ | 3 |
| ENGL 318 | British Literature II ${ }^{1}$ | 3 |
| ENGL 319 | American Literature I ${ }^{1}$ | 3 |
| ENGL 320 | American Literature II ${ }^{1}$ | 3 |
| ENGL 402 | World Literature ${ }^{1}$ | 3 |
| ENGL 403 | Literary and Cultural Theory ${ }^{1}$ | 3 |
| Subtotal |  | 24 |

## Required English Courses

| ENGL 230 | Introduction to Linguistics and Grammar ${ }^{1}$ |
| :---: | :---: |
| ENGL 311 | Chaucer and Medieval Culture ${ }^{1}$ |
| ENGL 331 | Historical Development of the English Language ${ }^{1}$ |
| ENGL 332 | Modern English Grammar and Syntax ${ }^{1}$ |
| bitotal |  |

Required English Literature Course
Select one of the following:

| ENGL 242 | African-American Literature ${ }^{1}$ |
| :--- | :--- |
| ENGL 243 | Literature of the Women's Movement $^{1}$ |
| ENGL 244 | Native American Literature $^{1}$ |
| ENGL 246 | U.S. Latino/a Literatures ${ }^{1}$ |
| ENGL 248 | Asian Literature ${ }^{1}$ |
| Subtotal |  |

Subtotal3
Electives
Select any two English courses: ${ }^{2}$ ..... 6
Subtotal ..... 6
Total Hours ..... 39

1 Course counts for 50\% of Major requirements and Major GPA
2 Except for ENGL 102

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term) locations such as Italy, London and Canada
2. Student-faculty research
3. Career education and development
4. Internships
5. Community services experience through the national Writing in Schools program
6. Volunteer experience in literary magazine production

English Literature - BA (5 25)
Concentration in Language and Literature (LLIT)
This program is effective as of Fall 2019
Revised 7-2019
UCC RISP 2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information
on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar* | 1 |
| MATH 117 | Quantitative Reasoning | 3 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| MODL 101 | Modern Language Requirement | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
|  | Hours | 16 |
| Spring |  |  |
| ENGL 104 | Critical Reading | 3 |
| MODL 102 | Modern Language Requirement | 3 |
| SCI 101 | Science of Life | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
|  | Hours | 15 |

## Second Year

Fall
Select one English Elective ${ }^{2} 3$

| MODL 103 | Modern Language Requirement | 3 |
| :--- | :--- | :--- |
| ENGL 220 | Introduction to Literary and Cultural <br> ${\text { Studies }(\text { Inquiry })^{3}}^{2}$ | 3 |

SCI $102 \quad 3$

| Declare a Thematic Thread ${ }^{10}$ | 3 |
| :---: | ---: |
| Hours | $\mathbf{1 5}$ |

Spring
Select one English Elective ${ }^{2}$
3

| ENGL 242 <br> or ENGL 248 | African-American Literature <br> or Asian Literature |  |
| :---: | :---: | ---: |
| ENGL 204 | Composition and Rhetoric ${ }^{4}$ | 3 |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| Hours | 3 |  |

## Third Year

Fall
Select one of the following:

| ENGL 243 | Literature of the Women's Movement |  |
| ---: | :--- | ---: |
| ENGL 244 | Native American Literature |  |
| ENGL 246 | U.S. Latino/a Literatures ${ }^{6}$ |  |
| ENGL 317 | British Literature I | 3 |
| ENGL 331 | Historical Development of the English <br> Language ${ }^{7}$ | 3 |


| Thematic Thread Requirement (p. 1378) |  | 3 |
| :---: | :---: | :---: |
| Course in other department/minor |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| ENGL 312 | Introduction to Shakespeare | 3 |
| ENGL 318 | British Literature II | 3 |
| ENGL 332 | Modern English Grammar and Syntax ${ }^{8}$ | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Course in other department/minor |  | 3 |
|  | Hours | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| ENGL 319 | American Literature I | 3 |
| ENGL 402 | World Literature | 3 |
| Elective |  | 3 |
| Course in other department/minor |  | 3 |
| Course in other department/minor |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| ENGL 320 | American Literature II | 3 |
| Select one of the following: |  | 3 |
| ENGL 403 Literary and Cultural Theory |  |  |
| ENGL Elective ${ }^{9}$ |  |  |
| Select one of the following: |  | 3 |
| ENGL Elective ${ }^{2}$ |  |  |
| ENGL 41 | Literature of the Environment |  |
| Another course approved by your adviser \& dept. chair |  |  |
| Course in other department/minor |  | 3 |
| Course in other department/minor |  | 3 |
|  | Hours | 15 |
| Total Hours** |  | 121 |
| 1 Course offered in multiple subjects; cannot take course in first major subject. |  |  |
| 2 Must complete two courses from the following: ENGL 230, ENGL 311, ENGL 331, ENGL 332 |  |  |
| IF not selecting ENGL 204 Comp and Rhetoric. |  |  |
| Take only if not selecting ENGL 220. |  |  |
| If not taking ENGL 243, ENGL 244, or ENGL 246. |  |  |
| If not taking ENGL 242 or ENGL 248. |  |  |
| If not taking ENGL 332. |  |  |
| If not taking ENGL 331. |  |  |
| 9 ENGL 328, ENGL 410 |  |  |
| 10 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread. |  |  |
| * Students are encouraged to take INDS 101 as a Free Elective. |  |  |
| Major Code: 525 |  |  |
| Concentration Code: LLIT |  |  |
| Revised date: 12.22.2020 |  |  |
| ** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please |  |  |

consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## English Literature, Bachelor of Arts (BA) - Concentration in Literary, Film, and Cultural Studies

## Program Learning Outcomes

English Literature - Literary, Film, and Cultural Studies, BA

- Interaction with Diverse Literary Texts: Display knowledge of discipline specific content through written and oral interaction with diverse literary and cultural texts.
- Methods of Discipline Specific Analysis: Apply principle methods of discipline specific analysis, and understand the basic assumptions and theoretical constructs that guide criticism
- Literature and Language as Cultural Artifacts: Express how literature and language, as cultural artifacts, respond to and record the value systems of diverse cultures and human experiences


## Universal Program Outcomes

- Research Tools and Resources: Use the research tools and resources of the profession, integrate them effectively into interpretive arguments, and properly document sources according to professional standards.
- Knowledge of Technology: Display knowledge of technologies that support both written and oral communication
- Degree Program Writing Competency - Understanding of the Writing Process: Understand the writing process to communicate ideas effectively to a variety of audiences.


## Related Links

English Literature - Literary, Film, and Cultural Studies, BA Program Page (https://www.sru.edu/academics/majors-and-minors/english-literary-film-and-cultural-studies/)

English Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/english/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Modern Language Requirement | $0-9$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |

Major/Concentration Requirements ..... 39
Electives ..... 38

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Sciences Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Sciences Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |
| Thematic Thread |  |  |
| Select 12 Credits (p.1378) ${ }^{2}$ |  | 12 |
| Total Hours |  | 42 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be $300-$ level or above.

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

| Code | Title |
| :--- | ---: |
| Complete $0-9$ credits | Hours |
| Total Hours | $0-9$ |
| $\mathbf{0 - 9}$ |  |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code Title | Hours |
| :--- | ---: |
| Complete one of the following: | $0-3$ |

Complete one of the following:

| ESAP 110 | Beginning Algebra |  |
| :---: | :---: | :---: |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major/Concentration Requirements

- 20 major credits must be taken at SRU or PASSHE
- 20 major credits must be taken at the 300 level or above

| Code Title | Hours |
| :--- | :--- |
| Required English Courses |  |


| ENGL 214 | Introduction to Film Analysis ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| ENGL 220 | Introduction to Literary and Cultural Studies ${ }^{1}$ | 3 |
| ENGL 403 | Literary and Cultural Theory ${ }^{1}$ | 3 |

Interpreting Literary Traditions 6

Select two of the following:

| ENGL 312 | Introduction to Shakespeare $^{1}$ |
| :---: | :--- |
| or ENGL 389 | Stratford Shakespeare Tour $^{\text {ENGL 317 }}$ |
| British Literature I $^{1}$ |  |
| ENGL 318 $^{\text {ENG } 319}$ | British Literature II $^{1}$ |
| ENGL 320 | American Literature I $^{1}$ |
| American Literature II |  |

Interpreting Culture \& Environments
Select two of the following:

| ENGL 243 | Literature of the Women's Movement $^{1}$ |
| :--- | :--- |
| ENGL 298 | Selected Topics $^{1,2}$ |
| ENGL 311 | Chaucer and Medieval Culture $^{1}$ |
| ENGL 328 | Young Adult Literature $^{1}$ |
| ENGL 410 | Literature of the Environment $^{1}$ |
| Interpreting Film |  |

Select two of the following:

| ENGL 298 | Selected Topics ${ }^{1,3}$ |
| :--- | :--- |
| ENGL 314 | European Film $^{1}$ |
| ENGL 316 | Asian Film $^{1}$ |
| ENGL 498 | Selected Topics $^{1,4}$ |
| Interpreting Diverse Texts |  |
| Select two from the following: |  |
| ENGL 242 | African-American Literature ${ }^{1}$ |
| ENGL 244 | Native American Literature $^{1}$ |
| ENGL 246 | U.S. Latino/a Literatures ${ }^{1}$ |
| ENGL 248 | Asian Literature ${ }^{1}$ |


| ENGL 300 | Queer Literature and Film ${ }^{1}$ |  |
| :---: | :---: | :---: |
| ENGL 402 | World Literature ${ }^{1}$ |  |
| Writing Culture |  | 3 |
| Select one of the following: |  |  |
| ENGL 225 | Introduction to Creative Writing |  |
| ENGL 205 | Introduction to Professional Writing |  |
| ENGL 307 | Writing About Electronic Media and Film ${ }^{1}$ |  |
| ENGL 315 | The Cinematic Review: Historical and Critical Writing ${ }^{1}$ |  |
| ENGL 349 | Creative Writing:Screenplay |  |
| ENGL 339 | Creative Writing: Fiction ${ }^{1}$ |  |
| Capstone Experience Requirement |  | 3 |
| ENGL 409 | Professional English ${ }^{1}$ |  |
| ENGL 450 | Internship ${ }^{1}$ |  |

1 Course counts for $50 \%$ of Major requirements and Major GPA
2 Select Interpreting Culture and Environment ENGL 298 topics from:

- Apocalyptic Literature
- Literary Pirates
- Nobel and Pulitzer Literature
- Dante and Our Journeys

3

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term) locations such as Italy, London and Canada
2. Student-faculty research
3. Career education and development
4. Internships
5. Community services experience through the national Writing in Schools program
6. Volunteer experience in literary magazine production

English Literature - BA (5 25)
Concentration in Literary, Film, and Cultural Studies (LTSC)
This program is effective as of Fall 2019
Revised 04.22.2021
UCC: 10.27.2020

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum
categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar | 1 |
| MATH 117 | Quantitative Reasoning | 3 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| Modern Language I |  | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
|  | Hours | 16 |
| Spring |  |  |
| ENGL 104 | Critical Reading | 3 |
| Modern Language II |  | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
| SCI 101 | Science of Life | 3 |
|  | Hours | 15 |

## Second Year

Fall

| ENGL 220 | Introduction to Literary and Cultural Studies (Inquiry) | 3 |
| :---: | :---: | :---: |
| ENGL 298 | Selected Topics | 3 |
| SCI 102 | Understanding the Physical World | 3 |
| Modern Language III |  | 3 |
| Social Science Inquiry (p. 1378) |  | 3 |
| Declare a Thematic Thread ${ }^{8}$ |  |  |
|  | Hours | 15 |

Spring
Thematic Thread Requirement (p. 1378)
Thematic Thread Requirement (p. 1378) 3
Thematic Thread Requirement (p. 1378) 3
Course in other department/minoror elective 3
Select one of the following: 3

| ENGL 230 | Introduction to Linguistics and Grammar ${ }^{2}$ |  |
| :--- | :--- | :--- |
| ENGL 242 | African-American Literature |  |
| ENGL Elective |  | $\mathbf{1 5}$ |

## Third Year

## Fall

ENGL 311
or ENGL 317
Chaucer and Medieval Culture
3

| ENGL 242 | African-American Literature | 3 |
| :---: | :---: | :---: |
| or ENGL 244 | or Native American Literature |  |
| or ENGL 246 | or U.S. Latino/a Literatures |  |

Select one of the following: 3

| ENGL 331 | Historical Development of the English <br> Language ${ }^{3}$ |
| :---: | :--- | ---: |
| ENGL Elective ${ }^{4}$ | 3 |
| Thematic Thread Requirement (p. 1378) | 3 |
| Course in other department/minor | $\mathbf{1 5}$ |

## Spring

ENGL 214 Introduction to Film Analysis 3
Select one of the following: 3

| ENGL 312 | Introduction to Shakespeare |  |
| :---: | :--- | :--- |
| ENGL 318 | British Literature II |  |
| ENGL 389 | Stratford Shakespeare Tour |  |
| ENGL 320 | American Literature II | 3 |
| or ENGL 242 | or African-American Literature |  |

Select one of the following: 3

| ENGL 332 | Modern English Grammar and Syntax ${ }^{5}$ |
| :--- | :--- |
| ENGL Elective $^{6}$ |  |


| Course in other department/minor | 3 |
| :---: | ---: |
| Hours | 15 |

## Fourth Year

Fall
ENGL 402 World Literature 3
ENGL 409 Professional English 3
Course in other department/minor 3
Select one of the following: 3

| ENGL 403 | Literary and Cultural Theory |  |
| :--- | :--- | ---: |
| ENGL Elective ${ }^{4}$ |  | 3 |
| Select one of the following: |  |  |
| ENGL 307 | Writing About Electronic Media and Film |  |
| ENGL 314 | European Film |  |
| ENGL 316 | Asian Film | $\mathbf{1 5}$ |

## Spring

Select one of the following: 3

| ENGL 328 | Young Adult Literature |
| :--- | :--- |
| ENGL 410 | Literature of the Environment |
| Select one of the following: |  |
| ENGL 403 | Literary and Cultural Theory |
| ENGL Elective $^{7}$ |  |

Select one of the following: 3

| ENGL 205 | Introduction to Professional Writing |
| :--- | :--- |
| ENGL 225 | Introduction to Creative Writing |
| ENGL 315 | The Cinematic Review: Historical and <br>  <br> Critical Writing |
| ENGL 339 | Creative Writing: Fiction |

Course in other department/minor 3

Course in other department/minor

|  | Hours 15 |
| :---: | :---: |
|  | Total Hours** 121 |
| 1 | Course offered in multiple subjects; cannot take course in first major subject. |
| 2 | If not taking ENGL 331 or ENGL 332. |
| 3 | If not taking ENGL 230 or ENGL 332. |
| 4 | ENGL 243, ENGL 248, ENGL 298 |
| 5 | If not taking ENGL 230 or ENGL 331. |
| 6 | ENGL 242, ENGL 298, ENGL 328, ENGL 410. |
| 7 | ENGL 328, ENGL 410 |
| 8 | Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread. |
|  | Students are encouraged to take INDS 101 as a Free Elective. |

Major Code: 525
Concentration Code: LTSC
Revised: 12.22.2020
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## English Writing, Bachelor of Science (BS) - Concentration in Creative Writing <br> Program Learning Outcomes <br> English Writing - Creative Writing, BS

- Development of Research Strategies: Develop strategies for research and integrating the results of this research into various creative texts.
- Knowledge of Traditional and Contemporary Techniques: Produce texts that will demonstrate knowledge of traditional and contemporary/experimental techniques in various creative writing genres.
- Demonstrate Proficiency in Manuscript Preparation: Produce texts that will demonstrate a proficiency in preparing manuscripts in various genres for submission for print and electronic publications.


## Universal Program Outcomes

- Research Tools and Resources: Use the research tools and resources of the profession, integrate them effectively into interpretive arguments, and properly document sources according to professional standards.
- Knowledge of Technology: Display knowledge of technologies that support both written and oral communication.
- Degree Program Writing Competency - Understanding of the Writing Process: Understand the writing process to communicate ideas effectively to a variety of audiences.


## Related Links

English Writing - Creative Writing, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/english-creative-writing/)

English Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/english/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.00 or higher
Overall GPA: 2.00 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major/Concentration Requirements | 45 |
| Electives | 32 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Sciences Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Sciences Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |
| Thematic Thread |  |  |
| Select 12 Credits (p. 1378) ${ }^{2}$ |  | 12 |
| Total Hours |  | 42 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2
From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |

Total Hours 0-3

## Computer Competency

| Code | Title | Hours |
| :---: | :---: | :---: |
| Demonstrate "computer competency" by one of the following: |  | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major/Concentration Requirements

- 23 major credits must be taken at SRU or PASSHE
- 23 major credits must be taken at the 300 level or above
- Fifteen credits are required outside the English department from one department or a minor or certificate or a major in a subject other than English (15 credits) -Refer to My Rock Audit


## Code Title Hours

Writing Workshops: Required English Courses

| ENGL 205 | Introduction to Professional Writing ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| ENGL 225 | Introduction to Creative Writing ${ }^{1}$ | 3 |
| ENGL 330 | Literary Publications \& Design ${ }^{1}$ | 3 |
| ENGL 334 | Writing Community Stories ${ }^{1}$ | 3 |
| ENGL 338 | Creative Writing: Creative Nonfiction ${ }^{1}$ | 3 |
| ENGL 339 | Creative Writing: Fiction ${ }^{1}$ | 3 |
| ENGL 340 | Creative Writing: Poetry ${ }^{1}$ | 3 |
| ENGL 346 | Writing the Graphic Novel ${ }^{1}$ | 3 |
| ENGL 429 | Grant and Proposal Writing ${ }^{1}$ | 3 |
| Subtotal |  | 27 |

## Writing and Theory

Select one of the following:

| ENGL 204 | Composition and Rhetoric $^{1}$ |
| :--- | :--- |
| ENGL 307 | Writing About Electronic Media and Film $^{1}$ |
| ENGL 327 | Healthcare Writing ${ }^{1}$ |
| ENGL 335 | Writing for Video Games $^{1}$ |
| ENGL 349 | Creative Writing:Screenplay |

Subtotal
Literature Courses
Select three of the following:

| $\begin{aligned} & \text { ENGL } 312 \\ & \text { or ENGL } 389 \end{aligned}$ | Introduction to Shakespeare Stratford Shakespeare Tour |
| :---: | :---: |
| ENGL 242 | African-American Literature ${ }^{1}$ |
| ENGL 243 | Literature of the Women's Movement ${ }^{1}$ |
| ENGL 244 | Native American Literature ${ }^{1}$ |
| ENGL 246 | U.S. Latino/a Literatures ${ }^{1}$ |
| ENGL 248 | Asian Literature ${ }^{1}$ |
| ENGL 298 | Selected Topics ${ }^{1,2}$ |
| ENGL 311 | Chaucer and Medieval Culture ${ }^{1}$ |
| ENGL 317 | British Literature ${ }^{1}$ |
| ENGL 318 | British Literature II ${ }^{1}$ |
| ENGL 319 | American Literature $\mathrm{I}^{1}$ |
| ENGL 320 | American Literature II ${ }^{1}$ |
| ENGL 328 | Young Adult Literature ${ }^{1}$ |
| ENGL 402 | World Literature ${ }^{1}$ |
| ENGL 410 | Literature of the Environment ${ }^{1}$ |

Subtotal
Capstone Experience - Part I
ENGL 409 Professional English ${ }^{1} 3$
Subtotal 3

Capstone Experience - Part II
Select one of the following options: 3

Option 1 - If below a 3.0 Overall GPA
Select one additional literature course from the Required Literature Course listing above
Option 2 - If at a 3.0 or above Overall GPA
Select one of the following:
One additional literature course from the Required Literature Course from the listing above ENGL 491 Senior Writing Project ${ }^{1}$
Subtotal 3

Total Hours 45
1 Course counts for $50 \%$ of Major requirements and Major GPA
2 May be taken twice as different topics.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term) locations such as Italy, London and Canada
2. Student-faculty research
3. Career education and development
4. Internships
5. Community services experience through the national Writing in Schools program
6. Volunteer experience in literary magazine production

ENGLISH WRITING - BS (5120)
Concentration in Creative Writing - (CREA)
This program is effective as of Summer 2021
Revised 04.20.2021
UCC 09.01.2020

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

Student pursuing a B.S. in English - Creative Writing must also complete 15 credits hours or more outside the English Department in a sequence from one department, or of a minor or major, in a subject other than English. The selection of outside courses must be approved by the student's English adviser and by the Chair of the English Department

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar * | 1 |
| MATH 117 | Quantitative Reasoning | 3 |
| SCI 101 | Science of Life | 3 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
|  | Hours | 16 |


| Spring |  |  |
| :--- | :--- | ---: |
| ENGL 104 | Critical Reading | 3 |
| ART 105 | Basic Studio Drawing | 3 |
| SCI 102 | Understanding the Physical World | 3 |
| Humanities Inquiry (p. 1378) | 3 |  |
| Social Science Inquiry (p. 1378) |  | 3 |
| Hours | $\mathbf{1 5}$ |  |

## Second Year

Fall
ENGL 205 Introduction to Professional Writing 3
ENGL 225 Introduction to Creative Writing 3
Select one of the following: 3

ENGL 243 Literature of the Women's Movement ${ }^{2}$ ENGL 244 Native American Literature ${ }^{2}$

| ENGL 246 | U.S. Latino/a Literatures ${ }^{3}$ |  |
| :---: | :---: | :---: |
| ENGL 298 | Selected Topics |  |
| Course in other department/thematic thread |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Declare a Thematic Thread ${ }^{6}$ |  |  |
|  | Hours | 15 |
| Spring |  |  |
| Course in another department/thematic thread |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| ENGL 339 | Creative Writing: Fiction | 3 |
| Select one of the following: |  | 3 |
| ENGL 242 African-American Literature ${ }^{4}$ |  |  |
| ENGL 248 | Asian Literature ${ }^{5}$ |  |
| ENGL 300 | Queer Literature and Film ${ }^{5}$ |  |
| ENGL 312 | Introduction to Shakespeare |  |
| Select one of the following: |  | 3 |
| ENGL 204 | Composition and Rhetoric ${ }^{6}$ |  |
| ENGL 327 | Healthcare Writing |  |
| ENGL 335 | Writing for Video Games ${ }^{5}$ |  |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| ENGL 334 | Writing Community Stories | 3 |
| Course in another department/thematic thread |  | 3 |
| Select two of the following: |  | 6 |
| ENGL 307 | Writing About Electronic Media and Film (if needed or select course in another department/thematic thread) |  |
| ENGL 338 | Creative Writing: Creative Nonfiction ${ }^{6}$ |  |
| ENGL 340 | Creative Writing: Poetry ${ }^{7}$ |  |
| Select one of the following: |  | 3 |
| ENGL 243 | Literature of the Women's Movement ${ }^{2}$ |  |
| ENGL 244 | Native American Literature ${ }^{2}$ |  |
| ENGL 246 | U.S. Latino/a Literatures ${ }^{3}$ |  |
| ENGL 298 | Selected Topics |  |
| ENGL 311 | Chaucer and Medieval Culture ${ }^{3}$ |  |
| ENGL 317 | British Literature I |  |
| ENGL 319 | American Literature I |  |
| ENGL 402 | World Literature |  |
|  | Hours | 15 |
| Spring |  |  |
| ENGL 330 | Literary Publications \& Design (if not taking semester 8) ${ }^{4}$ | 3 |
| ENGL 346 | Writing the Graphic Novel (if not taking semester 8) ${ }^{4}$ | 3 |
| ENGL 429 | Grant and Proposal Writing (if not taking semester 8) ${ }^{4}$ | 3 |
| Select one of the following: |  | 3 |
| ENGL 242 | African-American Literature ${ }^{4}$ |  |
| ENGL 248 | Asian Literature ${ }^{5}$ |  |
| ENGL 300 | Queer Literature and Film |  |
| ENGL 312 | Introduction to Shakespeare |  |

Course in another department/thematic Thread

## Hours

3

## Fourth Year

Fall

| Select one of the following: | 3 |
| :---: | :---: |
| ENGL 334 Writing Community Stories |  |
| Course in another department/thematic thread |  |
| ENGL 409 Professional English | 3 |
| ENGL $491 \quad$Senior Writing Project (or additional <br> Literature course) | 3 |
| Select one of the following: | 3 |
| ENGL 338 Creative Writing: Creative Nonfiction ${ }^{6}$ |  |
| ENGL 340 Creative Writing: Poetry ${ }^{7}$ |  |
| Course in other department/thematic thread | 3 |
| Hours | 15 |
| Spring |  |
| ENGL $330 \quad \begin{aligned} & \text { Literary Publications \& Design (if not taking } \\ & \text { semester 6) }\end{aligned}$ | 3 |
| ENGL 346 Writing the Graphic Novel ${ }^{4}$ | 3 |
| ENGL 429 Grant and Proposal Writing ${ }^{4}$ | 3 |
| ENGL $491 \quad$Senior Writing Project (or additional <br> Literature course) $^{7}$ | 3 |
| Course in other department/thematic thread | 3 |
| Hours | 15 |
| Total Hours** | 121 |

${ }^{1}$ Course offered in multiple subjects; cannot take course in first major subject.
2 Offered even numbered fall term.
3 Offered odd numbered fall term.
4 Offered even numbered spring term.
5 Offered even number spring term
6 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread.
7 Select additional Literature course from the following: ENGL 242 (offered odd numbered spring term), ENGL 248 (offered even number spring term), ENGL 300, or ENGL 312.

* Students are encouraged to take INDS 101 as a Free Elective.


## Major Code: 5120

Concentration Code: CREA
Revised date: 12.22.2020
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## English Writing, Bachelor of Science (BS) - Concentration in Professional Writing

## Program Learning Outcomes

## English Writing - Professional Writing, BS

- Production of Problem Solving Documents: Produce documents that solve problems relevant to professional and organizational contexts.
- Document Adaptation: Adapt documents to different rhetorical contexts.
- Evaluation of Rhetorical Values: Evaluate the rhetorical values of technical writing using the theory and scholarship of technical and professional communication.
- Application of Technical Editing Principles: Apply principles of technical editing for document development, publication, and use.


## Universal Program Outcomes

- Research Tools and Resources: Use the research tools and resources of the profession, integrate them effectively into interpretive arguments, and properly document sources according to professional standards.
- Knowledge of Technology: Display knowledge of technologies that support both written and oral communication.
- Degree Program Writing Competency - Understanding of the Writing Process: Understand the writing process to communicate ideas effectively to a variety of audiences.


## Related Links

English Writing - Professional Writing, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/english-professionalwriting/)

English Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/english/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

Code Title Hours
Rock Studies Requirements 42
$\begin{array}{ll}\text { Other Basic Requirements } & 0-3\end{array}$

| Computer Competency | $0-3$ |
| :--- | :--- |

Major/Concentration Requirements 45
Electives 32

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

| Rock Studies Requirements |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: |  | 3 |


| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |
| Subtotal |  |

Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378)
Humanities Inquiry
Social Science Inquiry
Select 3 Credits (p. 1378) 3
Natural Sciences Inquiry
SCI 101 Science of Life 3
Physical Sciences Inquiry
SCI $102 \quad 3$
Subtotal 15

## Thematic Thread

| Select 12 Credits $(\mathrm{p} .1378)^{2}$ | 12 |
| :--- | :--- |
| Total Hours | 42 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |

PE 202
Technology for Wellness

Total Hours

## Major/Concentration Requirements

- 23 major credits must be taken at SRU or PASSHE
- 23 major credits must be taken at the 300 level or above
- Fifteen credits are required outside the English department from one department or a minor or certificate or a major in a subject other than English - Refer to My Rock Audit

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Concentration Courses |  |  |
| ENGL 204 | Composition and Rhetoric ${ }^{1}$ | 3 |
| ENGL 205 | Introduction to Professional Writing ${ }^{1}$ | 3 |
| ENGL 225 | Introduction to Creative Writing ${ }^{1}$ | 3 |
| ENGL 327 | Healthcare Writing ${ }^{1}$ | 3 |
| ENGL 330 | Literary Publications \& Design ${ }^{1}$ | 3 |
| ENGL 334 | Writing Community Stories | 3 |
| ENGL 335 | Writing for Video Games | 3 |
| ENGL 365 | Writing for the World Wide Web ${ }^{1}$ | 3 |
| ENGL 429 | Grant and Proposal Writing | 3 |
| Subtotal |  | 27 |

Required Internship
ENGL $450 \quad$ Internship $^{1}{ }^{1} 3$
Subtotal 3

Required Language and Literature Course
ENGL 403 Literary and Cultural Theory ${ }^{1} 3$
Subtotal 3

Required Language and Literature Courses
Select two of the following:

| ENGL 312 <br> or ENGL 389 | Introduction to Shakespeare ${ }^{1}$ Stratford Shakespeare Tour |
| :---: | :---: |
| ENGL 242 | African-American Literature ${ }^{1}$ |
| ENGL 243 | Literature of the Women's Movement ${ }^{1}$ |
| ENGL 244 | Native American Literature ${ }^{1}$ |
| ENGL 246 | U.S. Latino/a Literatures ${ }^{1}$ |
| ENGL 248 | Asian Literature ${ }^{1}$ |
| ENGL 298 | Selected Topics ${ }^{1}$ |
| ENGL 311 | Chaucer and Medieval Culture ${ }^{1}$ |
| ENGL 317 | British Literature I ${ }^{1}$ |
| ENGL 318 | British Literature II ${ }^{1}$ |
| ENGL 319 | American Literature $\mathrm{I}^{1}$ |
| ENGL 320 | American Literature II ${ }^{1}$ |
| ENGL 402 | World Literature ${ }^{1}$ |
| ENGL 410 | Literature of the Environment |

Subtotal6

Required Language and Literature Courses
Select one of the following:

| ENGL 230 | Introduction to Linguistics and Grammar ${ }^{1}{ }^{1}$ |
| :---: | :--- |
| ENGL 331 | Historical Development of the English <br> Language ${ }^{1}$ |
| ENGL 332 | Modern English Grammar and Syntax ${ }^{1}$ |
| Subtotal |  |


| Required Capstone Experience (only offered in Spring) |  |  |
| :--- | ---: | ---: |
| ENGL 409 | Professional English | 3 |
| Subtotal | 3 |  |
| Total Hours | 45 |  |

1 Course counts for $50 \%$ of Major requirements and Major GPA
${ }^{2}$ May be taken twice as different topics.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term) locations such as Italy, London and Canada
2. Student-faculty research
3. Career education and development
4. Internships
5. Community services experience through the national Writing in Schools program
6. Volunteer experience in literary magazine production

ENGLISH WRITING - BS (5120)
Concentration in Professional (PROF)
This program is effective as of Summer 2021
Revised 03.05.2021
UCC: 09.01.2020

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall | Critical Writing | 3 |
| ENGL 102 | FYRST Seminar | 1 |
| INDS 101 | Quantitative Reasoning | 3 |
| MATH 117 | University Seminar ${ }^{1}$ | 3 |
| SUBJ 139 | Creative \& Aesthetic Inquiry (p. 1378) | 3 |
| Select one of the following: | 3 |  |
| COMM 200 |  | Civil Discourse: Theory \& Practice |
| PHIL 110 | Ethics and Civil Discourse |  |


| POLS 235 | Civil Discourse and Democracy |  |
| :---: | :---: | :---: |
|  | Hours | 16 |
| Spring |  |  |
| ENGL 104 | Critical Reading | 3 |
| ENGL 204 | Composition and Rhetoric | 3 |
| ENGL 225 | Introduction to Creative Writing | 3 |
| SCI 101 | Science of Life | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
|  | Hours | 15 |
| Second Year |  |  |
| Fall |  |  |
| ENGL 205 | Introduction to Professional Writing | 3 |
| SCI 102 | Understanding the Physical World | 3 |
| Select one of the following: |  | 3 |
| ENGL 243 | Literature of the Women's Movement |  |
| ENGL 244 | Native American Literature |  |
| ENGL 246 | U.S. Latino/a Literatures |  |
| ENGL 298 | Selected Topics |  |
| Course in other department/minor |  |  |
| Social Science Inquiry (p. 1378) |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Declare a Thematic Thread ${ }^{8}$ |  |  |
|  | Hours | 15 |
| Spring |  |  |
| ENGL 230 | Introduction to Linguistics and Grammar ${ }^{2}$ | 3 |
| Select one of the following: |  | 3 |
| ENGL 242 | African-American Literature |  |
| ENGL 248 | Asian Literature ${ }^{3}$ |  |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| ENGL 334 | Writing Community Stories | 3 |
| Select one of the following: |  | 3 |
| ENGL 298 | Selected Topics |  |
| ENGL 311 | Chaucer and Medieval Culture |  |
| ENGL 317 | British Literature I |  |
| ENGL 319 | American Literature I |  |
| ENGL 402 | World Literature |  |
| Select one of the following: |  | 3 |
| ENGL 331 | Historical Development of the English Language ${ }^{4}$ |  |
| Course in other department/minor |  |  |
| ENGL 365 | Writing for the World Wide Web | 3 |
| Course in other department/minor |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| ENGL 335 | Writing for Video Games | 3 |
| Select one of the following: |  | 3 |
| ENGL 298 | Selected Topics |  |


| ENGL 312 | Introduction to Shakespeare |  |
| :---: | :---: | :---: |
| ENGL 318 | British Literature II |  |
| ENGL 320 | American Literature II ${ }^{5}$ |  |
| Select one of the following: |  | 3 |
| ENGL 230 | Introduction to Linguistics and Grammar |  |
| ENGL 332 | Modern English Grammar and Syntax ${ }^{6}$ |  |
| Course in other department/minor |  |  |
| ENGL 327 <br> or ENGL 429 | Healthcare Writing or Grant and Proposal Writing | 3 |
| ENGL 330 | Literary Publications \& Design (every other spring) | 3 |
|  | Hours | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| ENGL 409 | Professional English | 3 |
| Select one of the following: |  | 3 |
| ENGL 403 | Literary and Cultural Theory |  |
| ENGL Elective ${ }^{7}$ |  |  |
| ENGL 450 | Internship | 3 |
| Course in other department/minor |  | 3 |
| Course in other department/minor |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| $\begin{aligned} & \text { ENGL } 327 \\ & \quad \text { or ENGL } 429 \end{aligned}$ | Healthcare Writing or Grant and Proposal Writing | 3 |
| Select one of the following: |  | 3 |
| ENGL 403 | Literary and Cultural Theory |  |
| ENGL Elective Course ${ }^{8}$ |  |  |
| ENGL 450 | Internship | 3 |
| ENGL 330 | Literary Publications \& Design (every other spring) | 3 |
| Course in other department/minor |  | 3 |
|  | Hours | 15 |
|  | Total Hours** | 121 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 If not taking ENGL 331 or ENGL 332
3 If not taking ENGL 243, ENGL 244, ENGL 246, or ENGL 298 in semester 3.
4 If not taking ENGL 230 or ENGL 332.
5 If not taking ENGL 298, ENGL 311, ENGL 317, ENGL 319, or ENGL 402 in semester 5
6 If not taking ENGL 331.
7 ENGL 243, ENGL 248, ENGL 298
8 ENGL 328, ENGL 410
9 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to
registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 5120
Concentration Code: PROF
Revised date: 08.03.2021

## Film and Media Studies, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Film and Media Studies, Minor Program Page (https://www.sru.edu/ academics/majors-and-minors/film-and-media-studies-minor/)

English Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/english/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Minor GPA: 2.00 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required courses |  |  |
| ENGL 214 | Introduction to Film Analysis | 3 |
| ENGL 307 | Writing About Electronic Media and Film | 3 |
| ENGL 315 | The Cinematic Review: Historical and Critical Writing | 3 |
| Electives |  |  |
| Select three of the following, at least one at 300-level or higher. |  | 9 |
| ART 214 | Intermediate Studio Digital Media |  |
| ART 300 | Art Seminar |  |
| ART 314 | Advanced Studio Digital Media |  |
| ART 315 | Master Studio |  |
| ART 414 | Senior Studio Digital Media |  |
| COMM 201 | Digital Imaging |  |
| COMM 248 | Interactive Multimedia 1 |  |
| COMM 254 | Video Production |  |
| COMM 258 | Interactive Multimedia 2 |  |
| COMM 347 | New-Media Journalism |  |
| COMM 350 | Editing for Video |  |
| COMM 355 | TV Field Production |  |
| COMM 359 | Interactive Multimedia 3 |  |
| COMM 458 | Media Criticism |  |
| ENGL 314 | European Film |  |
| ENGL 316 | Asian Film |  |
| ENGL 349 | Creative Writing:Screenplay |  |


| ENGL 498 | Selected Topics |
| :--- | :--- |
| HIST 498 | Selected Topics |
| POLS 333 | The Political Film |
| INDP 310 | Cultural Area Studies |
| RUSS 305 | Russian Civilization via Film |
| SPAN 307 | U.S. Latino Cultures |
| Pittsburgh Filmmakers Production or Analysis Course (with |  |

Total Hours

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN FILM AND MEDIA STUDIES (24D)
This program is effective as of Fall 2015
Revised 8-2019

## Literature, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Literature, Minor Program Page (https://www.sru.edu/academics/majors-and-minors/english-language-and-literature/)

English Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/english/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.00 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits

|  | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| ENGL 220 | Introduction to Literary and Cultural Studies | 3 |
| ENGL 312 | Introduction to Shakespeare | 3 |
| or ENGL 317 | British Literature I |  |
| or ENGL 318 | British Literature II |  |
| or ENGL 389 | Stratford Shakespeare Tour |  |
| ENGL 319 | American Literature I | 3 |
| or ENGL 320 | American Literature II |  |
| Select two of the following: |  | 6 |
| ENGL 242 | African-American Literature |  |
| ENGL 243 | Literature of the Women's Movement |  |
| ENGL 244 | Native American Literature |  |
| ENGL 246 | U.S. Latino/a Literatures |  |
| ENGL 248 | Asian Literature |  |
| ENGL 298 | Selected Topics |  |
| ENGL 300 | Queer Literature and Film |  |
| ENGL 311 | Chaucer and Medieval Culture |  |
| ENGL 328 | Young Adult Literature |  |
| ENGL 402 | World Literature |  |
| ENGL 403 | Literary and Cultural Theory |  |
| ENGL 410 | Literature of the Environment |  |
| English Electives |  |  |
| Select one ENGL |  | 3 |

Total Hours18

1 Excluding ENGL 102

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN LITERATURE (24A)
This program is effective as of Fall 2021
Revised 06.04.21
UCC 02.16.2021

## Writing, Minor

To access Minor Requirements, please view the Curriculum Guide tab

## Related Links

Writing, Minor Program Page (https://www.sru.edu/academics/majors-and-minors/english-creative-writing/)

English Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/english/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirements

Minor GPA: 2.00 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.


| ENGL 230 | Introduction to Linguistics and Grammar |  |
| :--- | :--- | ---: |
| ENGL 331 | Historical Development of the English <br> Language |  |
| ENGL 332 | Modern English Grammar and Syntax |  |
| English Electives |  | 6 |
| Select two ENGL courses ${ }^{1}$ | $\mathbf{2 1}$ |  |
| Total Hours |  |  |

1 Excluding ENGL 102, ENGL 104. Max 3 credits in ENGL 450.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information
on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN WRITING (24B)
This program is effective as of Summer 2019
Revised 8-2019
UCC 4.9.2019

## Gender Studies

| Chair | Location | Department Phone |
| :--- | :--- | :--- |
| Dr. Cindy LaCom | 110 Patterson Hall | $724-738-2359$ |

Department Web Site URL (https://www.sru.edu/academics/colleges-and-departments/cla/departments/gender-studies/)

Gender Studies considers how gender, along with race, class, sexualities, disability and ethnicity, shape access to and exclusion from power in an interdisciplinary context.

The Gender Studies Program takes an interdisciplinary approach to teaching and learning, with courses in numerous departments: English, EGEO, Psychology, History, and Political Science, among others. Relevant to all majors, a minor in Gender Studies prepares students both to interact in a diverse and increasingly global professional world and to understand how our embodied experiences, while personal and individual, are also culturally shaped. In Gender Studies courses, students analyze power structures, gender identities, and culture to promote social change.

## Programs

All first-year students who enter SRU in the Summer and Fall terms of 2019 and after will follow Rock Studies. Students who entered SRU before Spring 2019 will follow Liberal Studies. All new transfer students beginning Summer 2019 and after will follow Liberal Studies. We anticipate that transfer students will begin to enter under Rock Studies during the Summer/Fall term of 2021.

## Majors

- Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Gender and Diversity Studies - Rock Studies (p. 987)


## Minors

- Gender Studies, Minor (p. 980)


## Courses

GNDR 115 - Introduction to Gender Studies
Introduction to Gender Studies is an interdisciplinary course that offers a foundation for an intersectional analyses of gender within the context of systems and structures of power and oppression.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Transfer Thread Completion Course

## GNDR 120 - Introduction to the Study of Masculinities

This course proposes to introduce and explore the topic of masculinity as a subject for critical study. In the course, students will read about and discuss how masculinities are constructed, presented and reproduced in media and popular culture. This course is meant for and open to everyone interested in taking a critical approach to the study of gender in societies, with specific focus on how (especially american) masculinities shape and are shaped by identity, culture, media, war, politics and economics.

Credits: 3
Term(s) Typically Offered: Offered Summer Terms
Thematic Thread(s): Gender and Diversity, Transfer Thread Completion Course

## GNDR 139-University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

GNDR 190 - Experimental
A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## GNDR 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## GNDR 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## GNDR 280 - Introduction to Disability Studies

An introduction to the field of Disability Studies, which rejects medical paradigms and instead analyzes disability as a social, cultural and ideological phenomenon, with an intersectional and interdisciplinary focus on gender, race and socioeconomic status.

Credits: 3

## GNDR 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
GNDR 295 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## Credits: 1-6

Term(s) Typically Offered: Offered as Needed

## GNDR 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## GNDR 340 - Applied Queer Studies

An introduction to the field of queer studies with an applied focus (on gender, race, disability, age, ethnicity, transactional issues) in an intersectional and interdisciplinary context. The course analyzes the historical, cultural, political and discursive production of LGBTQAI+ identities, heteronormativity as a form of control, and LGBTQAI+ activism and advocacy.
Prerequisite: GNDR $115^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.

## GNDR 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GNDR 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## GNDR 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GNDR 400-Gender Studies and Porn Culture

Integrating feminist, sociological, media, marketing, neurological, and philosophical perspectives, the course analyzes the social implications of porn consumption, porn production and methods of porn distribution, including technological developments (for example, 3D software development and the use of artificial intelligence in sex dolls). While gender organizes the analytic approaches of the course, it considers other embodied and intersectional identities as well.

Prerequisite: GNDR $115^{\mathrm{C}}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

## GNDR 415 - Feminist Perspectives in the Disciplines

This course will explore feminist approaches to pedagogy and research in the humanities, social sciences, and natural sciences, highlighting how such approaches reshape and redirect the ways knowledge is constructed as well as the attendant, transformed results.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Gender and Diversity, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GNDR 450 - Gender Studies Internship

Professional experiences, such as working with the Girl Scouts or state National Organization for Women (NOW), or working in a women's center or abuse/sexual assault center, that will allow students to either apply or function within a feminist framework to understand the complexity of women's lives and contribute to women's opportunities.

Credits: 1-12
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GNDR 490 - Independent Study

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.
GNDR 495 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GNDR 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## History

\(\left.$$
\begin{array}{lll}\text { Chair } & \text { Secretary } & \text { Location }\end{array}
$$ \begin{array}{l}Department <br>

Phone\end{array}\right\}\)| Dr. William | Lori Marttala | 303 Spotts World <br> Bergmann |
| :--- | :--- | :--- |
|  |  | Culture Building |

Department Web Site URL (http://www.sru.edu/academics/colleges-anddepartments/cla/departments/history/)
Department Fact Sheet URL (https://www.sru.edu/documents/programs/ factsheets/undergraduate/history-fs.pdf)

Department Email: SRUhistorydept@sru.edu

## Faculty

## William Bergmann

Associate Professor
History
Ph.D., University of Cincinnati
M.A., University of Cincinnati
B.A., Franklin and Marshall College

Aaron Cowan
Professor
History
Ph.D., University of Cincinnati
M.A., University of Cincinnati
M.A., Kings College
B.A., Kings College

## Melissa Ford

Assistant Professor
History
Ph.D., Saint Louis University
M.A., Saint Louis University
B.A., Wellesley College

## Alan Levy

Professor
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Ph.D., University of Wisconsin at Madison
M.A., University of Wisconsin at Madison
B.A., Washington and Jefferson College

## Lia Paradis

Professor
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Ph.D., State University of New Jersey-Rutgers
B.S., Hunter College of the City-University of New York

## Thomas Pearcy

Professor
History

Ph.D., University of Miami
M.A., Purdue University
B.A., Purdue University

## Paula Rieder

Associate Professor
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Ph.D., University of Illinois at Urbana
B.A., Our Lady of Cincinnati College

## Eric Tuten

Assistant Professor
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Ph.D., University of Utah
M.A., University of Utah
B.A., Brigham Young University

## Carlis White

Associate Professor
History
Ph.D., University of Illinois
M.A., University of Illinois
M.D., Southern Baptist Theological Seminary
B.A., Johnson Bible College

## Programs

All first-year students who enter SRU in the Summer and Fall terms of 2019 and after will follow Rock Studies. Students who entered SRU before Spring 2019 will follow Liberal Studies. All new transfer students beginning Summer 2019 and after will follow Liberal Studies. We anticipate that transfer students will begin to enter under Rock Studies during the Summer/Fall term of 2021.

## Majors

- History, Bachelor of Arts (BA) (p. 848)


## Minors

- American History, Minor (p. 846)
- European History, Minor (p. 847)
- General History, Minor (p. 848)
- Non-Western History, Minor (p. 852)


## Certificates

- Applied History, Certificate (p. 847)


## Courses

## HIST 051 - Discussion

This is a laboratory experience associated with Ancient and Medieval World HIST 151.

Credits: 0

## HIST 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## HIST 140 - Spotlight on the Past

Students take a 360 -degree view of a historical moment to consider how people asked questions and sought answers to the challenges of the human condition then and now. Each section of this course focuses on a different topic. Refer to section descriptions when registering.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

HIST 151 - Ancient and Medieval World
Major civilizations of the Western world as they meet and interact with the East. Emphasis is upon cultural achievements and institutional development to 1650 .

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Global Citizenship, Revolutions, Transfer Thread
Completion Course, Transnational Culture, Violence
HIST 152 - Rise of the Modern World
This course surveys major events in world history from the Renaissance to the end of the 19th Century.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Global Citizenship, Revolutions, Transfer Thread Completion Course, Transnational Culture, Violence

HIST 153 - Contemporary World History
This course is a survey of major events, themes, and individuals in world history from 1900 to the present day. Topics could include the World Wars, the Cold War, and the emergence of new powers.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Global Citizenship, Revolutions, Transfer Thread Completion Course, Transnational Culture, Violence

## HIST 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## HIST 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## HIST 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## HIST 201 - Colonial America to 1815

Survey of American History during the period; topics may include the Indigenous cultures that formed America's first permanent societies the arrival of European colonists, the origins of slavery, the American Revolution, and the founding and expansion of the United States.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Becoming America, Being American, Revolutions, Transfer Thread Completion Course, Violence

HIST 202 - United States, 1815-1920
Survey of American History during the period; topics may include westward expansion, sectional division over slavery, the Civil War, Reconstruction, industrialization, Progressivism and the increasing influence of the U.S. global affairs.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Becoming America, Being American, Transfer Thread
Completion Course, Violence
HIST 203 - U.S. History Since 1920
Survey of American history during the period; topics may include the changing role of government in domestic life, the Great Depression, World War II, the Cold War, the struggle for equality and civil rights among minority groups, postwar political realignments, and the changing role of the United States in the age of globalization

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Becoming America, Being American, Transfer Thread Completion Course, Violence

HIST 205 - The Historian's Craft
This course introduces students to the essential skills associated with historical research and writing, as well as a survey of various historical philosophies, historiography, and careers for history majors.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms

## HIST 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## HIST 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## HIST 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## HIST 304 - American Military History

A survey of the development of all branches of the American military spanning the colonial period to present day. The course includes a brief introduction to the development of the western way of war from preHellenistic conflict through the middle ages in Europe. Technological innovation, evolution of tactical through strategic levels of warfare, and the symbiotic relationship between military development, national policy, and societal expectations will be examined.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

HIST 305 - Russia to 1855
A social, political and cultural history from ancient times to the death of Nicholas I

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 306 - Russia Since 1855

Continuity and change in Russia from the reign of Alexander II through the Soviet period.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Revolutions, Transfer Thread Completion Course Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 313 - U.S. Manhood and Masculinities

An examination of expressions of manhood in American History from the colonial era to the present. Through the use of gender as a category of historical analysis, students will study notions of manhood in social relations, sexuality, the economy and politics.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Being American, Body and Self, Gender and Diversity, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 318 - Gender and Sexuality in European Society

This course examines gender and sexuality in European society with emphasis on the relationship between ideas about gender and sexuality and their social and cultural manifestations.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Body and Self, Gender and Diversity, Transfer Thread Completion Course, Transnational Culture
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 319 - History of Women to 1750

An analysis of women from the earliest civilizations to 1750 through the examination of the lives of ordinary and outstanding women from different levels of the social order.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 320 - History of Women from 1750 to the Present

This course will examine the role of women in the period 1750 to present from a cross-cultural perspective. Through the use of gender as a category of historical analysis and with particular reference to socioeconomic differences, we will study the participation of women in the emergence of new national-states; the history of women's labor in the household and the work place, the contribution of women in intellectual life, and the participation of women in the social/political reform movements of the modern era.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 323 - African American History to 1876

To investigate, discuss and debate the historical experience of African
Americans from their origins in West Africa, through the Middle Passage and the Plantation, to the 15th Amendment and the Sell-Out of 1876.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): African-American Studies, Becoming America,
Transfer Thread Completion Course, Violence
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 324 - African American History Since 1876

The historical experiences of African Americans from the collapse of the Reconstruction and the emergence of Booker T. Washington, through the NAACP, UNIA, and the Harlem Renaissance, to the rise of the Nation of Islam, CORE, SCLC, and the election of 1976.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): African-American Studies, Transfer Thread
Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

HIST 326 - The Long Civil Rights Movement
Examines Black social movements, organizations, and civil rights court decisions in the United States from 1900 to the present.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): African-American Studies, Being American, Civil
Rights \& Social Movements, Gender and Diversity, Revolutions, Transfer
Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

HIST 331 - England to 1689
Celts, Anglo-Saxons, Danes, and Normans in the formation of a nation, the medieval period, and the Tudor and Stuart centuries.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 332 - Britain Since 1689

This course investigates key events and individuals in British history since the Glorious Revolution.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

HIST 333-Medieval Church
This course examines the medieval church and society with particular emphasis on the ways in which medieval men, women and institutions defined and applied the concepts of sanctity and heresy

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

HIST 335-Outstanding Americans
A biographical approach to the study of American history. A study is made of the lives of those Americans who have made a contribution to society outside of politics.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 336 - American Economic History

American economic development with an emphasis on commerce, industry, labor, finance and governmental participation.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 337 - Native American History

Histories and cultures of Indigenous peoples of North American from the pre-contact period to the present.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Being American, Civil Rights \& Social Movements,
Transfer Thread Completion Course, Violence
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 343 - Public History

This course is intended to introduce students to the practices and theory of public history. Students will gain an understanding of museums, historic preservation, archives, documentary film, and many other methods of preserving and presenting historical content outside the classroom

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 344 - The American City

This course explores the history of American cities from the colonial period through the present day, with particular emphasis on the late 19th and 20th centuries. Examines the formation and evolution of the physical urban environment; the city as a site of race, class, and ethnic interactions; urban political, economic, and cultural evolution; transportation and suburbanization; and the consequences of the "urban crisis" of the post-World War II era.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): African-American Studies, Being American, Civil Rights \& Social Movements, Political Arts, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 346 - Rise of Imperial Britain

This course is a study of key events, people and trends that shaped British history from the Act of Union that brought England, Scotland, Wales and Ireland together into a single nation, until the eve of WWI. This course will use literature, film, art and primary source documents, as well as textbooks to examine Britain's rise to be the largest and most powerful empire in the world.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Becoming America, Revolutions, Transfer Thread Completion Course, Transnational Culture
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 347 - Twentieth Century British Culture

This course is a study of key events, people and trends that shaped British culture throughout the Twentieth Century. The course will focus on such moments as the two world wars, decolonization and the rise of a multi-racial populace. It will provide the historical narrative and then analyze the cultural impact through the use of film, television, art, theater, photography and music.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Arts \& Popular Culture, Transfer Thread Completion Course, Transnational Culture
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 350 - The American Civil War

An examination of the causes, conduct, and consequences of the American Civil War with emphasis given to its political, constitutional, economic, military, and social ramifications.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 351 - Latin America to 1830

Political, economic, and social development of the Spanish and Portuguese colonies in America, culminating in the winning of national independence.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 352 - Latin America Since 1830

Developing countries of Latin America, their internal problems, international relations and historic evolution to the present.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Revolutions, Transfer Thread Completion Course Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 353 - History of the Americas

A study of the American republics and their interactions from the colonial era to the present. Students will begin their study by examining the rise and decline of the Spanish, Portuguese, Dutch, French and British empires in the New World. Having considered many of the legacies bequeathed to the new American republics by their colonial heritage, students can then examine how those legacies have affected interAmerican relations for the last two centuries.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Becoming America, Transfer Thread Completion Course, Transnational Culture
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

HIST 358 - American Popular Culture, 1865 to the Present
An interdisciplinary course, involving American literature, philosophy, the fine and performing arts, sports and politics, which examines characteristics and patterns in American popular culture and institutions. Studies will focus on how the creative life of selected Americans and their institutions inform the nature of the evolving cultures in different eras in American history and how they continue to shape the nation and its diverse peoples, values and mores.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Arts \& Popular Culture, Being American, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 362 - Africa North of the Zambezi

Language groups, migrations of peoples, external influences, colonialism, and the emergence of independent states.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 363 - Southern Africa

The Republic of South Africa and the High Commission Territories of Bechuanaland, Swaziland, and Basutoland, including colonialism, imperialism, war, and reconstruction in the 19th and 20th centuries.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 364 - History of Medicine

This course will trace the history of medical philosophy and practices. It will examine the vast variety of efforts to amend human suffering and extend life through human intervention. The course is concerned with medicinal approaches throughout the span of human development and across the globe.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): 21 st Century Healthcare, Transfer Thread
Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 370 - History and the Bible

The history of the eastern Mediterranean area from 1800 B.C.-100 A.D. with a study of the Old and New Testaments in order to evaluate their historical validity.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 371 - History of Jews

A course surveying Jewish life and thought from early Roman times to the present. Four thousand years of Jewish participation in most world civilizations are examined, and religious, philosophical, and literary contributions are analyzed.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 376 - Modern Japan

This course investigates the history of the Japanese people from the beginning of the nineteenth century to the present.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 380 - Egyptology

A study of the history and culture of ancient Egypt from the old kingdom through the new kingdom. The methods and disciplines utilized in the study of an ancient culture will be analyzed and evaluated.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 381-East Asian Military Traditions

This course examines the factors that have distinguished East Asian military practices from the fifth century BCE to modern times.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 382 - Modern Asian Pacific Rim

This course examines the political, social, economic, technological and cultural factors that have affected the Asian Pacific Rim's evolution into the most economically dynamic region of the world today.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 386 - Modern China

In this course we investigate the history of modern China, the major factors that influenced its course, the values that operate in Chinese society today as well as its fast ascent to major international importance.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## HIST 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 404 - Violence in Post-45 Europe

This course focuses on three case studies of violence in Europe in the post-WWII era: 1. Displaced Persons and the refugee crisis as a result of the collapse of governments at the end of the war; 2. The sectarian violence in Northern Ireland between 1968 and 2000; and 3. The wars in the Balkans in the 1990s.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Transfer Thread Completion Course, Violence
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 406 - Mass Killing and Genocide in the Modern World

In this course, we will explore through readings, films, discussion and internet the troubling and complex topics of mass killing (massacre) and genocide in the modern world, both vexing issues that continue to plague us into the twenty-first century and that no doubt we will face into the foreseeable future. We will examine definitions of terms and the longterm historical context(s) for mass killing/genocide, then we will consider specific cases of mass killing and genocide worldwide.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Transfer Thread Completion Course, Violence
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## HIST 411 - Digital History

This course will explore the ways in which digital technologies are changing how historians think about, research and present the past; topics may include digital publishing, visualizations, geospatial mapping, text mining and digitization of historical documents and artifacts.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## HIST 422 - Ancient Greece

This course examines the history of ancient Greece, from the rise of its city-states to the Hellenistic world created by Alexander the Great's conquests. In addition to surveying major events, significant persons, and intellectual achievements, additional emphasis will be given to examining contributions to modern concepts of participatory government and intellectual constructs.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 423 - Ancient Rome

This course examines the history of Ancient Rome, from its origins ca. 800 BCE to its "fall" traditionally dated ca. 476 CE. In addition to surveying major events and significant persons during its Regnal, Republican and Imperial Periods, emphasis will be given to examining Roman culture and political development as antecedents to modern institutions.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 424 - The Middle Ages

This course investigates the major political, social, and intellectual developments of Western Europe during the Middle Ages, 500 to 1500.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 426 - French Revolution and Napoleon

French political, social, and economic affairs in the 18th century, the French Enlightenment, the Revolution, and the Napoleonic period.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Revolutions, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## HIST 427 - Nineteenth Century Europe

From the Congress of Vienna to the outbreak of World War I, examining nationalism, liberalism, the response to industrialism, imperialism, the rise of the alliance system, and the breakdown of nineteenth century order.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Transfer Thread Completion Course, Transnational Culture

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 435 - Pennsylvania

The founding and growth of Pennsylvania to the present.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 437 - The American West

This course examines the history of diverse groups that have resided in the American West since the sixteenth century--Native Americans, Spanish, Mexicans, and citizens of the United States. Topics include the role of the United States government in the conquest, economic development, and administration of the West; the legacy of that conquest for native and immigrant peoples; the formation of distinctive Western communities; contests for access to natural resources and wealth; and the idea of the mythic frontier in American culture.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 445 - Americans and the Environment

This course surveys the environmental history of North America from precolumbian societies until the present, exploring how the environment has influenced America's social, political, economic and cultural development, as well as how human activity and ideas have shaped nature.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Sustainability, Transfer Thread Completion Course Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 450 - History Internship

Supervised placement and research in selected public and private agencies at appropriate institutions.

Credits: 1-12
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 453 - American Constitutional History and Law

Federal constitution by the Supreme Court, including the growth of constitutional law and political, social, economic, and technological changes.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Becoming America, Leadership Development,
Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 454 - Research and Writing Seminar

This class is designed to provide advanced history students with the opportunity to develop the research and writing skills of the historian. Students will produce a major paper based on research in primary sources.

Prerequisite: HIST $205^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 462 - The Contemporary Middle East

The economic, social, cultural, and political aspects of the Middle East in the perspective of the past.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 463 - Israel-History, State and Society

In this course, we will examine the following topics: the development of Zionism and the circumstances in the Jewish Diaspora that led to the call for a "Jewish" state; the British Mandate for Palestine, 1920-1948; the establishment of Israel; Israeli state and society, 1948 to present; and Israel within the broader context of the modern Middle East.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
HIST 464-The Scientific Revolution of the 17th and 18th Centuries The Scientific Revolutions of the 17th and 18th centuries is a survey of the changes and developments in Western science from antiquity to the brink of the Industrial Revolution. The course investigates the origins, transmission and development of scientific ideas and the appearance and impact of new intellectual communities in Western Europe.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Revolutions, Transfer Thread Completion Course Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 490 - Independent Study

For history majors or advanced students with a background in history. Prerequisites: QPA of 2.750 in history and permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## American History, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

American History, Minor Program Page (https://www.sru.edu/academics/ majors-and-minors/american-history-minor/)

History Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/history/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Minor GPA: 2.00 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

| Code $\quad$ Title | Hours |  |
| :--- | ---: | ---: |
| Required Courses |  | 6 |
| Select two of the following: |  |  |



* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN AMERICAN HISTORY (44B)
This program is effective as of Fall 2018
Revised 8-2019

## Applied History, Certificate

To access Certificate Requirements, please view the Curriculum Guide tab.

The job market in public history and historical tourism is growing rapidly. This is most easily seen in the emergence of specialized museums and living history centers, but also as a growing component of governmental services, including the national parks service and census bureau, local and state public space development and, most recently, through interactive web and app development. These occupations demand individuals who have an understanding of how to develop and apply historical knowledge and data in new and innovative ways. This certificate is specifically designed to provide students a foundation in the interaction between history and public consumption that will improve opportunities for employment.

For more information, please contact: Dr. Aaron Cowan

## Related Links

Applied History, Certificate Program Page (https://www.sru.edu/ academics/certificates/applied-history-certificate/)

History Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/history/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide <br> GPA Requirement <br> Certificate GPA: 2.0 or higher



* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Historical Competency

Students must demonstrate historical competency through successfully completing 6 credits prior to declaring the Letter of Completion in Applied History:

| Code | Title | Hours |
| :--- | :--- | ---: |
| Select one of the following: | 3 |  |
| HIST 151 | Ancient and Medieval World |  |
| HIST 152 | Rise of the Modern World |  |
| HIST 153 | Contemporary World History |  |
| Select one of the following: | 3 |  |
| HIST 201 | Colonial America to 1815 |  |
| HIST 202 | United States, 1815-1920 |  |
| HIST 203 | U.S. History Since 1920 |  |

or the equivalent as determined by the History Department

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
CERTIFICATE IN APPLIED HISTORY (5AHS)
Revised 05.17.2021

## European History, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

European History, Minor Program Page (https://www.sru.edu/academics/ majors-and-minors/european-history-minor/)

History Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/history/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Minor GPA: 2.00 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| Select two of the following: |  | 6 |
| HIST 151 | Ancient and Medieval World |  |
| HIST 152 | Rise of the Modern World |  |
| HIST 153 | Contemporary World History |  |
| Select three of the following: |  | 9 |
| HIST 305 | Russia to 1855 |  |
| HIST 306 | Russia Since 1855 |  |
| HIST 318 | Gender and Sexuality in European Society |  |
| HIST 319 | History of Women to 1750 |  |
| HIST 331 | England to 1689 |  |
| HIST 332 | Britain Since 1689 |  |
| HIST 333 | Medieval Church |  |
| HIST 346 | Rise of Imperial Britain |  |
| HIST 347 | Twentieth Century British Culture |  |
| HIST 364 | History of Medicine |  |
| HIST 404 | Violence in Post-45 Europe |  |
| HIST 422 | Ancient Greece |  |
| HIST 423 | Ancient Rome |  |
| HIST 424 | The Middle Ages |  |
| HIST 426 | French Revolution and Napoleon |  |
| HIST 427 | Nineteenth Century Europe |  |
| HIST 454 | Research and Writing Seminar |  |
| HIST 464 | The Scientific Revolution of the 17th and 18th Centuries |  |

## Free Elective

Select one course from HIST 151 through HIST 498
Total Hours

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN EUROPEAN HISTORY (44C)
This program is effective as of Fall 2014
Revised 8-2019

## General History, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

General History, Minor Program Page (https://www.sru.edu/academics/ majors-and-minors/history/)

History Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/history/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Minor GPA: 2.00 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

| Code Title | Hours |
| :--- | ---: |
| Required Courses |  |
| Select three $100 \& 200$ level HIST courses | $\mathbf{9}$ |
| Select three 300 level or above HIST courses | $\mathbf{1 8}$ |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN GENERAL HISTORY (44A)
This program is effective as of Fall 2003
Revised 8-2019

## History, Bachelor of Arts (BA) Program Learning Outcomes

- COMMUNICATION: including speech and writing, using appropriate sources of information and various presentation formats. Links to University Outcome \#1
- able to develop \& present a thesis effectively in either oral or written form
- able to organize legitimate supporting materials in a comprehensible way
- able to create a persuasive written argument
- able to speak clearly on a topic
- CRITICAL THINKING: locate, analyze, synthesize and evaluate information and ideas from multiple perspectives. Links to University Outcomes \#2 and \#3.
- able to interpret the meaning of historical texts
- able to identify an author's thesis
- able to identify key points in a document
- able to assess the logical consistency of arguments
- able to generate an independent argument from existing primary and secondary sources
- PROFESSIONAL PROFICIENCY: including competency in applying research methods and applying knowledge and skills to meet professional competencies with History. Links to University Outcomes \#8 and \#3.
- able to locate and retrieve information from a variety of sources (print, electronic, other)
- able to use Turabian (or Chicago Manual of Style)
- able to assess the legitimacy and appropriateness of sources
- OBJECTIVE KNOWLEDGE: includes demonstrating historical knowledge at a level which reflects competency and understanding of course material pertaining to a variety of historical epochs and diverse geographical and cultural contexts. Links to University Outcomes \#5 and \#6, but is defined specifically by the ability to acquire and to assess historical facts as well as interpretations that are broadly-based as well as in-depth.
- able to identify key historical figures, events, trends commensurate with being knowledgeable in a field of history
- able to summarize the current prevailing analyses of historical events
- able to identify mistakes of logic (or facts) when history is cited in debated issues
- CAREER PREPARATION: Links to University Outcome \# 5.
- can identify career paths suited to history majors
- can extrapolate applied history experience to a variety of historyoriented careers
- can report post-graduate success tied to history degree-based skills acquired as an undergraduate


## Related Links

History, BA Program Page (https://www.sru.edu/academics/majors-andminors/history/)

History Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/history/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Modern Language Requirement | $0-9$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 42 |
| Electives | 35 |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Sciences Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Sciences Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |
| Thematic Thread |  |  |
| Select 12 Credits (p.1378) ${ }^{2}$ |  | 12 |
| Total Hours |  | 42 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

| Code | Title |
| :--- | ---: |
| Complete 0-9 credits | Hours |
| Total Hours | $0-9$ |
| $\mathbf{0 - 9}$ |  |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code \begin{tabular}{ll}
Title \& Hours <br>
Complete one of the following: \& $0-3$ <br>
Meet required minimum SAT or ACT math score OR \& <br>
ESAP 110 \& Beginning Algebra <br>
\hline

 

<br>
\hline
\end{tabular}

Total Hours ..... 0-3

## Computer Competency

| Code | Title | Hours |
| :---: | :---: | :---: |
| Demonstrate "computer competency" by one of the following: |  | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major Requirements

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| HIST 205 | The Historian's Craft ${ }^{1}$ | 3 |
| Select two of the following: |  | 6 |
| HIST 151 | Ancient and Medieval World ${ }^{1}$ |  |
| HIST 152 | Rise of the Modern World ${ }^{1}$ |  |
| HIST 153 | Contemporary World History ${ }^{1}$ |  |
| Select two of the following: |  | 6 |


| HIST 201 | Colonial America to $1815^{1}$ |  |
| ---: | :--- | ---: |
| HIST 202 | United States, 1815-1920 $^{1}$ |  |
| HIST 203 | U.S. History Since 1920 |  |


| Required Elective Courses |  |
| :---: | :---: |
| United States |  |
| Select six credits from the list below (p. 850) | 6 |
| Africa, Asia, Latin America and Middle East |  |
| Select six credits from the list below (p. 850) | 6 |
| Europe |  |
| Select six credits from the list below (p. 851) | 6 |
| Applied History |  |
| Select three credits from the list below (p. 851) | 3 |
| Subtotal | 21 |
| Electives |  |
| All History majors must complete 6 additional upper division History credits. |  |
| HIST 300/400 level course ${ }^{1}$ | 3 |


| HIST 300/400 level course ${ }^{1}$ | 3 |
| :--- | :--- |
| Subtotal | 6 |

Total Hours
1 Course counts for 50\% of Major requirements and Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course


## United States

| Code | Title | Hours |
| :---: | :---: | :---: |
| HIST 304 | American Military History ${ }^{1}$ | 3 |
| HIST 313 | U.S. Manhood and Masculinities ${ }^{1}$ | 3 |
| HIST 323 | African American History to $1876{ }^{1}$ | 3 |
| HIST 324 | African American History Since $1876{ }^{1}$ | 3 |
| HIST 326 | The Long Civil Rights Movement ${ }^{1}$ | 3 |
| HIST 335 | Outstanding Americans ${ }^{1}$ | 3 |
| HIST 336 | American Economic History ${ }^{1}$ | 3 |
| HIST 337 | Native American History ${ }^{1}$ | 3 |
| HIST 344 | The American City ${ }^{1}$ | 3 |
| HIST 350 | The American Civil War ${ }^{1}$ | 3 |
| HIST 353 | History of the Americas ${ }^{1}$ | 3 |
| HIST 358 | American Popular Culture, 1865 to the Present ${ }^{1}$ | 3 |
| HIST 364 | History of Medicine ${ }^{1}$ | 3 |
| HIST 390 | Experimental ${ }^{1}$ | 3 |
| HIST 435 | Pennsylvania ${ }^{1}$ | 3 |
| HIST 437 | The American West ${ }^{1}$ | 3 |
| HIST 445 | Americans and the Environment ${ }^{1}$ | 3 |
| HIST 453 | American Constitutional History and Law ${ }^{1}$ | 3 |
| HIST 490 | Independent Study ${ }^{1}$ | 3 |
| HIST 498 | Selected Topics ${ }^{1}$ | 3 |

## Africa, Asia, Latin America and Middle East

| Code | Title | Hours |
| :---: | :---: | :---: |
| HIST 351 | Latin America to $1830{ }^{1}$ | 3 |
| HIST 352 | Latin America Since $1830{ }^{1}$ | 3 |
| HIST 353 | History of the Americas ${ }^{1}$ | 3 |
| HIST 362 | Africa North of the Zambezi ${ }^{1}$ | 3 |
| HIST 363 | Southern Africa ${ }^{1}$ | 3 |
| HIST 364 | History of Medicine ${ }^{1}$ | 3 |
| HIST 370 | History and the Bible ${ }^{1}$ | 3 |
| HIST 371 | History of Jews ${ }^{1}$ | 3 |
| HIST 376 | Modern Japan ${ }^{1}$ | 3 |
| HIST 380 | Egyptology ${ }^{1}$ | 3 |
| HIST 381 | East Asian Military Traditions ${ }^{1}$ | 3 |
| HIST 382 | Modern Asian Pacific Rim ${ }^{1}$ | 3 |
| HIST 386 | Modern China ${ }^{1}$ | 3 |
| HIST 390 | Experimental ${ }^{1}$ | 3 |
| HIST 406 | Mass Killing and Genocide in the Modern World ${ }^{1}$ | 3 |
| HIST 462 | The Contemporary Middle East ${ }^{1}$ | 3 |


| HIST 463 | Israel-History, State and Society ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| HIST 490 | Independent Study ${ }^{1}$ | 3 |
| HIST 498 | Selected Topics ${ }^{1}$ | 3 |

1 Course counts for $50 \%$ of Major requirements and Major GPA

| Europe |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| HIST 305 | Russia to $1855{ }^{1}$ | 3 |
| HIST 306 | Russia Since $1855{ }^{1}$ | 3 |
| HIST 318 | Gender and Sexuality in European Society ${ }^{1}$ | 3 |
| HIST 319 | History of Women to $1750{ }^{1}$ | 3 |
| HIST 331 | England to $1689{ }^{1}$ | 3 |
| HIST 332 | Britain Since $1689{ }^{1}$ | 3 |
| HIST 333 | Medieval Church ${ }^{1}$ | 3 |
| HIST 346 | Rise of Imperial Britain ${ }^{1}$ | 3 |
| HIST 347 | Twentieth Century British Culture ${ }^{1}$ | 3 |
| HIST 364 | History of Medicine ${ }^{1}$ | 3 |
| HIST 390 | Experimental ${ }^{1}$ | 3 |
| HIST 404 | Violence in Post-45 Europe ${ }^{1}$ | 3 |
| HIST 422 | Ancient Greece ${ }^{1}$ | 3 |
| HIST 423 | Ancient Rome ${ }^{1}$ | 3 |
| HIST 424 | The Middle Ages ${ }^{1}$ | 3 |
| HIST 426 | French Revolution and Napoleon ${ }^{1}$ | 3 |
| HIST 427 | Nineteenth Century Europe ${ }^{1}$ | 3 |
| HIST 464 | The Scientific Revolution of the 17th and 18th Centuries ${ }^{1}$ | 3 |
| HIST 490 | Independent Study ${ }^{1}$ | 3 |
| HIST 498 | Selected Topics ${ }^{1}$ | 3 |

1 Course counts for $50 \%$ of Major requirements and Major GPA
Applied History

| Code | Title | Hours |
| :--- | :--- | ---: |
| HIST 343 | Public History ${ }^{1}$ | 3 |
| HIST 395 | Workshop $^{1}$ | 3 |
| HIST 411 | Digital History $^{1}$ | 3 |
| HIST 450 | History Internship $^{1}$ | 3 |
| HIST 454 | Research and Writing Seminar $^{1}$ | 3 |
| HIST 490 | Independent Study $^{1}$ | 3 |
| HIST 495 | Workshop $^{1}$ | 3 |

1 Course counts for $50 \%$ of Major requirements and Major GPA

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. These opportunities can deepen and enhance the learning in History. In addition, there is a strong correlation between long-term student success and engagement in these opportunities:

1. Internships
2. Reacting to the Past designated courses
3. Student-faculty research
4. International and domestic study programs (short-term, semester, and year-long)
5. Volunteering at historical institutions (museums, archives, libraries, living history centers, etc.)
6. Career education and development
7. Student leadership development

HISTORY - BA (544)
This program is effective as of Fall 2019
Revised 7-2019
UCC RISP 2019

## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall |  |  |
| SUBJ 139 | University Seminar |  |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar | 1 |
| Select one of the following: | 3 |  |
| HIST 151 |  | Ancient and Medieval World |
| HIST 152 | Rise of the Modern World |  |
| HIST 153 | Contemporary World History |  |


| Select one of the following: |  | 3 |
| :---: | :---: | :---: |
| HIST 201 | Colonial America to 1815 |  |
| HIST 202 | United States, 1815-1920 |  |
| HIST 203 | U.S. History Since 1920 |  |
| Humanities Inquiry (p. 1378) |  | 3 |
|  | Hours | 16 |
| Spring |  |  |
| ENGL 104 | Critical Reading | 3 |
| Select one of the following: |  | 3 |


| HIST 151 | Ancient and Medieval World |
| :--- | :--- |
| HIST 152 | Rise of the Modern World |
| HIST 153 | Contemporary World History |


| Select one of the following: | 3 |  |
| ---: | :--- | ---: |
| HIST 201 | Colonial America to 1815 |  |
| HIST 202 | United States, 1815-1920 |  |
| HIST 203 | U.S. History Since 1920 | 3 |
| MODL 1XX | Language and Culture I, II, or III | 3 |
| MATH 117 | Quantitative Reasoning | $\mathbf{1 5}$ |


| Second Year Fall |  |  |
| :---: | :---: | :---: |
| HIST 205 | The Historian's Craft | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| MODL 1XX | Language and Culture I, II, or III | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
| Social Science Inquiry (p. 1378) |  | 3 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 15 |
| Spring |  |  |
| United States History 300/400 |  | 3 |
| European History 300/400 |  | 3 |
| MODL 1XX | Language and Culture I, II, or III | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Elective/Minor/Certificate/2nd Major |  | 3 |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| United States History 300/400 |  | 3 |
| African, Asian, Latin American, and Middle Eastern History 300/400 |  | 3 |
| SCI 101 | Science of Life | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Elective/Minor/Certificate/2nd Major |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| Applied History 300/400 |  | 3 |
| African, Asian, Latin American, and Middle Eastern History 300/400 |  | 3 |
| SCI 102 | Understanding the Physical World | 3 |
| Elective/Minor/Certificate/2nd Major |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| European Hist | /400 | 3 |
| Elective/Minor/Certificate/2nd Major |  | 3 |
| Elective/Minor/Certificate/2nd Major |  | 3 |
| Elective/Minor/Certificate/2nd Major |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| European History 300/400 |  | 3 |
| History Elective 300/400 |  | 3 |
| Elective/Minor/Certificate/2nd Major |  | 3 |
| Elective/Minor/Certificate/2nd Major |  | 3 |



## Non-Western History, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Non-Western History, Minor Program Page (https://www.sru.edu/ academics/majors-and-minors/non-western-history-minor/)

History Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/history/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Minor GPA: 2.00 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required History Courses |  |  |
| HIST 151 | Ancient and Medieval World | 3 |
| HIST 153 | Contemporary World History | 3 |
| Select three of the following: | 9 |  |
| HIST 362 | Africa North of the Zambezi |  |
| HIST 363 | Southern Africa |  |
| HIST 364 | History of Medicine |  |
| HIST 370 | History and the Bible |  |
| HIST 371 | History of Jews |  |
| HIST 376 | Modern Japan |  |
| HIST 380 | Egyptology |  |


| HIST 381 | East Asian Military Traditions |
| :--- | :--- |
| HIST 382 | Modern Asian Pacific Rim |
| HIST 386 | Modern China |
| HIST 406 | Mass Killing and Genocide in the Modern <br> World |
| HIST 454 | Research and Writing Seminar <br> (Nonwestern topics only) |
| HIST 462 | The Contemporary Middle East |
| HIST 463 | Israel-History, State and Society |
| Free Elective |  |

Select one History course ${ }^{1} \quad 3$

## Total Hours

From HIST 151 through HIST 498.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN NON-WESTERN HISTORY (44D)
This program is effective as of Fall 2014.
Revised 8-2019

## Homeland/Corporate Security Studies

| Chair | Secretary | Location |
| :--- | :--- | :--- |
| Department <br> Phone |  |  |
| Dr. Susan <br> Lubinski | Renee Hazlet | 215 Spotts World <br> Culture Building |

Department Web Site URL (https://www.sru.edu/academics/colleges-and-departments/cla/departments/homeland-corporate-securitystudies/)
Department Fact Sheet URL (https://www.sru.edu/documents/programs/ factsheets/undergraduate/securitystudies-fs.pdf)

## Faculty

Melissa Berdell
Instructor
Homeland/Corporate Sec Studies
D.H.E., Duquesne University
M.S., Point Park University
B.A., University of Pittsburgh

## Kevin Cassidy

Instructor

Homeland/Corporate Sec Studies<br>M.A., John Jay College<br>B.S., John Jay College<br>Susan Lubinski<br>Associate Professor<br>Homeland/Corporate Sec Studies<br>J.D., Duquesne University<br>M.S., Grove City College<br>B.S.B.A., Youngstown State University<br>C.P.A., Youngstown State University

## Bret Perchaluk

Instructor
Homeland/Corporate Sec Studies
M.S., National Intelligence University
B.A., Rider University

## John Rovesti

Instructor
Homeland/Corporate Sec Studies

## Jordan Titera

Assistant Professor
Homeland/Corporate Sec Studies
M.S., Saint Joseph's University
B.A., Slippery Rock University

Brian Wisneski
Instructor
Homeland/Corporate Sec Studies
Ed.D., Creighton University
M.S., Boston University
B.A., Spring Arbor University

## Programs

All first-year students who enter SRU in the Summer and Fall terms of 2019 and after will follow Rock Studies. Students who entered SRU before Spring 2019 will follow Liberal Studies. All new transfer students beginning Summer 2019 and after will follow Liberal Studies. We anticipate that transfer students will begin to enter under Rock Studies during the Summer/Fall term of 2021.

## Majors

- Corporate Security, Bachelor of Science (BS) - Concentration in Fraud (p. 860)
- Corporate Security, Bachelor of Science (BS) - Concentration in Organizational Security (p. 863)
- Homeland Security, Bachelor of Science (BS) (p. 868)


## Minors

- Emergency Management, Minor (p. 866)
- Fraud, Minor (p. 867)
- Homeland Security, Minor (p. 871)
- Organizational Security, Minor (p. 872)


## Certificates

- Emergency Management, Certificate (p. 865)
- Fraud, Certificate (p. 866)
- Homeland Security, Certificate (p. 871)
- Organizational Security, Certificate (p. 872)


## Courses

## CSS Courses

## CSS 100 - Modern Security

This course will explore the ever-changing security environment confronting domestic governments in securing its homeland, for-profit and non-profit organizations, and individuals. This course will discuss the history of security, the sub-topics of security, and whether insecurities can be eliminated, prevented, or merely managed. Students will apply risk assessment procedures, devise solutions to complex security issues, and weigh the strengths and weaknesses of those solutions. The student will be able to assess the complexity of solving modern day security problems when confronting economic limitations, policy and legal implications, and the feasibility of providing security to diverse populations.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## CSS 120 - Introduction to Private Security

This course will provide an overview of the private security field and the numerous complexities within it. Topics include but are not limited to an overview of private security, the basic goals and responsibilities of the industry, the challenges facing security, and various security systems for infrastructure, institutional and commercial organizations.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms

## CSS 139-University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## CSS 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

CSS 195-Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. The course outline will be determined by the instructor based on key developments, trends or specialized content within homeland security. Permission of instructor.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## CSS 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CSS 210 - Physical Security

This course discusses the methods, processes, and policies surrounding the security protection of the workplace. Students will study the historical roots of physical protection of assets, cultural contexts and interpretations of security efforts, as well as the way modern technology is changing the methods and focus of protection programs.
The important elements of physical barriers, electronic controls and surveillance, and procedural efforts to secure assets will be examined. The role of the Security Manager in regulated workspaces will be discussed.

Prerequisite: CSS $120^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms

## CSS 240 - Security Management

This course will examine the security department's role and function within an organization and the activities associated with operating and managing the department. This course will also look at how to manage various relationships security professionals encounter both internally and externally.

Prerequisite: $\operatorname{CSS} 120^{\circ}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Fall Terms

## CSS 290-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## CSS 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. The course outline will be determined by the instructor based on key developments, trends or specialized content within homeland security. Permission of instructor.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## CSS 298-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CSS 300-Personnel Security

This course discusses the structures, processes, and regulations surrounding the security protection of people in the workplace. Students will study and weigh the advantages and legal restrictions of background checks as a condition of employment. Protection of workers in general, as well as programs to safeguard executives, workers in controversial industries/fields, and the design of policies and programs providing protection for workers with special issues outside the workplace will be examined. Defining, preventing and reacting to workplace violence will be explored.

Prerequisites: CSS $120^{\mathrm{D}}$ or HSS $120^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CSS 320 - Security Risk and Emergency Management

This course will provide guidance how to conduct risk assessments, handle emergencies and develop and implement business contingency and disaster recovery plans. students will learn how to develop and use risk surveys and other information gathering techniques, and design and implement controls by understanding cost/benefit analysis, crime prediction, response planning and business impact analysis.

Prerequisite: CSS $240^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CSS 351 - Fraud

Approximately 5\% of U.S. organizations annual revenues are lost to fraud each year. This course explores the historical and social problems created by fraud, the ethical and legal issues fraud presents to organizations and our economy; and the principles of fraud detection, examination, and prevention organizations employ to combat fraud in order to minimize both economic losses and a loss of jobs.

Credits: 3
Term(s) Typically Offered: Offered Fall, Winter, \& Summer
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CSS 352 - Law \& Ethics in the Workplace

This course explores the historical, legal, ethical and practical implications of legal rights of workers in organizational relationships. This course will provide the historical evolution of protective legislation for workers and the continual refinement of common law to workers" rights. Ethical issues not addressed by the law will be explored as well as $t$ he importance of diversity in order to provide maximum growth for society and all individuals.

Credits: 3
Term(s) Typically Offered: Offered Winter, Spring\&Summer
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CSS 354 - Risk Assessment and Fraud Prevention

Every level of today's organizations must make ethics and organizational integrity a priority. Controlling for risk and preventing fraud are critical skills leaders in every organization will be called upon to exercise. Focus must be placed on fraud prevention, internal controls, compliance with regulations and other risk exposure. Students will apply course concepts to their own disciplines.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CSS 360-Specialized Fraud Schemes

This course will examine specialized frauds such as identity theft, financial institution fraud, payment fraud, insurance fraud, healthcare fraud, contract and procurement fraud, tax fraud, and bankruptcy fraud. A thorough analysis of money laundering and its place in specialized fraud schemes will be reviewed. For each type of specialized fraud, we will explore the various types of fraud schemes within these specialized frauds and the controls that can be implemented to prevent or detect them.

Prerequisites: CSS $351^{\text {D }}$ and ACCT $209^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in CERT - Fraud, Fraud or Organizational Security.

## CSS 370 - Fraud Law and Report Writing

This course will examine both domestic and international laws surrounding fraud. We will discuss the special non-governmental agencies assisting in the fight against fraud domestically and worldwide and their recommended compliance guidelines. In this class we will also discuss how to write an effective fraud report for various audiences. Ethical responsibilities of a fraud examiner will also be examined.

Prerequisite: CSS $351^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Fraud.

## CSS 390-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CSS 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. The course outline will be determined by the instructor based on key developments, trends or specialized content within homeland security. Permission of instructor.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CSS 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CSS 420 - Fraud Examination

This course will expose the student to an in-depth analysis of the fraud schemes perpetrated by those within and external to organizations. the elements of fraud schemes, the red flags associated with each scheme and how the scheme can be prevented and detected will be analyzed. This course will also emphasize financial statement fraud, and external fraud schemes from customers, vendors and unrelated third parties. Corporate espionage will also be covered.

Prerequisite: CSS $351^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Corporate Security.

## CSS 430 - Corporate Security Law

This course will cover the pertinent security laws surrounding an investigation and developing a case for prosecution. It will also cover the various laws security professionals can breach while conducting security investigations.

Prerequisite: CSS $351^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Corporate Security, Fraud or Organizational Security.

CSS 440 - Corporate Security Investigation
This course will provide the fundamentals of corporate security investigations, the methods used in an investigation, how to build a case, apply investigative strategies, use investigative technology and write an effective report. The course will also emphasize the ethics, values and laws one must consider when conducting an effective investigation.

Prerequisite: CSS $351^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Corporate Security, Fraud or Organizational Security.

## CSS 450 - Internship

Supervised placement and research in selected public and private agencies.

## Credits: 3-9

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CSS 460 - Corporate Security Capstone

Student will apply and demonstrate prior knowledge, skills and abilities to a major project which will be communicated both in written and oral forms. This course will cover current topics in corporate security and current global issues challenging security. A discussion of professional ethics, proper etiquette and interviewing skills, negotiation and conflict resolution skills will also be discussed.
Prerequisites: CSS $440^{\circ}$ and $\operatorname{CSS} 430^{C}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Corporate Security.

## CSS 490 - Independent Study

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. students work on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CSS 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. The course outline will be determined by the instructor based on key developments, trends or specialized content within homeland security. Permission of instructor.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CSS 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## HSS Courses

## HSS 120-Introduction to Homeland Security

This course is a general introduction to the foundations of homeland security, counter-terrorism, infrastructure protection, intelligence operations and other mechanics of the homeland defense field. This course also includes an overview of the legal, sociopolitical and criminal justice aspects of homeland security.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Summer Terms

## HSS 130 - Principles of Emergency Management

This course will introduce the foundations of emergency management and discuss the emergency management cycle. The concept of the whole community approach will be emphasized along with the tools and resources used in emergency management situations. An emergency exercise will be assigned and special topics unique to emergencies will be explored.

## Credits: 3

## HSS 139-University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## HSS 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## HSS 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. The course outline will be determined by the instructor based on key developments, trends or specialized content within homeland security. Permission of instructor.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## HSS 198-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## HSS 210 - Fundamentals of Terrorism

This course will explore the complex issues surrounding terrorism. In terms of terrorism, the topics addressed may include: complexities of defining it, types of terrorists, causes of terrorism, methods used to achieve their goals, environments, funding and support, structure and counter-terrorist measures, and the issues the criminal justice system faces when trying to prevent, detect, and investigate it.

Prerequisites: HSS $120^{\circ}$ or CSS $120^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with department of Homeland/Corporate Sec Studies.

## HSS 230 - Risk Analysis and Strategic Planning

This course provides an overview of principles of risk analysis and management, including vulnerability and threat identification, assessing risk threats, security survey methodology, emergency management and response strategies.

Prerequisite: HSS $120^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
HSS 250 - Managing Natural, Man-Made and Technological Disasters
This course will discuss the history of natural, technological and manmade (intentional) disasters. (e.g., 1918 Pandemic, Great Flood of 1923, 1994 Northridge Earthquake, Coronavirus 19, September 11th). Students will analyze the complex nature of disasters, identifying overriding themes while examining lessons learned and best practices to handle specific types of disasters.

Credits: 3

## HSS 260 - Emergency Management Planning

This course will provide an in-depth analysis of planning methodologies and constructs as well as pitfalls and limiting factors in the development and execution of emergency management plans at the strategic, operational and tactical levels. The origins of emergency management planning, applicable policies and legislation will be reviewed. The course will also examine historical incident review and analysis, contemporary and emerging planning doctrine, and advanced planning concepts.

Prerequisite: HSS $130^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Enrollment limited to students with department of Homeland/Corporate Sec Studies

## HSS 290-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## HSS 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. The course outline will be determined by the instructor based on key developments, trends or specialized content within homeland security. Permission of instructor.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## HSS 298-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## HSS 300-Terrorist Organizations and Lone Wolves

This course will allow students to study the ideological evolution, the behavioral indicators, recruitment styles, organizational styles, financing methods, and tactics for specific domestic and international terrorist organizations. Issues such as the radicalization and behavioral indicators of both terrorist organization and lone wolves will be discussed as well.

Prerequisite: HSS $210^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Homeland/Corporate Sec Studies.

## HSS 310 - Weapons of Mass Destruction

This course will examine the threat and use of nuclear, biological, chemical, and radiological weapons and their implications to the Homeland. The course will evaluate means of proliferation and countermeasures overseas and within the Homeland.

Prerequisite: HSS $210^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Homeland/Corporate Sec Studies.

## HSS 320 - Protecting Infrastructure and Key Assets

This course focuses on the protection of critical infrastructure, including information and telecommunication systems, water supply, energy, first responders, transportation, health/medical and other key assets.

Prerequisite: HSS $230^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HSS 330 - Intelligence Operations

This course encompasses the development and use of national security and policing intelligence, and includes theoretical and practical models of intelligence in governmental and private security environments.

Prerequisite: HSS $320^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

HSS 340 - Intelligence for Homeland Security
This course will examine intelligence operations for the Homeland Security Enterprise at the state and local level, within the Department of Homeland Security, and within the private sector. The course will utilize intelligence tradecraft to assess current threats, trends, hazards, and vulnerabilities in the Homeland. The course will also prepare students to write intelligence briefs.

Prerequisite: HSS $330^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Homeland Security.

## HSS 350-Securing Virtual Infrastructure

This course will examine the implications of the growing cybersecurity environment. The course will discuss targeted systems, threat adversaries, attack methods, and recovery and mitigation processes.
Prerequisite: HSS $230^{\circ}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Homeland Security.

## HSS 360-Social Dimensions of Disaster

This class will analyze how individuals, groups, families, organizations, communities and countries, handle disasters before, during, and after they occur. The vulnerability of various social groups will be explored as well as reactions to disasters the stressors associated with disasters.
Methods to reduce vulnerabilities and build local capacity will be covered.
Prerequisites: HSS $250^{\text {C }}$ or HSS $260^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in CERT - Emergency Management, Emergency Management, Corporate Security, Homeland Security, Fraud or Organizational Security.
HSS 370-Research in Disasters and Emergency Management
This course will describe in detail how research is conducted in disasters and emergency management how to read and understand scholarly work; and apply related studies from the field of disaster research. Students will be taught how to evaluate open-source data for construction of research projects. The basic foundations of how to conduct qualitative research studies geared towards disaster research will be provided.

Prerequisite: HSS $250^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in CERT - Emergency Management, Emergency Management, Corporate Security, Homeland Security, Fraud or Organizational Security.

## HSS 380-Crisis \& Emergency Risk Communication

Disasters mandate effective communication. This course will analyze communication theory to examine common challenges and best practices encountered in emergency, crisis and risk communication situations by public information officers, public authorities, first responders, and health professionals. It will explore the opportunity to develop strategies and communication solutions in interpersonal, mediated, social media, and public contexts.

Prerequisite: HSS $250^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in CERT - Emergency Management, Emergency Management, Corporate Security, Homeland Security, Fraud or Organizational Security.

## HSS 390-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HSS 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. The course outline will be determined by the instructor based on key developments, trends or specialized content within homeland security. Permission of instructor.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HSS 398-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HSS 441 - Terrorism, Law and National Security

This course will discuss terrorism-its structure, causes, and illegal financing and the evolution of domestic and international laws evolving to deal with terrorism and national security.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
HSS 450 - Internship HS
Supervised placement and research in selected public and private
agencies. Permission of instructor.
Credits: 3-9
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HSS 460 - Capstone in Homeland Security

The Capstone class applies student professional proficiency, communication skills, ethical understanding, cultural awareness and critical thinking towards the completion of a capstone project that demonstrates competency in multiple aspects of homeland security and defense.

Prerequisite: HSS $340^{\circ}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Homeland Security.

## HSS 490 - Independent Study

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. students work on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HSS 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. The course outline will be determined by the instructor based on key developments, trends or specialized content within homeland security. Permission of instructor.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HSS 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Corporate Security, Bachelor of Science (BS) - Concentration in Fraud

## Program Learning Outcomes

- Critical Thinking and Problem Solving in Security Studies: Students will develop critical thinking skills necessary to the identification and response of security threats.
- Ethics, Values and Morality in Security Studies: Students will identify, explain and apply principles of ethics, law, values and morality to security-based scenarios and practices.
- Professional Communication in Security Studies: Students will demonstrate ability to clearly articulate plans, strategies, analyses and other field-based communications in oral and written format, including the use of current technologies and media.
- Professional Proficiency in Security Studies: Students will recognize, explain, report and demonstrate current field-based best practices in security management, threat response, and other knowledge/ skills/abilities demanded by the field and the impact of technology on security preparedness and implementation.
- Writing Proficiency in Security Studies: Students will practice and apply principles of clear, professional, succinct and straightforward writing.


## Related Links

Corporate Security - Fraud, BS Program Page (https://www.sru.edu/ academics/majors-and-minors/corporate-security/)

Homeland/Corporate Security Studies Department Page (https:// www.sru.edu/academics/colleges-and-departments/cla/departments/ homeland-corporate-security-studies/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.00 or higher
Overall GPA: 2.00 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major/Concentration Requirements | 60 |
| Electives | 18 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Sciences Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Sciences Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |

Thematic Thread

| Select 12 Credits $(\mathrm{p} .1378)^{2}$ | 12 |
| :--- | :--- |
| Total Hours | 42 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required | minimum SAT or ACT math score OR |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | $\mathbf{0 - 3}$ |

## Computer Competency

| Code | Title | Hours |
| :--- | :--- | ---: |
| Demonstrate "computer competency" by one of the following: | $0-3$ |  |
| Pass Computer Competency Exam OR |  |  |$\quad$| Select one of the following at SRU or another post-secondary |  |
| :--- | :--- |
| institution: |  |
| CPSC 100 Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |
| CPSC 130 | Introduction to Computing and <br> Programming |

## Major/Concentration Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :---: | :---: | :---: |
| Core Courses |  |  |
| ACCT 209 | Financial Accounting ${ }^{1}$ | 3 |
| BUSA 340 | Legal Environment of Business ${ }^{1}$ | 3 |
| CSS 120 | Introduction to Private Security ${ }^{2}$ | 3 |
| CSS 351 | Fraud ${ }^{2}$ | 3 |
| CSS 352 | Law \& Ethics in the Workplace ${ }^{2}$ | 3 |
| CSS 354 | Risk Assessment and Fraud Prevention ${ }^{2}$ | 3 |
| CSS 430 | Corporate Security Law ${ }^{2}$ | 3 |
| CSS 440 | Corporate Security Investigation ${ }^{2}$ | 3 |
| CSS 460 | Corporate Security Capstone ${ }^{2}$ | 3 |
| ENGL 205 | Introduction to Professional Writing ${ }^{1}$ | 3 |
| CSLD 251 | Leadership Theory ${ }^{1}$ | 3 |
| MIS 265 | Management Information Systems ${ }^{1}$ | 3 |
| MIS 301 | Practical Computer Security ${ }^{1}$ | 3 |
| Subtotal |  | 39 |
| Fraud Concentration |  |  |
| CSS 240 | Security Management ${ }^{2}$ | 3 |
| CSS 360 | Specialized Fraud Schemes ${ }^{2}$ | 3 |


| CSS 370 | Fraud Law and Report Writing ${ }^{2}$ | 3 |
| :---: | :---: | :---: |
| CSS 420 | Fraud Examination ${ }^{2}$ | 3 |
| MIS 333 | Introduction to Computer Forensics ${ }^{2}$ | 3 |
| Subtotal |  | 15 |
| Major Electives |  |  |
| Select two of the following: |  | 6 |
| ACCT 322 | Business Analysis and Decision Makin |  |
| CSS 190 | Experimental ${ }^{2}$ |  |
| or CSS 290 | Experimental |  |
| or CSS 390 | Experimental |  |
| CSS 195 | Workshop ${ }^{2}$ |  |
| or CSS 295 | Workshop |  |
| or CSS 395 | Workshop |  |
| or CSS 495 | Workshop |  |
| CSS 198 | Selected Topics ${ }^{2}$ |  |
| or CSS 298 | Selected Topics |  |
| or CSS 398 | Selected Topics |  |
| or CSS 498 | Selected Topics |  |
| CSS 210 | Physical Security ${ }^{2}$ |  |
| CSS 300 | Personnel Security ${ }^{2}$ |  |
| CSS 320 | Security Risk and Emergency Managem 2 |  |
| CSS 450 | Internship ${ }^{2}$ |  |
| CSS 490 | Independent Study ${ }^{2}$ |  |
| HSS 120 | Introduction to Homeland Security ${ }^{2}$ |  |
| HSS 210 | Fundamentals of Terrorism ${ }^{2}$ |  |
| INDP 348 | Sociology of Organizations ${ }^{1}$ |  |
| CSLD 352 | Self Leadership ${ }^{1}$ |  |
| CSLD 353 | Teambuilding for Leaders ${ }^{2}$ |  |
| MGMT 351 | Organizational Behavior ${ }^{1}$ |  |
| Subtotal |  | 6 |
| Total Hours |  | 60 |
| 1 Course counts for 50\% of Major but not Major GPA <br> 2 Course counts for $50 \%$ of Major requirements and Major GPA <br> * Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course. |  |  |
| Co-curricular and Experiential Learning |  |  |
| Students are encouraged to explore additional curricular and co-curricula opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities: |  |  |
| 1. Internships |  |  |
| 2. Job Shadowing |  |  |
| 3. Security Studies Club |  |  |
| 4. Project to End Human Trafficking Club |  |  |
| 5. Security Studies Speaker's Series |  |  |
| 6. Department of Homeland/Corporate Security Studies Field Trips and Spring Break Trips |  |  |
| CORPORATE SECURITY (5170) |  |  |

This program is effective as of Fall 2019
Revised 7-2019
UCC 3.26.2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall |  |  |
| CSS 120 | Introduction to Private Security | 3 |
| INDS 101 | FYRST Seminar | 1 |
| ENGL 102 | Critical Writing | 3 |
| SUBJ 139 | University Seminar | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) | 3 |  |
| Humanities Inquiry (p. 1378) | 3 |  |
|  | Hours | $\mathbf{1 6}$ |


| Spring |  | 3 |
| :--- | :--- | :--- |
| CSLD 251 | Leadership Theory | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: |  |  |


| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :---: | :--- | ---: |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Free Elective |  | 3 |
|  | Hours | $\mathbf{1 5}$ |

## Second Year

Fall

| ACCT 209 | Financial Accounting | 3 |
| :--- | :--- | :--- |
| ENGL 205 | Introduction to Professional Writing ${ }^{1}$ | 3 |
| CSS 240 | Security Management | 3 |
| SCI 101 | Science of Life | 3 |
| Free Elective |  | 3 |
| ${\text { Declare a Thematic } \text { Thread }^{2}}{ }^{2}$ |  |  |


|  | Hours | $\mathbf{1 5}$ |
| :--- | :--- | ---: |
| Spring |  |  |
| CSS 352 | Law \& Ethics in the Workplace | 3 |
| SCI 102 | Understanding the Physical World | 3 |
| BUSA 340 | Legal Environment of Business | 3 |
| MIS 265 | Management Information Systems | 3 |
| Free Elective |  | 3 |
|  | Hours | $\mathbf{1 5}$ |


| Third Year |  |  |
| :---: | :---: | :---: |
| Fall |  |  |
| CSS 351 | Fraud | 3 |
| CSS 360 | Specialized Fraud Schemes | 3 |
| CSS 420 | Fraud Examination | 3 |
| MIS 301 | Practical Computer Security | 3 |
| Social Science Inquiry (p. 1378) |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Free Elective |  | 3 |
|  | Hours | 21 |
| Spring |  |  |
| CSS 354 | Risk Assessment and Fraud Prevention | 3 |
| CSS 370 | Fraud Law and Report Writing | 3 |
| CSS 430 | Corporate Security Law | 3 |
| MIS 333 | Introduction to Computer Forensics | 3 |
| Major Elective |  | 3 |
|  | Hours | 5 |
| Fourth Year |  |  |
| Fall |  |  |
| CSS 440 | Corporate Security Investigation | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Major Elective |  | 3 |
|  | Hours | 9 |
| Spring |  |  |
| CSS 460 | Corporate Security Capstone | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Thematic Thread Requirement (Upper Level) (p. 1378) |  | 3 |
| Free Elective |  | 5-6 |
|  | Hours | -15 |
| Total Hours** |  |  |
| ${ }^{2}$ Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/ ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UIdNTi4u)to declare a thread. |  |  |
| Students are encouraged to take INDS 101 as a Free Elective. |  |  |
| - CS Organizational Security Major requires 60 Credit Hours (36 Core + 9 General + 9 Culture + 6 Electives). |  |  |
| - The number of Rock Studies courses will depend on how much overlap there is between major courses and Rock Studies courses. |  |  |
| ** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year. |  |  |
| Major Code: 5170 |  |  |
| Concentra |  |  |

## Revised date: 01.28.2021

## Corporate Security, Bachelor of Science (BS) - Concentration in Organizational Security <br> Program Learning Outcomes

- Critical Thinking and Problem Solving in Security Studies: Students will develop critical thinking skills necessary to the identification and response of security threats.
- Ethics, Values and Morality in Security Studies: Students will identify, explain and apply principles of ethics, law, values and morality to security-based scenarios and practices.
- Professional Communication in Security Studies: Students will demonstrate ability to clearly articulate plans, strategies, analyses and other field-based communications in oral and written format, including the use of current technologies and media.
- Professional Proficiency in Security Studies: Students will recognize, explain, report and demonstrate current field-based best practices in security management, threat response, and other knowledge/ skills/abilities demanded by the field and the impact of technology on security preparedness and implementation.
- Writing Proficiency in Security Studies: Students will practice and apply principles of clear, professional, succinct and straightforward writing.


## Related Links

Corporate Security - Organizational Security, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/corporate-security/)

Homeland/Corporate Security Studies Department Page (https:// www.sru.edu/academics/colleges-and-departments/cla/departments/ homeland-corporate-security-studies/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major/Concentration Requirements | 60 |
| Electives | 18 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Sciences Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Sciences Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |
| Thematic Thread |  |  |
| Select 12 Credits (p.1378) ${ }^{2}$ |  | 12 |
| Total Hours |  | 42 |
| Course offered in multiple subjects; cannot take course in first major subject. |  |  |
| 2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above. |  |  |
| Basic Math Requirement |  |  |
| Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree. |  |  |
| Code | Title | Hours |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 Beginning Algebra |  |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate "computer competency" by one of the following: |  | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |

PE 202
Technology for Wellness
Total Hours
Major/Concentration Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :---: | :---: | :---: |
| Core Courses |  |  |
| ACCT 209 | Financial Accounting ${ }^{1}$ | 3 |
| BUSA 340 | Legal Environment of Business ${ }^{1}$ | 3 |
| CSS 120 | Introduction to Private Security ${ }^{2}$ | 3 |
| CSS 351 | Fraud ${ }^{2}$ | 3 |
| CSS 352 | Law \& Ethics in the Workplace ${ }^{2}$ | 3 |
| CSS 354 | Risk Assessment and Fraud Prevention ${ }^{2}$ | 3 |
| CSS 430 | Corporate Security Law ${ }^{2}$ | 3 |
| CSS 440 | Corporate Security Investigation ${ }^{2}$ | 3 |
| CSS 460 | Corporate Security Capstone ${ }^{2}$ | 3 |
| ENGL 205 | Introduction to Professional Writing ${ }^{1}$ | 3 |
| CSLD 251 | Leadership Theory ${ }^{1}$ | 3 |
| MIS 265 | Management Information Systems ${ }^{1}$ | 3 |
| MIS 301 | Practical Computer Security ${ }^{1}$ | 3 |
| Subtotal |  | 39 |
| Organizational Security Concentration |  |  |
| CSS 210 | Physical Security ${ }^{2}$ | 3 |
| CSS 240 | Security Management ${ }^{2}$ | 3 |
| CSS 300 | Personnel Security | 3 |
| CSS 320 | Security Risk and Emergency Management 2 | 3 |
| MGMT 351 | Organizational Behavior ${ }^{2}$ | 3 |
| Subtotal |  | 15 |

## Major Electives

Select two of the following:6

| ACCT 322 | Business Analysis and Decision Making ${ }^{1}$ |
| :---: | :---: |
| CSS 190 | Experimental ${ }^{2}$ |
| or CSS 290 | Experimental |
| or CSS 390 | Experimental |
| CSS 195 | Workshop ${ }^{2}$ |
| or CSS 295 | Workshop |
| or CSS 395 | Workshop |
| or CSS 495 | Workshop |
| CSS 198 | Selected Topics ${ }^{2}$ |
| or CSS 298 | Selected Topics |
| or CSS 398 | Selected Topics |
| or CSS 498 | Selected Topics |
| CSS 360 | Specialized Fraud Schemes ${ }^{2}$ |
| CSS 370 | Fraud Law and Report Writing ${ }^{2}$ |
| CSS 420 | Fraud Examination ${ }^{2}$ |
| CSS 450 | Internship ${ }^{2}$ |
| CSS 490 | Independent Study ${ }^{2}$ |
| HSS 120 | Introduction to Homeland Security ${ }^{2}$ |
| HSS 210 | Fundamentals of Terrorism ${ }^{2}$ |
| INDP 348 | Sociology of Organizations ${ }^{1}$ |


| CSLD 352 | Self Leadership $^{1}$ |  |
| :--- | :--- | ---: |
| CSLD 353 | Teambuilding for Leaders $^{1}$ |  |
| MIS 333 | Introduction to Computer Forensics $^{1}$ |  |
| Subtotal |  | 6 |
| Total Hours |  | $\mathbf{6 0}$ |

1 Course counts for $50 \%$ of Major but not Major GPA
2 Course counts for $50 \%$ of Major requirements and Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Internships
2. Job Shadowing
3. Security Studies Club
4. Project to End Human Trafficking Club
5. Security Studies Speaker's Series
6. Department of Homeland/Corporate Security Studies Field Trips and Spring Break Trips

CORPORATE SECURITY (5170)
Concentration in Organizational Security (ORGN)
This program is effective as of Fall 2019
Revised 7-2019
UCC 3.26.2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

Course Title Hours

First Year
Fall

| CSS 120 | Introduction to Private Security | 3 |
| :--- | :--- | ---: |
| INDS 101 | FYRST Seminar | 1 |
| ENGL 102 | Critical Writing | 3 |
| SUBJ 139 | University Seminar | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) | 3 |  |
| Humanities Inquiry (p. 1378) | 3 |  |
|  | Hours | $\mathbf{1 6}$ |


| Spring |  |  |
| :---: | :---: | :---: |
| CSLD 251 | Leadership Theory | 3 |
| ENGL 104 | Critical Reading | 3 |
| CSS 210 | Physical Security | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Free Elective |  | 3 |
|  | Hours | 15 |
| Second Year |  |  |
| Fall |  |  |
| ACCT 209 | Financial Accounting | 3 |
| ENGL 205 | Introduction to Professional Writing ${ }^{1}$ | 3 |
| CSS 240 | Security Management | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Free Elective |  | 3 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 15 |
| Spring |  |  |
| CSS 352 | Law \& Ethics in the Workplace | 3 |
| BUSA 340 | Legal Environment of Business | 3 |
| MIS 265 | Management Information Systems | 3 |
| SCI 101 | Science of Life | 3 |
| Free Elective |  | 3 |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| CSS 300 | Personnel Security | 3 |
| CSS 351 | Fraud | 3 |
| MIS 301 | Practical Computer Security | 3 |
| SCI 102 | Understanding the Physical World | 3 |
| Social Science Inquiry (p. 1378) |  | 3 |
| Free Elective |  | 3 |
|  | Hours | 18 |
| Spring |  |  |
| CSS 354 | Risk Assessment and Fraud Prevention | 3 |
| CSS 430 | Corporate Security Law | 3 |
| MGMT 351 | Organizational Behavior | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Major Elective |  | 3 |
|  | Hours | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| CSS 440 | Corporate Security Investigation | 3 |
| CSS 320 | Security Risk and Emergency Management | 3 |
| Major Elective |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |

## Spring

CSS 460

| Thematic Thread Requirement (p. 1378) | 3 |
| :--- | ---: |
| Major Elective | $2-3$ |
| Electives | 6 |
|  | Hours |
| Total Hours** | $\mathbf{1 4 - 1 5}$ |

The prerequisites for ENGL 205 are ENGL 102 \& ENGL 104.
2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/ ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UIdNTi4u)to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.
- CS Organizational Security Major requires 60 Credit Hours ( 36 Core + 9 General + 9 Culture + 6 Electives).
- The number of free electives will depend on Rock Studies courses taken and/or Minor.
- The number of Rock Studies courses will depend on how much overlap there is between major courses and Rock Studies courses.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 5170
Concentration Code: ORGN
Revised date: 01.28.2021

## Emergency Management, Certificate

To access Certificate Requirements, please view the Curriculum Guide tab.

The Emergency Management certificate prepares individuals for working in some facet of the disaster cycle. The certificate is ideal for professionals in the field or those transitioning into the emergency management field to gain a credential while furthering their understanding of the processes involved with managing a disaster. Being that disasters can affect any industry; this certificate was built with an interdisciplinary lens. The certificate can be completed $100 \%$ online.

## Related Links

Emergency Management, Certificate Program Page (https:// www.sru.edu/academics/certificates/emergency-management(certificate)/)

Homeland/Corporate Security Studies Department Page (https:// www.sru.edu/academics/colleges-and-departments/cla/departments/ homeland-corporate-security-studies/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Certificate GPA: 2.0 or higher

## Certificate Requirements

- These courses are regularly offered through fall, winter, spring and summer rotations that will ensure a 12 month completion period.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  |  |
| HSS 130 | Principles of Emergency Management | 3 |
| HSS 250 | Managing Natural, Man-Made and <br> Technological Disasters | 3 |
| HSS 360 | Social Dimensions of Disaster | 3 |
| HSS 380 | Crisis \& Emergency Risk Communication | $\mathbf{3}$ |
| Total Hours |  | $\mathbf{1 2}$ |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

CERTIFICATE IN EMERGENCY MANAGEMENT (0700)
Effective Fall 2020
Revised 08.21.2020
UCC 04.21.2020

## Emergency Management, Minor

To access Minor Requirements, please view the Curriculum Guide tab.
The Emergency Management minor prepares individuals for working in some facet of the disaster cycle and will align with any industry role since disasters can affect any organization. Being that disasters can affect any industry; this minor was built with an interdisciplinary lens. The minor can be completed $100 \%$ online.

## Related Links

Emergency Management, Minor Program Page (https://www.sru.edu/ academics/majors-and-minors/emergency-management-(minor)/)

Homeland/Corporate Security Studies Department Page (https:// www.sru.edu/academics/colleges-and-departments/cla/departments/ homeland-corporate-security-studies/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses number 300 and above)
- A minor shall be no fewer than 18 credits.

| Code | Title |  |
| :---: | :---: | :---: |
| Core Requirements |  |  |
| HSS 130 | Principles of Emergency Management | 3 |
| HSS 250 | Managing Natural, Man-Made and Technological Disasters | 3 |
| HSS 260 | Emergency Management Planning | 3 |
| HSS 360 | Social Dimensions of Disaster | 3 |
| Electives |  |  |
| Select two of the follo | wing: | 6 |
| HSS 310 | Weapons of Mass Destruction |  |
| HSS 370 | Research in Disasters and Emergency Management |  |
| HSS 380 | Crisis \& Emergency Risk Communication |  |

Total Hours

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course


## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

Minor in Emergency Management (07A)
Effective Fall 2020
Revised 08.21.20
UCC 04.21.20

## Fraud, Certificate

To access Certificate Requirements, please view the Curriculum Guide tab.

## Related Links

Fraud, Certificate Program Page (https://www.sru.edu/academics/ certificates/fraud-certificate/)

Homeland/Corporate Security Studies Department Page (https:// www.sru.edu/academics/colleges-and-departments/cla/departments/ homeland-corporate-security-studies/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Certificate GPA: 2.0 or higher

## Certificate Requirements

- These courses are regularly offered through fall, winter, spring and summer rotations that will ensure a 12 month completion period.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  |  |
| CSS 120 | Introduction to Private Security | 3 |
| CSS 351 | Fraud | 3 |
| CSS 354 | Risk Assessment and Fraud Prevention | 3 |
| CSS 360 | Specialized Fraud Schemes | $\mathbf{3}$ |
| Total Hours |  | $\mathbf{1 2}$ |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
CERTIFICATE IN FRAUD (5FRD)
This program is effective as of Summer 2019
Revised 12-2018

## Fraud, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

The Fraud minor provides instruction to students about the various components of internal controls, the types of security breaches organizations encounter, and the uniqueness of fraud in any organization. Students will also learn about the different types of fraud, and the principles of fraud prevention, detection, and how to assess for fraud. This minor will be of great benefit to any majors including but not limited to: business majors, resort recreation and hospitality management majors, safety majors, sport management majors, criminology and criminal justice majors and cyber security computer majors. All industries and organizations are susceptible to fraud, and the minor will be relevant to most careers in management, compliance, accounting, security, and administration. Moreover, the Fraud minor introduces
students to the knowledge requirements needed to become Certified Fraud Examiners.

## Related Links

Fraud, Minor Program Page (https://www.sru.edu/academics/majors-and-minors/corporate-security/)

Homeland/Corporate Security Studies Department Page (https:// www.sru.edu/academics/colleges-and-departments/cla/departments/ homeland-corporate-security-studies/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses number 300 and above)
- A minor shall be no fewer than 18 credits.
- Students graduating in December 2015 and thereafter may only use 6 credits from their academic major towards the completion of an academic adviser.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Core Requirements |  |  |
| CSS 120 | Introduction to Private Security | 3 |
| CSS 351 | Fraud | 3 |
| CSS 354 | Risk Assessment and Fraud Prevention | 3 |
| CSS 360 | Specialized Fraud Schemes | 3 |
| Electives |  | 6 |
| Select two of the following: |  |  |
| CSS 210 | Physical Security |  |
| CSS 300 | Personnel Security |  |
| CSS 430 | Corporate Security Law | $\mathbf{1 8}$ |
| CSS 440 | Corporate Security Investigation |  |
| Total Hours |  |  |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## MINOR IN FRAUD (80F)

This program is effective as of Summer 2019
Revised 8-2019

## Homeland Security, Bachelor of Science (BS) <br> Program Learning Outcomes

- Ethics, Values and Morality in Homeland Security Studies: Students will identify, explain and apply principles of ethics, law, values and morality to security-based scenarios and practices.
- Multicultural Awareness in Homeland Security Studies: Students will develop and interpret understanding and knowledge of varied racial, ethnic and cultural entities and explain their role in security-based practices.
- Professional Communication in Homeland Security Studies: Students will demonstrate ability to clearly articulate plans, strategies, analyses and other field-based communications in oral and written format, including the use of current technologies and media.
- Professional Proficiency in Homeland Security Studies: Students will recognize, explain, report and demonstrate current field-based best practices in security management, threat response, and other knowledge/skills/abilities demanded by the field.
- Writing Proficiency in Homeland Security Studies: Students will practice and apply principles of clear, professional, succinct and straightforward writing.


## Related Links

Homeland Security, BS Program Page (https://www.sru.edu/academics/ majors-and-minors/homeland-security/)

Homeland/Corporate Security Studies Department Page (https:// www.sru.edu/academics/colleges-and-departments/cla/departments/ homeland-corporate-security-studies/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

| Summary* |  |
| :--- | ---: |
| Code $\quad$ Title | Hours |
| Rock Studies Requirements | 42 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 60 |
| Electives | 18 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Sciences Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Sciences Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |
| Thematic Thread |  |  |
| Select 12 Credits (p. 1378) ${ }^{2}$ |  | 12 |
| Total Hours |  | 42 |
| Course offered in multiple subjects; cannot take course in first major subject. |  |  |
| 2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above. |  |  |
| Basic Math Requirement |  |  |
| Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree. |  |  |
| Code | Title | Hours |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP $110 \quad$ Beginning Algebra |  |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate "computer competency" by one of the following: |  | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |

PE 202
Technology for Wellness

## Total Hours

## Major Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required |  |  |
| CSS 300 | Personnel Security ${ }^{1}$ | 3 |
| CSS 351 | Fraud ${ }^{1}$ | 3 |
| ENGL 205 | Introduction to Professional Writing ${ }^{2}$ | 3 |
| Subtotal |  | 9 |
| Major Core Courses |  |  |
| HSS 120 | Introduction to Homeland Security ${ }^{1}$ | 3 |
| HSS 130 | Principles of Emergency Management | 3 |
| HSS 210 | Fundamentals of Terrorism ${ }^{1}$ | 3 |
| HSS 230 | Risk Analysis and Strategic Planning ${ }^{1}$ | 3 |
| HSS 300 | Terrorist Organizations and Lone Wolves ${ }^{1}$ | 3 |
| HSS 310 | Weapons of Mass Destruction ${ }^{1}$ | 3 |
| HSS 320 | Protecting Infrastructure and Key Assets ${ }^{1}$ | 3 |
| HSS 330 | Intelligence Operations ${ }^{1}$ | 3 |
| HSS 340 | Intelligence for Homeland Security ${ }^{1}$ | 3 |
| HSS 350 | Securing Virtual Infrastructure ${ }^{1}$ | 3 |
| HSS 441 | Terrorism, Law and National Security ${ }^{1}$ | 3 |
| HSS 460 | Capstone in Homeland Security ${ }^{1}$ | 3 |
| Subtotal |  | 36 |

## Cultural Awareness Competency

Proficiency must be met at the 102 and/or 103 (in place of 103
level course, one of the courses listed below can be taken)
Select one of the following options:
Six to nine credits of ARAB; CHIN; FREN; SPAN; 101, 102, and/ or $103^{2}$
Zero to nine credits from the following list: ${ }^{3,4}$

| ARAB 215 | Topics in Arabic Culture ${ }^{2}$ |
| :--- | :--- |
| CHIN 306 | Survey of Chinese Civilization and Culture ${ }^{2}$ |
| CHIN 202 | Intermediate Chinese I |
|  |  |
| FREN 215 | Topics in French and Francophone Culture |

HIST 352 Latin America Since $1830{ }^{2}$
HIST 382 Modern Asian Pacific Rim ${ }^{2}$
HIST 386 Modern China ${ }^{2}$
HIST 462 The Contemporary Middle East ${ }^{2}$
HIST 463 Israel-History, State and Society ${ }^{2}$
INDP $310 \quad$ Cultural Area Studies ${ }^{2}$
SPAN 104 Situational Spanish ${ }^{2}$
SPAN 215 Topics in Hispanic Culture ${ }^{2}$
SPAN 315 Spanish Study Abroad ${ }^{2}$
Subtotal

## Major Electives

Select two of the following:
HSS 190 Experimental ${ }^{1}$
or HSS 290 Experimental
or HSS 390 Experimental
HSS 195 Workshop ${ }^{1}$
or HSS 295 Workshop
or HSS 395 Workshop
or HSS 495 Workshop
HSS 198
or HSS 298
or HSS 398
or HSS 498
HSS 250
HSS 260
HSS 360 Social Dimensions of Disaster
HSS 370 Research in Disasters and Emergency Management
HSS $380 \quad$ Crisis \& Emergency Risk Communication
HSS 450 Internship HS ${ }^{1}$
HSS $490 \quad$ Independent Study ${ }^{1}$
CRIM 343 Criminal Investigations ${ }^{2}$
CSLD $244 \quad$ Artificial Intelligence in Cognitive Studies and Film
CSLD 350 Multicultural Leadership
CSLD 352 Self Leadership
CSLD 353 Teambuilding for Leaders
CSS 352 Law \& Ethics in the Workplace ${ }^{2}$
CSS 354 Risk Assessment and Fraud Prevention ${ }^{2}$
INDP 321 Minority Groups ${ }^{2}$
INDP 327 Religion and Society ${ }^{2}$
INDP 340 Social Inequality ${ }^{2}$
MIS 301 Practical Computer Security ${ }^{2}$
MIS 333 Introduction to Computer Forensics ${ }^{2}$
MS 302 Advanced Military Skills ${ }^{2}$
MS 401 Leadership Dimensions and Concepts ${ }^{2}$
PHIL 331 Social and Political Philosophy ${ }^{2}$
PHIL $341 \quad$ Philosophy of Religion ${ }^{2}$
POLS 322 The United Nations and International Law ${ }^{2}$
POLS 365 International Political Economy ${ }^{2}$
POLS 403 Constitutional Law ${ }^{2}$
Subtotal 6

Total Hours
1 Course counts for 50\% of Major requirements and Major GPA
2 Course counts for $50 \%$ of Major but not Major GPA
3 The number of language credits earned above will determine the number of credits needed in this section.
4 See adviser for guidance, also refer to your MyRock Audit

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student
success and participation in the following types of programs and activities:

1. Internships
2. Job Shadowing
3. Security Studies Club
4. Project to End Human Trafficking Club
5. Security Studies Speaker's Series
6. Department of Homeland/Corporate Security Studies Field Trips and Spring Break Trips

HOMELAND SECURITY (BS) (51HS)
This program is effective as of Summer 2020
Revised 08.19.20
UCC 04.21.20

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| HSS 120 | Introduction to Homeland Security | 3 |
| ENGL 102 | Critical Writing | 3 |
| SUBJ 139 | University Seminar | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
| Free Elective |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| HSS 210 | Fundamentals of Terrorism | 3 |
| MODL 101 | Modern Language Requirement | 3 |
| ENGL 104 | Critical Reading | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
| Free Elective |  | 3 |
|  | Hours | 15 |
| Second Year |  |  |
| Fall |  |  |
| MODL 102 | Modern Language Requirement | 3 |
| ENGL 205 | Introduction to Professional Writing ${ }^{1}$ | 3 |
| HSS 230 | Risk Analysis and Strategic Planning | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Free Electiv |  | 3 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 15 |


| Spring |  |  |
| :---: | :---: | :---: |
| HSS 130 | Principles of Emergency Management | 3 |
| MODL 103 | Modern Language Requirement | 3 |
| SCI 101 | Science of Life | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Social Science Inquiry (p. 1378) |  | 3 |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| CSS 300 | Personnel Security | 3 |
| CSS 351 | Fraud | 3 |
| HSS 300 | Terrorist Organizations and Lone Wolves | 3 |
| HSS 320 | Protecting Infrastructure and Key Assets | 3 |
| Free Elective |  | 3 |
|  | Hours | 15 |

Spring

| HSS 310 | Weapons of Mass Destruction | 3 |
| :--- | :--- | ---: |
| HSS 330 | Intelligence Operations | 3 |
| HSS 350 | Securing Virtual Infrastructure | 3 |
| SCI 102 | Understanding the Physical World | $\mathbf{3}$ |
| Thematic Thread Requirement (p. 1378) | $\mathbf{3}$ |  |
| Hours | $\mathbf{1 5}$ |  |

## Fourth Year

Fall

| HSS 340 | Intelligence for Homeland Security | 3 |
| :--- | :--- | ---: |
| HSS 441 | Terrorism, Law and National Security | 3 |
| Major Elective |  | 3 |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| Thematic Thread Requirement (p. 1378) | 3 |  |
|  | Hours | $\mathbf{1 5}$ |
| Spring | Capstone in Homeland Security |  |
| HSS 460 |  | 3 |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| Major Elective |  | $\mathbf{3}$ |
| Elective | Hours | $\mathbf{6}$ |
|  | Total Hours** | $\mathbf{1 5}$ |

1 The prerequisites for ENGL 205 are ENGL 102 \& ENGL 104.
2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/
ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UIdNTi4u)to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.
- HS Organizational Security Major requires 60 Credit Hours (36 Core + 9 General +9 Culture +6 Electives).
- The number of free electives will depend on Liberal Studies (LS) courses taken and/or Minor.
- The number of LS courses will depend on how much overlap there is between major courses and LS courses.

Major Code: 51HS
Revised date: 01.28.2021
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Homeland Security, Certificate

To access Certificate Requirements, please view the Curriculum Guide tab.

In this certificate program, students learn how to investigate, protect, and minimize the effects of these adversities, as well as how to respond to and recover from those same threats. You will gain knowledge of the many tools used to fight terrorism, protect infrastructures and key assets, secure intelligence, and devise disaster plans to respond to real-world issues.

## Related Links

Homeland Security, Certificate Program Page (https://www.sru.edu/ academics/certificates/homeland-security-certificate/)

Homeland/Corporate Security Studies Department Page (https:// www.sru.edu/academics/colleges-and-departments/cla/departments/ homeland-corporate-security-studies/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Certificate GPA: 2.0 or higher

## Certificate Requirements

- These courses are regularly offered through fall, winter, spring and summer rotations that will ensure a 12 month completion period.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  |  |
| CSS 300 | Personnel Security | 3 |
| HSS 120 | Introduction to Homeland Security | 3 |
| HSS 210 | Fundamentals of Terrorism | 3 |
| HSS 230 | Risk Analysis and Strategic Planning | 3 |
| Total Hours |  | $\mathbf{1 2}$ |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum
categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
CERTIFICATE IN HOMELAND SECURITY (5HOM)
This program is effective as of Summer 2019
Revised 10-2019

## Homeland Security, Minor

To access Minor Requirements, please view the Curriculum Guide tab.
The Homeland Security minor provides a comprehensive study of the skills needed to prevent man-made and natural disasters. Students will learn how to investigate, protect, and minimize the effects of these adversities, as well as how to respond to and recover from those same threats. The curriculum covers many tools used to fight terrorism, protect infrastructures and key assets, secure intelligence, and devise disaster plans to respond to real-world issues. This minor introduces students to the knowledge requirements needed for careers in emergency management, criminal investigations, law enforcement, CIA, ICE, FBI, and ATF. The Homeland Security minor will prepare students for this fast-growing field-exposing students to a wide range of careers and professional certifications.

## Related Links

Homeland Security, Minor Program Page (https://www.sru.edu/ academics/majors-and-minors/homeland-security/)

Homeland/Corporate Security Studies Department Page (https:// www.sru.edu/academics/colleges-and-departments/cla/departments/ homeland-corporate-security-studies/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses number 300 and above)
- A minor shall be no fewer than 18 credits

| Code | Title | Hours |
| :--- | :--- | ---: |
| Core Requirements |  |  |
| HSS 120 | Introduction to Homeland Security | 3 |
| HSS 130 | Principles of Emergency Management | 3 |
| HSS 210 | Fundamentals of Terrorism | 3 |
| HSS 230 | Risk Analysis and Strategic Planning | 3 |
| Electives |  | 6 |
| Select two of the following: |  |  |
| CSS 300 | Personnel Security |  |


| CSS 351 | Fraud |
| :--- | :--- |
| HSS 300 | Terrorist Organizations and Lone Wolves |
| HSS 310 | Weapons of Mass Destruction |
| HSS 320 | Protecting Infrastructure and Key Assets |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN HOMELAND SECURITY (80G)
This program is effective as of Fall 2020
Revised 08.20.20
UCC 04.21.20

## Organizational Security, Certificate

To access Certificate Requirements, please view the Curriculum Guide tab.

The Organizational Security certificate prepares recipients for roles where security functions of an organization may be assigned as a cognate responsibility. The certificate is ideal for those transitioning from related roles, such as law enforcement, into the private sector and provides a solid credential to show the holder can transition smoothly into a corporate role. Working professionals in fields such as safety and human resources often hold responsibilities in the security realm and this certificate provides a foundation for success in these crossover positions. The certificate can be completed $100 \%$ online.

## Related Links

Organizational Behavior, Certificate Program Page (https://www.sru.edu/ academics/certificates/organizational-security-certificate/)

Homeland/Corporate Security Studies Department Page (https:// www.sru.edu/academics/colleges-and-departments/cla/departments/ homeland-corporate-security-studies/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide <br> GPA Requirement <br> Certificate GPA: 2.0 or higher

## Certificate Requirements

- These courses are regularly offered through fall, winter, spring and summer rotations that will ensure a 12-month completion period.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  |  |
| CSS 120 | Introduction to Private Security | 3 |
| CSS 210 | Physical Security | 3 |
| CSS 300 | Personnel Security | 3 |
| CSS 351 | Fraud | $\mathbf{3}$ |
| Total Hours |  | $\mathbf{1 2}$ |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
CERTIFICATE IN ORGANIZATIONAL SECURITY (50RG)
This program is effective as of Summer 2019
Revised 12-2018

## Organizational Security, Minor

To access Minor Requirements, please view the Curriculum Guide tab.
The Organizational Security minor prepares recipients for roles where security functions of an organization may be assigned as a cognate responsibility. The minor is ideal for those in programs that are preparing them to enter into the private sector. Working professionals in fields such as safety and human resources often hold responsibilities in the security realm and this certificate provides a foundation for success in these crossover positions. The minor can be completed $100 \%$ online.

## Related Links

Organizational Behavior, Minor Program Page (https://www.sru.edu/ academics/majors-and-minors/corporate-security/organizational-security-minor-requirements/)

Homeland/Corporate Security Studies Department Page (https:// www.sru.edu/academics/colleges-and-departments/cla/departments/ homeland-corporate-security-studies/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses number 300 and above)
- A minor shall be no fewer than 18 credits.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Core Requirements |  |  |
| CSS 120 | Introduction to Private Security | 3 |
| CSS 210 | Physical Security | 3 |
| CSS 300 | Personnel Security | 3 |
| CSS 351 | Fraud | 3 |
| Electives |  | 6 |
| Select two of the following: |  |  |
| CSS 240 | Security Management |  |
| CSS 430 | Corporate Security Law |  |
| CSS 440 | Corporate Security Investigation | $\mathbf{1 8}$ |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN ORGANIZATIONAL SECURITY (80H)
Effective Summer 2019
Revised 8.2019

## Library

| Chair | Secretary | Location | Department <br> Phone |
| :--- | :--- | :--- | :--- |
| Jessica Jordan | Emily Connell | 209 Bailey Library $724-738-2663$ |  |

M.A., Peking University
B.A., Peking University

## Rocco Cremonese

Instructor
Library
M.L.I.S., University of Pittsburgh
M.A., Slippery Rock University
B.S., Slippery Rock University

Heather Getsay
Associate Professor
Library
M.L.I.S., University of Pittsburgh
B.A., Westminster College

Jessica Jordan
Assistant Professor
Library
M.L.S., Clarion University of Pennsylvania
B.S., Indiana University of Pennsylvania

## Judith Silva

Associate Professor
Library
M.L.S., University of Pittsburgh
B.A., University of California at Santa Cruz

## Alessia Zanin Yost

Instructor
Library
M.L.I.S., San Jose State University
M.A., University of California Davis
B.A., California State University

## Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| LIBR 110 | Introduction to Library \& Information | 1 |
|  | Resources |  |
| LIBR 139 | University Seminar | 3 |
| LIBR 190 | Experimental | $1-3$ |
| LIBR 210 | Library Research Methods | 3 |
| LIBR 290 | Experimental | $1-3$ |
| LIBR 390 | Experimental | $1-3$ |
| LIBR 490 | Independent Study | $1-3$ |

## Modern Languages and Cultures

Chair
Dr. Gisela Dieter

| Location | Department Phone |
| :--- | :--- |
| 218 Spotts World | $724-738-2062$ |
| Culture Building |  |

Department Web Site URL (https://www.sru.edu/academics/colleges-and-departments/cla/departments/modern-languages-and-cultures/) Department Fact Sheet URL (https://www.sru.edu/documents/programs/ factsheets/undergraduate/mlc-fs.pdf)

## Faculty

Wei Bian
Associate Professor
Modern Languages \& Cultures

Ph.D., University of Georgia
M.A., University of Northern Iowa
B.Ed., Beijing Institute of PE
M.Ed., Beijing Institute of PE

## Malick Coly

Instructor
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Ph.D., Purdue University
M.A., University of Missouri-Columbia
B.A., Cheikh Anta Diop University Dakar

## Maria Cortijo

Professor
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M.A., Texas Tech University
M.A., Universidad San Pablo-Madrid
B.A., Universidad Cumplutense de Madrid

## Gisela Dieter

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M.A., University of Pittsburgh
M.A., Youngstown State University
B.S., Clarion University of Pennsylvania

## Yukako Ishimaru

Instructor
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B.A., Saga University

## Edna Lima

Instructor
Modern Languages \& Cultures
Ph.D., Iowa State University
M.A., Iowa State University
B.A., Federal University of Vicosa

## Damarys Lopez

Assistant Professor
Modern Languages \& Cultures

## Marnie Petray-Covey

Associate Professor
Modern Languages \& Cultures
Ph.D., Purdue University
M.A., Purdue University
B.A., Arkansas Tech University

## Salwa Vandegrift

Instructor
Modern Languages \& Cultures
M.S., Mosul University
B.S., Mosul University

We anticipate that transfer students will begin to enter under Rock Studies during the Summer/Fall term of 2021.

## Majors

- Modern Languages and Cultures, Bachelor of Arts (BA) Concentration in Cultural Area Studies (p. 898)
- Modern Languages and Cultures, Bachelor of Arts (BA) Concentration in French (p. 901)
- Modern Languages and Cultures, Bachelor of Arts (BA) Concentration in Professional French (p. 903)
- Modern Languages and Cultures, Bachelor of Arts (BA) Concentration in Spanish (p. 906)
- Modern Languages and Cultures, Bachelor or Arts (BA) Concentration in Professional Spanish (p. 909)


## Minors

- Arabic, Minor (p. 895)
- French, Minor (p. 895)
- Professional French, Minor (p. 912)
- Professional Japanese, Minor (p. 913)
- Professional Spanish, Minor (p. 913)
- Spanish, Minor (p. 914)


## Certificates

- Japanese Studies, Certificate (p. 896)
- Latin American Studies, Certificate (p. 896)
- Middle Eastern Studies, Certificate (p. 897)


## Courses

## ARAB Courses

ARAB 101 - Arabic Language and Culture I
This course is the first in a three course series which will provide an introduction to the Arabic language.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Being American, Global Citizenship, Food, Wellness \& Environment Across Cultures, International Business, Transfer Thread Completion Course, Transnational Culture
ARAB 102 - Arabic Language and Culture II
This course is the second in a three course series which will provide an introduction to the Arabic language.

Prerequisite: ARAB $101^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Being American, Global Citizenship, Fighting Social
Problems, Food, Wellness \& Environment Across Cultures, International
Business, Transfer Thread Completion Course, Transnational Culture

## Programs

All first-year students who enter SRU in the Summer and Fall terms of 2019 and after will follow Rock Studies. Students who entered SRU before Spring 2019 will follow Liberal Studies. All new transfer students beginning Summer 2019 and after will follow Liberal Studies.

## ARAB 103-Arabic Language and Culture III

This course is the third in a three course series which will provide an introduction to the Arabic language.

Prerequisite: ARAB $102^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Being American, Global Citizenship, Food, Wellness \& Environment Across Cultures, International Business, Transfer Thread Completion Course, Transnational Culture

## ARAB 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## ARAB 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## ARAB 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## ARAB 198-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ARAB 202 - Intermediate Arabic I

Comprehensive review of Arabic language and culture with emphasis on developing the students' abilities for proficient oral and written accomplishments.

Prerequisite: ARAB $103^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms

## ARAB 215 - Topics in Arabic Culture

This course provides deeper knowledge of Arabic culture by examining selected topics in Arabic culture. This course is taught in English.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): Transfer Thread Completion Course

## ARAB 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
ARAB 295-Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## ARAB 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## ARAB 300-Reading \& Writing in Arabic

This course is designed to develop and enhance reading and writing skills in Modem Standard Arabic (MSA).

Prerequisites: ARAB $101^{C}$ and ARAB $102^{C}$ and ARAB $103^{C}$ and
ARAB $202^{* C}$ (may be taken concurrently).
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ARAB 301 - Arabic Conversation I

This course is focused on conversation using Modem Standard Arabic (MSA) and will acquaint the student with formal registers and forms of oral communication.

Prerequisites: ARAB $101^{\circ}$ and ARAB $102^{C}$ and ARAB $103^{C}$ and ARAB $202^{* C}$ (may be taken concurrently).
${ }^{\mathrm{C}}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ARAB 315 - Arabic Study Abroad

This course is designed for students who wish to study Arabic society firsthand. Students will study the culture. literature. history, art. and other socio-political issues concerning the country where the program is offered.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ARAB 390-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ARAB 395-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ARAB 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ARAB 490 - Independent Study

Students have an opportunity to study selected areas in greater concentration. The nature of the topic selected and its treatment are determined in consultation with the instructor. credits) Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ARAB 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ARAB 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1, Freshman 2 or Sophomore 1.

## ASL Courses

## ASL 101 - American Sign Language and Culture

This course is the first of a three-course series and focuses on American Sign Language and Culture. This course introduces basic aspects of the grammar and proper use of hand configuration and facial expressions in sign language communication.

Credits: 3

## CHIN Courses

CHIN 101 - Chinese Language and Culture I
This course is the first in a three course series which will provide an introduction to the Mandarin language.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): Becoming America, Being American, Global Citizenship, Food, Wellness \& Environment Across Cultures, International Business, Transfer Thread Completion Course, Transnational Culture

CHIN 102 - Chinese Language and Culture II
This course is the second in a three course series which will provide an introduction to the Mandarin language.

Prerequisite: CHIN $101{ }^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): Becoming America, Being American, Global Citizenship, Food, Wellness \& Environment Across Cultures, International Business, Transfer Thread Completion Course, Transnational Culture

## CHIN 103 - Chinese Language and Culture III

This course is the third in a three course series which will provide an introduction to the Mandarin language.
Prerequisite: CHIN $102^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): Becoming America, Being American, Global Citizenship, Food, Wellness \& Environment Across Cultures, International Business, Transfer Thread Completion Course, Transnational Culture

## CHIN 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

## CHIN 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
CHIN 195 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## Credits: 1-6

Term(s) Typically Offered: Offered as Needed

## CHIN 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CHIN 202 - Intermediate Chinese I

Comprehensive review of the Mandarin language with emphasis on developing the students" abilities for proficient oral and written accomplishments.

Prerequisite: CHIN $103^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed

## CHIN 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## CHIN 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## CHIN 298-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CHIN 306 - Survey of Chinese Civilization and Culture

A study of the important aspects of China's culture, including its geography, history, social and political values, arts, sciences, literature, religion, and ideology. Course is taught in English and open to all interested persons.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHIN 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHIN 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHIN 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHIN 490 - Independent Study

Students have an opportunity to study selected areas in greater concentration. The nature of the topic selected and its treatment are determined in consultation with the instructor. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHIN 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHIN 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FREN Courses

FREN 101 - French Language and Culture I
This course is the first in a three course series which will provide an introduction to the French language.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Being American, Global Citizenship, Food, Wellness \& Environment Across Cultures, International Business, Transfer Thread Completion Course
FREN 102 - French Language and Culture II
This course is the second in a three course series which will provide an introduction to the French language.

Prerequisites: minimum score of 15 in 'Placement in FREN102' or
FREN $101^{\text {D }}$ or minimum score of 233 in 'Placement in FREN102'
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Being American, Global Citizenship, Food, Wellness \& Environment Across Cultures, International Business, Transfer Thread Completion Course

## FREN 103 - French Language and Culture III

This course is the third in a three course series which will provide an introduction to the French language.

Prerequisites: (minimum score of 25 in 'French - SRU Placement Exam' or minimum score of 25 in 'Placement in FREN103') or FREN $102^{\mathrm{D}}$ or minimum score of 318 in 'Placement in FREN103'
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Being American, Global Citizenship, Food, Wellness \& Environment Across Cultures, International Business, Transfer Thread Completion Course

## FREN 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## FREN 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## FREN 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## FREN 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## FREN 201 - French Conversation 1

A functional course in speaking and writing French, stressing everyday vocabulary and sentence structure. Some grammar review.

Prerequisites: FREN $103{ }^{\text {D }}$ or minimum score of 35 in 'Placement in FREN200 level' or minimum score of 386 in 'Placement in FREN200 level'
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms

## FREN 215 - Topics in French and Francophone Culture

This course provides deeper knowledge of French and Francophone culture by examining selected topics in French and Francophone culture. This course is taught in English.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): Transfer Thread Completion Course

## FREN 220 - Reading in French

An introduction to reading in French at the intermediate level.
Prerequisites: FREN $103{ }^{\text {D }}$ or minimum score of 35 in 'Placement in FREN200 level' or minimum score of 386 in 'Placement in FREN200 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms

## FREN 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## FREN 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## FREN 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## FREN 300 - French Grammar and Composition 1

An intermediate grammar review course emphasizing the basic structure of French.

Prerequisites: minimum score of 45 in 'Placement in FREN300 level' or FREN $201^{\text {D }}$ or FREN $220^{\mathrm{D}}$ or minimum score of 447 in 'Placement in FREN300 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

FREN 301 - French Conversation 2
Development of French vocabulary and conversation skills through intensive study of selected theme areas.

Prerequisites: FREN $201^{\text {D }}$ or FREN $220^{\text {D }}$ or minimum score of 45 in 'Placement in FREN300 level' or minimum score of 447 in 'Placement in FREN300 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FREN 303 - Professional French

Designed to acquaint the student with formal registers and formulas of communication used in all professional communication in the Frenchspeaking world.

Prerequisites: FREN $220^{\mathrm{D}}$ or FREN $201^{\mathrm{D}}$ or minimum score of 45 in
'Placement in FREN300 level' or minimum score of 447 in 'Placement in FREN300 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FREN 305 - France through the Ages

An advanced course in the study of the development of French civilization from the earliest times to the end of the 19th century.

Prerequisites: FREN $201^{\text {D }}$ or FREN $220^{\text {D }}$ or minimum score of 45 in 'Placement in FREN300 level' or minimum score of 447 in 'Placement in
FREN300 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

FREN 306 - France and Francophone Identities Today
An exploration of diverse voices, social groups and societies in francophone literatures through works by francophone writers from all over the world. Designed as an introduction to the literatures and cultures of the francophone world, this course considers issues of social status, history, resistance, representation and identity. Taught in French.

Prerequisites: FREN $220^{\text {D }}$ or FREN $201^{\text {D }}$ or minimum score of 45 in
'Placement in FREN300 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): Transfer Thread Completion Course, Transnational Culture
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FREN 315 - French Study Abroad

This course is designed for students who wish to study French/ Francophone society firsthand. Students will study the culture, literature, history, art, and other issues concerning the country where the program is offered.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FREN 320 - Main Currents in French Literature

An introduction to the study of French literature through prose, drama and poetry.

Prerequisites: FREN $201^{\text {D }}$ or FREN $220^{\text {D }}$ or minimum score of 45 in 'Placement in FREN300 level' or minimum score of 447 in 'Placement in FREN300 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

FREN 330 - French Literature from the 18th Century to the Present Representative works and literary movements in French literature from the eighteenth century to the present will be studied.

Prerequisites: FREN $201^{\text {D }}$ or FREN $220^{\text {D }}$ or minimum score of 447 in
'Placement in FREN300 level'
${ }^{D}$ Requires minimum grade of $D$. Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FREN 350 - French Linguistics and Phonetics

An introduction to general linguistics and the practical application of phonetics to the study of French. Analysis and practice of the sound system of the foreign language.
Prerequisites: FREN $201^{\text {D }}$ or FREN $220^{\text {D }}$ or minimum score of 45 in 'Placement in FREN300 level' or minimum score of 447 in 'Placement in FREN300 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FREN 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## FREN 395 - Workshop

Special topics of interest to undergraduates and selected community members. A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FREN 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
FREN 400 - French Grammar and Composition 2
An advanced course in the study of French grammar and usage.
Prerequisite: FREN 300 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
FREN 401 - French Conversation 3
This course will provide the opportunity for advanced students to improve their aural comprehension and their conversation abilities in French.

Prerequisites: FREN $301^{D}$ and FREN $300^{D}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FREN 402 - Eighteenth-Century Novel

A study of the Age of Enlightenment as reflected in the novel.
Prerequisites: FREN $301^{D}$ and (FREN $300^{D}$ or FREN $303^{D}$ or FREN $305^{D}$ or FREN $306^{\text {D }}$ or FREN $320^{\text {D }}$ or FREN $330^{\text {D }}$ or FREN $350^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FREN 403 - Nineteenth-Century French Literature

Readings from the romantic, realistic and naturalistic movements.
Prerequisites: FREN $301^{D}$ and (FREN $300^{D}$ or FREN $303^{D}$ or FREN $305^{D}$ or FREN $306^{\text {D }}$ or FREN $320^{\text {D }}$ or FREN $330^{\text {D }}$ or FREN $350^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

FREN 404 - Exploring French Culture through Media
A study of various aspects of modern French literature.
Prerequisites: FREN $301^{D}$ and (FREN $300^{D}$ or FREN $303^{D}$ or FREN $305^{D}$ or FREN $306^{\text {D }}$ or FREN $320^{\text {D }}$ or FREN $330^{\text {D }}$ or FREN $350^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FREN 411 - Literature of the Classical Period

A study of French Classicism, emphasizing the plays of Corneille, Moliere and Racine.

Prerequisites: and (FREN $300^{D}$ or FREN $303^{D}$ or FREN $305^{D}$ or FREN $306^{D}$ or FREN $320^{\text {D }}$ or FREN $330^{\text {D }}$ or FREN $350^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FREN 430 - French Literature 12th to 17th Century

Representative works and literary movements in French Literature from the 12th through the 17th centuries will be studied.
Prerequisite: FREN $300^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FREN 490 - Independent Study

Students have an opportunity to study selected areas in greater concentration. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FREN 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FREN 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GERM Courses

GERM 101-German Language and Culture I
This course is the first in a three course series which will provide an introduction to the German language.

Credits: 3
Thematic Thread(s): Being American
GERM 102-German Language and Culture II
This course is the second in a three course series which will provide an introduction to the German language.

Prerequisites: (minimum score of 11 in 'Placement in GERM102' or minimum score of 21 in 'Placement in GERM103') or GERM $101^{\text {D }}$ or minimum score of 264 in 'Placement in GERM102'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Thematic Thread(s): Being American, Transfer Thread Completion Course

## GERM 103-German Language and Culture III

This course is a third in a three course series which will provide an introduction to the German language.

Prerequisites: minimum score of 21 in 'Placement in GERM103' or
GERM $102^{\text {D }}$ or minimum score of 343 in 'Placement in GERM103'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Thematic Thread(s): Being American, Transfer Thread Completion Course

## GERM 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

GERM 190 - Experimental
A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

## GERM 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

## GERM 198-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

## GERM 201 - Communication in German

A functional course in speaking and writing German, stressing everyday vocabulary and sentence structure.

Prerequisites: GERM $103^{\mathrm{D}}$ or minimum score of 31 in 'Placement in GERM200 level' or (GERM $101^{\mathrm{D}}$ and GERM $102^{\mathrm{D}}$ and GERM $103^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3

## GERM 210-German Literature in Translation

A study of representative German literary works, emphasizing the persons and ideas which have influenced German foreign literatures. The course will be given in English; no knowledge of German required. For non majors.

Credits: 3

## GERM 220 - Reading in German

An introduction reading in German at the intermediate level.
Prerequisites: GERM $103^{\text {D }}$ or minimum score of 35 in 'Placement in GERM200 level' or minimum score of 425 in 'Placement in GERM200 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
GERM 255-German Civilization I
Course taught by Clarion University of PA faculty via ITV
Credits: 3

## GERM 257-German Immersion

This course, offered in Germany, introduces students first-hand to German culture, including aspects of everyday life in Germany. Course facilitates understanding of Germany's history and civilization through study of important monuments and urban design.

Prerequisites: GERM $103{ }^{\text {D }}$ or minimum score of 35 in 'Placement in GERM200 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
GERM 260-German Short Story
Course taught by Clarion University of PA faculty via ITV
Credits: 3
GERM 290-Experimental
A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

## GERM 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

## GERM 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

## GERM 300-German Grammar Review

An intermediate grammar review course, emphasizing the basic structures of German.

Prerequisites: GERM $201^{\mathrm{D}}$ or GERM $220^{\mathrm{D}}$ or minimum score of 41 in
'Placement in GERM300 level' or minimum score of 512 in 'Placement in GERM300 level'
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GERM 303-Business German

A study of the German language as related to business and commerce. A consideration of the form and language of the business letter in German.

Prerequisites: GERM $201^{\mathrm{D}}$ or GERM $220^{\mathrm{D}}$ or minimum score of 45 in
'Placement in GERM300 level' or minimum score of 512 in 'Placement in GERM300 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GERM 305-German Civilization

A study of the development of German civilization from its earliest
beginnings to its modern times. Course is for majors and non-majors.
Prerequisites: GERM $201^{\mathrm{D}}$ or GERM $220^{\mathrm{D}}$ or minimum score of 45 in
'Placement in GERM300 level' or minimum score of 512 in 'Placement in GERM300 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GERM 306 - Modern German Civilization

A study of the civilization of German-speaking areas in the twentieth century.

Prerequisites: GERM $220^{\mathrm{D}}$ or GERM $201^{\mathrm{D}}$ or minimum score of 45 in 'Placement in GERM300 level' or minimum score of 512 in 'Placement in GERM300 level'
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GERM 307-German Conversation and Composition 1

Course developing student abilities in listening, speaking and writing German. Emphasis is on discussions of student compositions on a variety of issues relating to modern Germany.

Prerequisites: GERM $220^{\text {D }}$ or minimum score of 45 in 'Placement in GERM300 level'
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GERM 308 - German Conversation and Composition 2

Course developing student abilities in listening, speaking and writing German. Emphasis is on discussions of student compositions on a variety of issues relating to modern German.

Prerequisite: GERM $307^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GERM 320 - Main Currents in German Literature

An introduction to the study of German literature through prose, drama, and poetry.

Prerequisites: GERM $201^{\mathrm{D}}$ or GERM $220^{\mathrm{D}}$ or minimum score of 45 in 'Placement in GERM300 level' or minimum score of 512 in 'Placement in GERM300 level'
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GERM 350-German Linguistics and Phonetics

An introduction to general linguistics and the practical application of linguistics to the study of German, ANalysis and practice of the sound system of the foreign language.

Prerequisites: GERM $201^{\text {D }}$ or GERM $220^{\text {D }}$ or minimum score of 45 in 'Placement in GERM300 level' or minimum score of 512 in 'Placement in GERM300 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GERM 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GERM 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GERM 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GERM 400 - Advanced Grammar

An advanced course in the study of German grammar and usage.
Prerequisite: GERM $300^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GERM 411 - Contemporary German Literature

A study of the outstanding authors writing in German in the twentieth century.

Prerequisites: GERM $300^{\mathrm{D}}$ and (GERM $303^{\mathrm{D}}$ or GERM $305^{\mathrm{D}}$ or GERM $306^{\mathrm{D}}$ or GERM $307^{\mathrm{D}}$ or GERM $308^{\mathrm{D}}$ or GERM $320^{\mathrm{D}}$ or GERM $350^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GERM 490 - Independent Study

Students have the opportunity to study selected areas in greater concentration. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GERM 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GERM 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ITAL Courses

ITAL 101 - Italian Language and Culture I
A broad and practical working foundation in the language.
Credits: 3
Thematic Thread(s): Being American, Transfer Thread Completion Course
ITAL 102 - Italian Language and Culture II
A broad and practical working foundation in the language.
Prerequisite: ITAL $101^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Thematic Thread(s): Being American, Transfer Thread Completion Course
ITAL 103-Italian Language and Culture III
A broad and practical working foundation in the language.
Prerequisite: ITAL $102^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Thematic Thread(s): Being American, Transfer Thread Completion Course

## ITAL 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## ITAL 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

## ITAL 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

## ITAL 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

## ITAL 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

ITAL 295 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

## ITAL 298-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

## ITAL 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ITAL 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ITAL 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ITAL 490 - Independent Study

Students have an opportunity to study selected areas in greater concentration. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ITAL 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ITAL 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## Credits: 1-3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## JAPN Courses

## JAPN 101 - Japanese Language and Culture I

This course is the first in a three course series which will provide an introduction to the Japanese language.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Being American, Global Citizenship, Food, Wellness \& Environment Across Cultures, International Business, Transfer Thread Completion Course, Transnational Culture

## JAPN 102 - Japanese Language and Culture II

This course is the second in a three course series which will provide an introduction to the Japanese language.

Prerequisite: JAPN 101 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Being American, Global Citizenship, Food, Wellness \& Environment Across Cultures, International Business, Transfer Thread Completion Course, Transnational Culture

## JAPN 103 - Japanese Language and Culture III

This course is the third in a three course series which will provide an introduction to the Japanese language.

Prerequisite: JAPN 102 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Thematic Thread(s): Being American, Global Citizenship, Food, Wellness \& Environment Across Cultures, International Business, Transfer Thread Completion Course, Transnational Culture

## JAPN 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## JAPN 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## JAPN 195-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## Credits: 1-6

Term(s) Typically Offered: Offered as Needed

## JAPN 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## JAPN 202 - Intermediate Japanese I

Comprehensive review of Japanese language with emphasis on developing the students' abilities for proficient oral and written accomplishments.
Prerequisite: JAPN $103^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
JAPN 215 - Topics in Japanese Culture
This course provides deeper knowledge of Japanese culture by examining selected topics in Japanese culture. This course is taught in English.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): Transfer Thread Completion Course

## JAPN 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## JAPN 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## JAPN 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## JAPN 300 - Reading \& Writing Japanese

This course reviews hiragana, kalakana, roma-ji, and kanji characters to develop and enhance Japanese reading and writing skills.

Prerequisite: JAPN 103 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## JAPN 303 - Professional Japanese

This course acquaints the student with formal registers and forms of communication used in all professional communication in Japan. There are no prerequisites for this course.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## JAPN 315 - Japanese Study Abroad

This course is designed for students who wish to study Japan/ Japanese society firsthand. Students will study the culture, literature, history, art, and other socio-political issues concerning the country where the program is offered. There are no prerequisites for this course.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## JAPN 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## JAPN 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## JAPN 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## JAPN 490 - Independent Study

Students have an opportunity to study selected areas in greater concentration. The nature of the topic is selected and its treatment are determined in consultation with the instructor. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## JAPN 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## JAPN 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## KORN Courses

## KORN 101 - Korean Language and Culture I

This course is the first in a three course series which will provide an introduction to the Korean language.

## Credits: 3

Thematic Thread(s): Being American, Global Citizenship, Food, Wellness \& Environment Across Cultures, International Business, Transfer Thread Completion Course, Transnational Culture
KORN 102-Korean Language and Culture II
This course is the second in a three course series which will provide an introduction to the Korean language.
Prerequisite: KORN $101{ }^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Thematic Thread(s): Being American, Global Citizenship, Food, Wellness \& Environment Across Cultures, International Business, Transfer Thread Completion Course, Transnational Culture

## KORN 103 - Korean Language and Culture III

This course is the third in a three course series which will provide an introduction to the Korean language.
Prerequisite: KORN $102^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Thematic Thread(s): Being American, Global Citizenship, Food, Wellness \& Environment Across Cultures, International Business, Transfer Thread Completion Course, Transnational Culture

## KORN 139-University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

## Credits: 3

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## KORN 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

## KORN 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

## KORN 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
KORN 202 - Intermediate Korean I
Comprehensive review of Korean grammar with emphasis on developing the students' abilities for proficient oral and written accomplishments.

Prerequisite: KORN $103{ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3

## KORN 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

## KORN 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

## KORN 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

## KORN 306 - Modern Korean Civilization

Course analyzes the most significant characteristics, foreign influences, and cultural traditions that have comprised Korean culture since 1900.
Course will be taught in English and is open to all interested students.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## KORN 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## KORN 395-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## KORN 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## KORN 490 - Independent Study

Students have an opportunity to study selected areas in greater concentration. The nature of the topic selected and its treatment are determined in consultation with the instructor. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## KORN 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## Credits: 1-6

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## KORN 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MODL Courses

MODL 105 - Introduction to Asian Civilizations
This course is an introductory, interdisciplinary course designed to give students a broad understanding of the geographic, historical and religious, cultural, artistic, social, political and economic forces that shape Asia. No prior knowledge is expected. This is a Liberal Studies, Global Community, Non-US course.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## MODL 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

MODL 151 - Self-Instructional Languages
Self-Instruction in basic language is open to serious students with previous language background. The course is designed to develop the speaking, listening comprehension of the student on a basic level. Course may be repeated in each language up to a maximum of three credits. Not applicable for modern language requirement or liberal studies. Students may choose from any world languages not available in the regular offerings.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## MODL 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## MODL 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## MODL 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MODL 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MODL 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## MODL 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MODL 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MODL 395-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## Credits: 1-6

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MODL 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MODL 490 - Independent Study

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. $\tilde{A}, \hat{A}$ Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MODL 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## Credits: 1-6

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MODL 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RUSS Courses

RUSS 101-Russian Language and Culture I
This course is the first in a three course series which will provide an introduction to the Russian language.

Credits: 3
Thematic Thread(s): Being American, Transfer Thread Completion Course

## RUSS 102 - Russian Language and Culture II

This course is the second in a three course series which will provide an introduction to the Russian language.
Prerequisite: RUSS $101^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Thematic Thread(s): Being American, Transfer Thread Completion Course
RUSS 103-Russian Language and Culture III
This course is the third in three course series which will provide an introduction to the Russian language.

Prerequisite: RUSS $102^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Thematic Thread(s): Being American, Transfer Thread Completion Course

## RUSS 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

## RUSS 195-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## Credits: 1-6

## RUSS 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

## RUSS 201-Third Crse Russian

After a review of basic principles this course continues to develop understanding and skill in using more complex elements of the Russian language and in recognizing and mastering their use in both written and spoken form. Taught through distance education.

## Credits: 3

## RUSS 202-Intermediate Russian I

Comprehensive review of Russian grammar with emphasis on developing the students' abilities for proficient oral and written accomplishments.

Prerequisite: RUSS $103^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3

## RUSS 210-Russian Literature in Translation

A study of representative Russian literary works from its origins to 1917. Course is taught in English; no knowledge of Russian required.

## RUSS 270-Study in the Republic of Russia

This course is designed for students who desire to study modern Russia first-hand. Students will study modern Russian economy, housing, the political system, history, and information on Russia while traveling in the Republic of Russia.

Prerequisite: ENGL $102^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1-3

## RUSS 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

## RUSS 295-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

## RUSS 298-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

## RUSS 301 - Advanced Russian 1

A detailed course designed to give the student a valid structural knowledge of Russian. A study of the finer points of modern Russian usage.

Prerequisite: RUSS $202{ }^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RUSS 302 - Advanced Russian 2

An advanced course in the study of Russian grammar designed to improve vocabulary, idiomatic useage, reading skills, and individual style.

Prerequisite: RUSS $301{ }^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RUSS 305-Russian Civilization via Film

A comprehensive analysis of Russian civilization through the media of Russian film. Russian films with subtitles present all major aspects of Russian civilization: the Tatar yoke, Russian expansion, the rise of Muscovy, the social-economic-political conflicts at various levels of tsarism, communication and post-communism. No prerequisite

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RUSS 306 - The Challenge of Russian Legacy

A broad study of the social, political, historical, economic, and cultural situations of modern Russian from 1917 to the present. Course is offered in English and is open to all interested students.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RUSS 390-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RUSS 395-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RUSS 398-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RUSS 490 - Independent Study

Students have an opportunity to study selected areas in greater concentration. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RUSS 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RUSS 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN Courses

## SPAN 101 - Spanish Language \& Culture I

This course is the first in a three-course series that offers an introduction to the Spanish language and cultures of the Spanish-speaking World.

## Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, \& Summer
Thematic Thread(s): Becoming America, Being American, Global
Citizenship, Food, Wellness \& Environment Across Cultures, International Business, Transfer Thread Completion Course, Transnational Culture

## SPAN 102 - Spanish Language \& Culture II

This is the second in a three-course series that offers an introduction to the Spanish language and cultures of the Spanish-speaking World.

Prerequisites: minimum score of 15 in 'Placement in SPAN102' or SPAN $101^{D}$ or SPAN $110^{D}$ or SPAN $121^{D}$ or SPAN $131^{D}$ or minimum score of 234 in 'Placement in SPAN102'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): Becoming America, Being American, Global Citizenship, Food, Wellness \& Environment Across Cultures, International Business, Transfer Thread Completion Course, Transnational Culture

## SPAN 103-Spanish Language \& Culture III

This course is the third in a three-course series that offers and introduction to the Spanish language and cultures of the Spanishspeaking World.

Prerequisites: minimum score of 25 in 'Placement in SPAN103' or SPAN $102^{\text {D }}$ or minimum score of 312 in 'Placement in SPAN103'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): Becoming America, Being American, Global Citizenship, Food, Wellness \& Environment Across Cultures, International Business, Transfer Thread Completion Course, Transnational Culture

## SPAN 104-Situational Spanish

This course provides the opportunity to learn practical application Spanish phrases and cultural aspects relevant to future careers in fields that have direct contact with the public, depending on situations specific to the different professional fields.

Prerequisite: SPAN $102^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$. Credits: 3

## SPAN 110-Spanish for Educators

This course provides an introduction and essential tools for communicating with Spanish-speaking students, parents/guardians and school personnel to pre-service and in-service educators.

Credits: 3
Thematic Thread(s): Education, Transfer Thread Completion Course Enrollment is limited to students with a program in Early Childhood Ed (PK-4), Health and Physical Education, Early Child/Spec Ed(PK-4)PK-8), Sec Education-English(7-12), Sec Education-French (K-12), Mid LevelEngl\&Lang Arts (4-8), Mid Level-Mathematics (4-8), Mid Level-Social Studies (4-8), Middle Level-Science (4-8), Sec Ed-Social Stud-Hist (7-12), Secondary Educ-Spanish (K-12), SPED Transition Programming, Music Education (K-12) or K-12 Art Teacher Preparation.
Enrollment limited to students in the College of Education or College of Liberal Arts colleges.

## SPAN 121 - Spanish for Health Professionals

This course will explore occupational Spanish specializing in Health Care Professionals. This course provides an introduction and essential tools for communicating with Spanish-speaking patients. The course's context is health professions and communicative aspects within the field of Health. The topics presented are carefully selected/designed to help health care professionals manage various situations within the field while addressing Spanish-speaking patients. This course has no prerequisites. This course satisfies the prerequisite for Span 102.

Credits: 3
Term(s) Typically Offered: Offered Winter Terms
Thematic Thread(s): 21 st Century Healthcare, Food, Wellness \& Environment Across Cultures, Transfer Thread Completion Course Enrollment limited to students in a Bachelor of Science degree.

## SPAN 131-Spanish for the Business World

This course is intended for students who wish to acquire knowledge of Spanish for use in a practical business context. This course provides an introduction and essential tools for communicating with Spanishspeaking clients and partners as well as culture background to succeed in a cross-cultural environment. The topics presented are carefully selected/designed to help business professionals manage various situations within the field while addressing Spanish-speaking clients and partners. This course has no prerequisites.

## Credits: 3

Thematic Thread(s): International Business, Transfer Thread Completion Course
Enrollment limited to students in a Bachelor of Science degree.

## SPAN 139-University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## SPAN 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## SPAN 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## SPAN 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## SPAN 200 - Writing in Spanish for the Professions I

This course provides a review of basic Spanish grammar with an emphasis on developing writing skills for the professions.

Prerequisites: minimum score of 35 in 'Placement in SPAN200 level' or SPAN $103^{\text {D }}$ or minimum score of 384 in 'Placement in SPAN200 level' or SPAN $104{ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms

## SPAN 201 - Speaking in Spanish for the Professions I

A functional course in speaking and writing Spanish, stressing everyday vocabulary and sentence structure. Some grammar review.

Prerequisites: SPAN $103^{\mathrm{D}}$ or SPAN $104^{\mathrm{D}}$ or minimum score of 35 in 'Placement in SPAN200 level' or minimum score of 384 in 'Placement in SPAN200 level'
${ }^{D}$ Requires minimum grade of $D$. Credits: 3
Term(s) Typically Offered: Offered Spring Terms

## SPAN 215 - Topics in Hispanic Culture

This course provides insight into Hispanic cultures by examining the practices and traditions of the different countries that comprise the Hispanic world. This course is taught in English.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Transfer Thread Completion Course
SPAN 220 - Understanding Hispanic Cultures Through Reading
In this course students develop a deeper understanding of the cultural diversity of the Hispanic World through a variety of texts and media related to different disciplines.

Prerequisites: SPAN $200^{\text {D }}$ or minimum score of 35 in 'Placement in SPAN200 level' or minimum score of 384 in 'Placement in SPAN200 level'
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms

## SPAN 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## SPAN 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## Credits: 1-6

Term(s) Typically Offered: Offered as Needed

## SPAN 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
SPAN 300 - Writing in Spanish for the Professions II
This course reviews intermediate-level grammar concepts while at the same time focusing on writing skills with an emphasis on developing writing proficiency for the professions.

Prerequisites: minimum score of 45 in 'Placement in SPAN300 level' or minimum score of 457 in 'Placement in SPAN300 level' or SPAN $200^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 301 - Speaking in Spanish for the Professions II

This course is the second in a three-course sequence that focuses on developing students' oral proficiency, including fluency and functional competence.
Prerequisites: SPAN $201^{\text {D }}$ and (SPAN $200^{\text {D }}$ or SPAN $220^{\mathrm{D}}$ ) or minimum score of 457 in 'Placement in SPAN300 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

SPAN 302 - Communication in Spanish for the Elementary Classroom This course is designed to offer the elementary education major specific language skills necessary for effective communication in the elementary education classroom. (open only to Ed majors).

Prerequisites: SPAN $201^{\text {D }}$ or minimum score of 45 in 'Placement in SPAN300 level' or minimum score of 457 in 'Placement in SPAN300 level'
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a minor in Spanish (Elem Ed).
Enrollment limited to students in the following programs:

- BSED11
- BSED1100
- BSED1189
- BSED1192
- BSED1231
- BSED1233
- BSED1234
- BSED1235
- BSED1284


## SPAN 303 - Developing Communicative and Cultural Competence for the Workplace

This course is designed to teach students the necessary skills to interact effectively in Spanish in a professional setting.
Prerequisites: SPAN $200^{\mathrm{D}}$ and SPAN $201^{\mathrm{D}}$ and SPAN $220^{\mathrm{D}}$ or minimum score of 45 in 'Placement in SPAN300 level' or minimum score of 457 in 'Placement in SPAN300 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 305-Spain Today

A study of the history of Spain and of important components of its culture, such as art, architecture, and daily life.

Prerequisites: (SPAN $200^{\mathrm{D}}$ or SPAN $201^{\mathrm{D}}$ ) and SPAN $220^{\mathrm{D}}$ or minimum score of 45 in 'Placement in SPAN300 level' or minimum score of 457 in 'Placement in SPAN300 level'
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## SPAN 307 - U.S. Latino Cultures

A study of the cultural background of the members of the Spanishspeaking minorities in the United States, especially the Chicanos, Puerto Ricans and Cubans.

Prerequisites: SPAN $220^{\mathrm{D}}$ and (SPAN $200^{\mathrm{D}}$ or SPAN $201^{\mathrm{D}}$ ) or minimum score of 457 in 'Placement in SPAN300 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 309 - Hispanic Civilization for the K-12 Classroom

This course, designed for the Elementary Education major, focuses on themes of Hispanic civilization and culture appropriate for inclusion in the K - 12 classroom. Open to Spanish education majors only.

Prerequisites: (SPAN $200^{\mathrm{D}}$ or SPAN $201^{\mathrm{D}}$ ) and SPAN $220^{\mathrm{D}}$ or minimum score of 45 in 'Placement in SPAN300 level' or minimum score of 457 in 'Placement in SPAN300 level'
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Elementary Education
(K-6), Early Childhood Ed (PK-4), Early Child/Spec Ed(PK-4)PK-8), Mid
Level-Engl\&Lang Arts (4-8), Mid Level-Mathematics (4-8), Mid Level-Social Studies (4-8), Middle Level-Science (4-8), Secondary Educ-Spanish (K-12) or Spanish (Elem Ed).

## SPAN 315 - Spanish Study Abroad

This course is designed for students who wish to study the Hispanic society firsthand. Students will study the culture, literature, history, art, and other issues concerning the country where the program is offered.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 318 - Hispanic Children's Literature for the K-12 Classroom

Students will read legends, fables, poems which are part of the Hispanic tradition and which are told to or read by young children and younger adolescents.

Prerequisites: (SPAN $200^{\mathrm{D}}$ or SPAN $201^{\mathrm{D}}$ ) and SPAN $220^{\mathrm{D}}$ or minimum score of 45 in 'Placement in SPAN300 level' or minimum score of 457 in 'Placement in SPAN300 level'
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a minor in Spanish (Elem Ed).
Enrollment limited to students in the following programs:

- BSED11
- BSED1100
- BSED1189
- BSED1192
- BSED1231
- BSED1233
- BSED1234
- BSED1235
- BSED1284


## SPAN 326 - The Civilization of Spanish America: Precolumbian to 19th Century

A study of the development of the civilization of Spanish America from Precolumbian times to the 19th century, including important aspects of their culture, such as art, architecture, and daily life.

Prerequisites: (SPAN $200^{\mathrm{D}}$ or SPAN $201^{\mathrm{D}}$ ) and SPAN $220^{\mathrm{D}}$ or minimum score of 45 in 'Placement in SPAN300 level' or minimum score of 457 in
'Placement in SPAN300 level'
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 328 - Latin American Today

A study of the development of the civilization of Spanish America from the 19th century to the present, including important aspects of their culture, such as art, architecture, and daily life.

Prerequisites: (SPAN $200^{\mathrm{D}}$ or SPAN $201^{\mathrm{D}}$ ) and SPAN $220^{\mathrm{D}}$ or minimum score of 45 in 'Placement in SPAN300 level' or minimum score of 457 in 'Placement in SPAN300 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 330 - Spanish Literature 1800 to Present

A study of major writers genres and literary movements of Spain in this period.

Prerequisites: SPAN $220^{\mathrm{D}}$ and (SPAN $200^{\mathrm{D}}$ or SPAN $201^{\mathrm{D}}$ ) or minimum score of 45 in 'Placement in SPAN300 level'
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 332 - Spanish American Literature - 19th Century to Present

A study of major writers genres and literary movements of Latin American in this period.
Prerequisites: SPAN $220^{\mathrm{D}}$ and (SPAN $200^{\mathrm{D}}$ or SPAN $201^{\mathrm{D}}$ ) or minimum score of 45 in 'Placement in SPAN300 level' or minimum score of 457 in
'Placement in SPAN300 level'
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 335 - Women in Hispanic Literature

A study of Hispanic women authors and of Hispanic women as literary characters in Hispanic literature.

Prerequisites: SPAN $220^{\mathrm{D}}$ and (SPAN $200^{\mathrm{D}}$ or SPAN $201^{\mathrm{D}}$ ) or minimum score of 457 in 'Placement in SPAN300 level'
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 340 - Introduction to Translation

This course provides hands-on experience translating different types of texts to further develop Spanish language skills and intercultural competence.
Prerequisites: SPAN $300^{\mathrm{D}}$ or minimum score of 45 in 'Placement in SPAN300 level' or minimum score of 457 in 'Placement in SPAN300 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 350 - The Sounds of Spanish

In this course students will work on their Spanish pronunciation skills and will also learn about dialectal variations in the Spanish-speaking world.

Prerequisites: SPAN $200^{\mathrm{D}}$ and (SPAN $201^{\mathrm{D}}$ or SPAN $220^{\mathrm{D}}$ ) or minimum score of 45 in 'Placement in SPAN300 level' or minimum score of 457 in
'Placement in SPAN300 level'
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 400 - Writing in Spanish for the Professions III

This course provides an overview of intermediate- and advanced-level Spanish grammar with an emphasis on research and advanced writing skills.

Prerequisite: SPAN $300^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 401- Speaking in Spanish for the Professions III

This course is the third in a three-course sequence that focuses on developing students' oral proficiency, including fluency and functional competence.
Prerequisite: SPAN $301^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 431 - Exploring Spanish Culture through Media

A study and analysis of the most important works of representative Spanish authors of this period.

Prerequisites: SPAN $300^{\mathrm{D}}$ and (SPAN $305^{\mathrm{D}}$ or SPAN $307^{\mathrm{D}}$ or SPAN $326^{\mathrm{D}}$ or SPAN $328^{\text {D }}$ ) and (SPAN $330^{\mathrm{D}}$ or SPAN $332^{\mathrm{D}}$ or SPAN $318^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 432 - Exploring Latin American Cultures through Media

A study and analysis of the most important works of representative Spanish-American authors of this period.

Prerequisites: SPAN $300^{\mathrm{D}}$ and (SPAN $305^{\mathrm{D}}$ or SPAN $307^{\mathrm{D}}$ or SPAN $326^{\mathrm{D}}$ or SPAN $328^{\mathrm{D}}$ ) and (SPAN $330^{\mathrm{D}}$ or SPAN $332^{\mathrm{D}}$ or SPAN $318^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 490 - Independent Study

Students have an opportunity to study selected areas in greater concentration. The nature of the topic selected and its treatment are determined in consultation with the instructor. credits) Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## Credits: 1-6

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Arabic, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Arabic, Minor Program Page (https://www.sru.edu/academics/majors-and-minors/arabic-(minor)/)

Modern Language and Cultures Department Page (https://www.sru.edu/ academics/colleges-and-departments/cla/departments/modern-languages-and-cultures/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

GPA: 2.00 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (an upper division course includes any 3 credit course that requires a prerequisite)
- A minor shall be no fewer than 18 credits.
- Minimum 2.0 CGPA
Code Title Hours

| Required Courses |  |  |
| :---: | :---: | :---: |
| ARAB 101 | Arabic Language and Culture $\mathrm{I}^{1}$ | 3 |
| ARAB 102 | Arabic Language and Culture II ${ }^{1}$ | 3 |
| ARAB 103 | Arabic Language and Culture III ${ }^{1}$ | 3 |
| ARAB 202 | Intermediate Arabic ${ }^{1}$ | 3 |
| Select two of the following: |  | 6 |
| ARAB 300 | Reading \& Writing in Arabic ${ }^{1}$ |  |
| ARAB 301 | Arabic Conversation ${ }^{1}$ |  |
| ARAB 315 | Arabic Study Abroad ${ }^{1}$ |  |
| Total Hours |  | 18 |

1 A grade of " C " or better is required.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

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earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN ARABIC (03A)
This program is effective as of Fall 2019
Revised 04.09.2020
UCC 3.26.2019

## French, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

French, Minor Program Page (https://www.sru.edu/academics/majors-and-minors/french/)

Modern Language and Cultures Department Page (https://www.sru.edu/ academics/colleges-and-departments/cla/departments/modern-languages-and-cultures/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.00 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required French Courses |  |  |
| FREN 102 | French Language and Culture II ${ }^{1}$ | 3 |
| FREN 103 | French Language and Culture III ${ }^{1}$ | 3 |
| FREN 201 | French Conversation $1{ }^{1}$ | 3 |
| FREN 220 | Reading in French ${ }^{1}$ | 3 |
| Select two FREN courses at the 300/400 level ${ }^{1}$ |  | 6 |
| Total Hours |  | 18 |
| 1 A grade of "C" or better is required |  |  |
| * Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course. |  |  |
| Important Curriculum Guide Notes |  |  |
| This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report |  |  |

and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN FRENCH (28A)
This program is effective as of Spring 2019.
Revised 8-2019

## Japanese Studies, Certificate

To access Certificate Requirements, please view the Curriculum Guide tab.

## Related Links

Japanese Studies, Certificate Program Page (https://www.sru.edu/ academics/certificates/japanese-studies-certificate/)

Modern Language and Cultures Department Page (https://www.sru.edu/ academics/colleges-and-departments/cla/departments/modern-languages-and-cultures/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide <br> GPA Requirement <br> Certificate GPA: 2.0 or higher

Certificate Requirements
Code Title Hours

## Required Core Courses

| JAPN $101^{\text {JAPN } 102}$ | Japanese Language and Culture I $^{1}$ | 3 |
| :--- | :--- | :--- |
| JAPN $^{1}$ | 3 |  |
| JAPN 103 $^{103}$ | Japanese Language and Culture II $^{1}$ | 3 |

If a student has tested out of the Core JAPN requirements, a total 0-9 of nine JAPN credits must still be successfully passed. Select from:

| JAPN 202 | Intermediate Japanese ${ }^{1}$ |  |
| :---: | :---: | :---: |
| JAPN 215 | Topics in Japanese Culture |  |
| MODL 105 | Introduction to Asian Civilizations |  |
| Emphasis |  |  |
| Select six credits from one of the following groups: |  | 6 |
| Political Emphasis |  |  |
| JAPN 215 | Topics in Japanese Culture |  |
| Department Approved Course |  |  |
| Historical Emphasis |  |  |
| HIST 376 | Modern Japan |  |
| HIST 381 | East Asian Military Traditions |  |
| HIST 382 | Modern Asian Pacific Rim |  |
| JAPN 215 | Topics in Japanese Culture |  |
| Cultural and Literary Emphasis |  |  |
| ENGL 248 | Asian Literature |  |
| ENGL 316 | Asian Film |  |
| ENGL 402 | World Literature (by Advisement) |  |


| INDP 310 | Cultural Area Studies |  |
| :--- | :--- | :--- |
| INDP 310 | Cultural Area Studies |  |
| INDP 360 | Issues in Asia; Women in Asian Societies |  |
| JAPN 215 | Topics in Japanese Culture |  |
| PHIL 140 | World Religions (by Advisement) | $\mathbf{1 5}$ |
| Total Hours |  |  |
| 1 | A grade of "C" or better is required. |  |
| *Some courses may require pre-requisites. Please see course <br> descriptions to determine if there are any pre-requisites for that <br> specific course. |  |  |

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
CERTIFICATE IN JAPANESE STUDIES (5JAS)
This program is effective as of Spring 2019.
Revised 10-2019

## Latin American Studies, Certificate

To access Certificate Requirements, please view the Curriculum Guide tab.

Related Links<br>Latin American Studies, Certificate Program Page (https://www.sru.edu/ academics/certificates/latin-american-studies-certificate/)<br>Modern Language and Cultures Department Page (https://www.sru.edu/ academics/colleges-and-departments/cla/departments/modern-languages-and-cultures/)<br>Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Certificate GPA: 2.0 or higher

## Certificate Requirements

- Please Note: Based on the Placement Test administered by the Department of Modern Languages and Cultures, a student may exempt any or all of the courses at the 100 and 200 levels.

| Code $\quad$ Title | Hours |  |
| :--- | ---: | ---: |
| Required Courses |  | 15 |
| Select three of the following: |  |  |
| SPAN 307 | U.S. Latino Cultures ${ }^{1}$ |  |


| SPAN 326 | The Civilization of Spanish America: <br> Precolumbian to 19th Century ${ }^{1}$ |
| :--- | :--- |
| SPAN 328 | Latin American Today ${ }^{1}$ |
| ENGL 246 | U.S. Latino/a Literatures <br> SPAN 332 |
| Spanish American Literature - 19th Century |  |
| to Present ${ }^{1}$ |  |

Total Hours

A grade of "C" or better is required.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course


## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

CERTIFICATE IN LATIN AMERICAN STUDIES (554L)
This program is effective as of Spring 2019
Revised 10-2019

## Middle Eastern Studies, Certificate

To access Certificate Requirements, please view the Curriculum Guide tab.

## Related Links

Middle Eastern Studies, Certificate Program Page (https://www.sru.edu/ academics/certificates/middle-eastern-studies-certificate/)

Modern Language and Cultures Department Page (https://www.sru.edu/ academics/colleges-and-departments/cla/departments/modern-languages-and-cultures/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Certificate GPA: 2.0 or higher

## Certificate Requirements

Code Title Hours

Required Core Courses
ARAB 101
Arabic Language and Culture $\mathrm{I}^{1}$

| ARAB 102 | Arabic Language and Culture II ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| ARAB 103 | Arabic Language and Culture III ${ }^{1}$ | 3 |
| ARAB 215 | Topics in Arabic Culture ${ }^{1}$ | 3 |
| Subtotal |  | 12 |
| Electives |  |  |
| Select three credits the following: |  | 3 |
| ARAB 202 | Intermediate Arabic I ${ }^{1}$ |  |
| ARAB 315 | Arabic Study Abroad |  |
| CRIM 328 | Transnational Crime \& Justice |  |
| CRIM 380 | Women \& the Criminal Justice System |  |
| HIST 370 | History and the Bible |  |
| HIST 371 | History of Jews |  |
| HIST 380 | Egyptology |  |
| HIST 462 | The Contemporary Middle East |  |
| HIST 463 | Israel-History, State and Society |  |
| HSS 441 | Terrorism, Law and National Security |  |
| INDP 310 | Cultural Area Studies |  |
| PHIL 140 | World Religions |  |
| POLS 103 | International Relations |  |
| POLS 220 | Foreign Policy |  |
| POLS 263 | Introduction to Comparative Politics |  |
| POLS 350 | Transnational Terrorism |  |
| POLS 369 | Politics of Developing Areas |  |

Total Hours

1 A grade of " C " or better is required.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
CERTIFICATE IN MIDDLE EASTERN STUDIES (5MES)
This program is effective as of Fall 2020
UCC 03.05.20
Revised 08.17.20

## Modern Languages and Cultures, Bachelor of Arts (BA) - Concentration in Cultural Area Studies

## Program Learning Outcomes

- Communication: Communicate in other language than English
- Standard 1.1: Students engage in conversations, provide and obtain information, express feelings and emotions, and exchange opinions.
- Standard 1.2: Students understand and interpret written and spoken language on a variety of topics.
- Standard 1.3: Students present information, concepts, and ideas to an audience of listeners or readers on a variety of topics.
- Communities: Participate in multilingual communities at home \& around the world
- Standard 5.1: Students use the language both within and beyond the school setting.
- Standard 5.2: Students show evidence of becoming life-long learners by using the language for personal enjoyment and enrichment.
- Comparisons: Develop insight into the nature of language and culture
- Standard 4.1: Students demonstrate understanding of the nature of language through comparisons of the language studied and their own.
- Standard 4.2: Students demonstrate understanding of the concept of culture through comparisons of the cultures studied and their own.
- Connections: Connect with other disciplines and acquire information
- Standard 3.1: Students reinforce and further their knowledge of other disciplines through the foreign language.
- Standard 3.2: Students acquire information and recognize the distinctive viewpoints that are only available through the foreign language and its cultures.
- Cultures: Gain knowledge and understanding of other cultures
- Standard 2.1: Students demonstrate an understanding of the relationship between the practices and perspectives of the culture studied.
- Standard 2.2: Students demonstrate an understanding of the relationship between the products and perspectives of the culture studied.


## Related Links

Modern Languages and Cultures - Cultural Area Studies, BA Program Page (https://www.sru.edu/academics/majors-and-minors/cultural-areastudies/)

Modern Languages and Cultures Department Page (https://www.sru.edu/ academics/colleges-and-departments/cla/departments/modern-languages-and-cultures/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

## Summary*

| Title | Hours |
| :--- | ---: |
| Code | 42 |
| Rock Studies Requirements | $0-9$ |
| Modern Language Requirement | $0-3$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | 36 |
| Major/Concentration Requirements | 42 |
| Electives |  |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Sciences Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Sciences Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |
| Thematic Thread |  |  |
| Select 12 Credits (p.1378) ${ }^{2}$ |  | 12 |
| Total Hours |  | 42 |

1 Course offered in multiple subjects; cannot take course in first major
subject.
2 From at least 3 categories; no more than 6 credits from one
department; 6 credits must be 300-level or above.

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete 0-9 credits |  | 0-9 |
| Total Hours |  | 0-9 |
| Basic Math Requirement |  |  |
| Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree. |  |  |
| Code | Title | Hours |
| Complete one | following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | uter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Ar |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major/Concentration Requirements

- 17 major credits must be taken at SRU or PASSHE
- 17 major credits must be taken at the 300 level or above (Adviser approved courses)
- Courses used in this major may not be used to satisfy Rock Studies, a minor, or another major's requirements.
- A student must have earned 30 credits and a 2.0 GPA to enter the program.
- AP, Credit by Exam, CLEP, and institutional credit by exam may count towards the degree to a maximum of 45 credits. Pass/Fail and noncredit courses will not be counted in the major.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Oral and Written Communication |  |  |
| Select two of the following: |  | 6 |
| COMM 217 | Intercultural Communication ${ }^{1}$ |  |
| GES 105 | World Regional Geography ${ }^{1}$ |  |
| HIST 153 | Contemporary World History ${ }^{1}$ |  |
| POLS 103 | International Relations ${ }^{1}$ |  |
| Analytical, Quantitative \& Critical Thinking Skills |  |  |
| Select one of area: | owing courses approved for your cultural | 3 |
| HIST 151 | Ancient and Medieval World ${ }^{1}$ |  |
| HIST 152 | Rise of the Modern World ${ }^{1}$ |  |
| INDP 106 | Race and Ethnic Diversity in the USA ${ }^{1}$ |  |
| INDP 310 | Cultural Area Studies ${ }^{1}$ |  |
| INDP 322 | Archaeology of the Americas ${ }^{1}$ |  |


| MODL 105 | Introduction to Asian Civilizations ${ }^{1}$ |
| :--- | :--- |
| Select one of the following: |  |
| INDP 317 | Statistics for the Social Sciences ${ }^{1}$ |
| INDP 318 | Research Methods in Interdisciplinary <br> Studies ${ }^{1}$ |

Subtotal ..... 12
Emphasis Area
Courses selected by advisement
Part I: Primary Cultural Area -America, Asia, Europe, Latin America or Middle East
Select five courses in the following categories: Foundations, ..... 15
Culture and Society, History, Current Issues
Part II: Electives
Select three electives ..... 9
Subtotal ..... 24
Total Hours ..... 36
1 Course counts for 50\% of Major requirements and Major GPA* Some courses may require pre-requisites. Please see coursedescriptions to determine if there are any pre-requisites for thatspecific course.

## Experiential Learning Experience

Must complete 40 hours of experiential learning activities which are approved by the Academic Adviser. Please consult with your Adviser for details of the options available.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Experiential Learning Activities | 40 |  |

## Co-curricular and Experiential Learning

The department of Modern Languages encourages students to engage in the following areas to deepen their educational experience:

1. International study programs (short-term, semester, and year-long)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership development

Service-learning classes
Career education and development
7. Internships

Field Experiences
9. Volunteering (schools, world language competition, language clubs, communities)

MODERN LANGUAGES AND CULTURES - BA (5 45)
Concentration in Cultural Area Studies (CAST)
This program is effective as of Fall 2019
Revised 02.2020
UCC RISP 2019

## Important Curriculum Guide Notes

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ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Recommended Four-Year Plan

| Course Title | Hours |
| :---: | :---: |
| First Year |  |
| Fall |  |
| Modern Language Requirement I | 3 |
| ENGL 102 Critical Writing | 3 |
| \{SUBJ 139\} University Seminar | 3 |
| Rock Studies Course | 3 |
| Rock Studies Course | 3 |
| Hours | 15 |
| Spring |  |
| Modern Language Requirement II | 3 |
| ENGL 104 Critical Reading | 3 |
| Rock Studies Course | 3 |
| Rock Studies Course | 3 |
| Rock Studies Course | 3 |
| Hours | 15 |

Second Year
Fall

| COMM 217 | Intercultural Communication ${ }^{1}$ | 3 |
| :--- | :--- | :--- |
| HIST 151 | Ancient and Medieval World ${ }^{2}$ | 3 |
| Select one of the following: | 3 |  |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |

Modern Language Requirement III 3
ENGL 104 Critical Reading 3
$\frac{\text { Declare a Thematic Thread }}{}{ }^{3}$

| Spring |  |  |
| :--- | :--- | ---: |
| COMM 217 | Intercultural Communication ${ }^{1}$ | 3 |
| HIST 151 | Ancient and Medieval World ${ }^{2}$ | 3 |
| Rock Studies Course | 3 |  |
| Rock Studies Course | 3 |  |
| Rock Studies Course | 3 |  |
| Hours | $\mathbf{1 5}$ |  |


| Third Year |  |
| :--- | ---: |
| Fall |  |
| Major Emphasis Area Course | 3 |
| Major Emphasis Area Course | 3 |
| Major Emphasis Area Course | 3 |
| Rock Studies Course | 3 |
| Rock Studies Course | 3 |
| Hours | $\mathbf{1 5}$ |



## Modern Languages and Cultures, Bachelor of Arts (BA) - Concentration in French

## Program Learning Outcomes

- Communication: Communicate in other language than English
- Standard 1.1: Students engage in conversations, provide and obtain information, express feelings and emotions, and exchange opinions.
- Standard 1.2: Students understand and interpret written and spoken language on a variety of topics.
- Standard 1.3: Students present information, concepts, and ideas to an audience of listeners or readers on a variety of topics.
- Communities: Participate in multilingual communities at home \& around the world
- Standard 5.1: Students use the language both within and beyond the school setting.
- Standard 5.2: Students show evidence of becoming life-long learners by using the language for personal enjoyment and enrichment.
- Comparisons: Develop insight into the nature of language and culture
- Standard 4.1: Students demonstrate understanding of the nature of language through comparisons of the language studied and their own.
- Standard 4.2: Students demonstrate understanding of the concept of culture through comparisons of the cultures studied and their own.
- Connections: Connect with other disciplines and acquire information
- Standard 3.1: Students reinforce and further their knowledge of other disciplines through the foreign language.
- Standard 3.2: Students acquire information and recognize the distinctive viewpoints that are only available through the foreign language and its cultures.
- Cultures: Gain knowledge and understanding of other cultures
- Standard 2.1: Students demonstrate an understanding of the relationship between the practices and perspectives of the culture studied.
- Standard 2.2: Students demonstrate an understanding of the relationship between the products and perspectives of the culture studied.


## Related Links

Modern Languages and Cultures - French, BA Program Page (https:// www.sru.edu/academics/majors-and-minors/french/)

Modern Languages and Cultures Department Page (https://www.sru.edu/ academics/colleges-and-departments/cla/departments/modern-languages-and-cultures/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Title | Hours |
| :--- | ---: |
| Code | 42 |
| Rock Studies Requirements | $0-9$ |
| Modern Language Requirement | $0-3$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | 30 |
| Major/Concentration Requirements | 48 |
| Electives |  |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |

Subtotal ..... 15
Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378) ..... 3
Humanities Inquiry
Select 3 Credits (p. 1378) ..... 3
Social Science Inquiry
Select 3 Credits (p. 1378) ..... 3
Natural Sciences InquiryPhysical Sciences Inquiry
SCI $102 \quad$ Understanding the Physical World ..... 3
Subtotal ..... 15
Thematic Thread
Select 12 Credits (p. 1378) ${ }^{2}$ ..... 12
Total Hours ..... 42

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

| Code | Title |
| :--- | ---: |
| Complete 0-9 credits | Hours |
| Total Hours | $0-9$ |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Ar |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major/Concentration Requirements

- 15 major credits must be taken at SRU or PASSHE
- 15 major credits must be taken at the 300 level or above

|  | Title | Hours |
| :---: | :---: | :---: |
| Basic Skill Courses |  |  |
| Exemption from the basic skills courses may be possible based on a placement exam given by the Modern Languages Department. Both English and Native French speakers should consult the Modern Languages and Cultures Department for information. |  |  |
| FREN 103 | French Language and Culture III 1,2 | 3 |
| FREN 201 | French Conversation $1^{\text {1,2 }}$ | 3 |
| FREN 220 | Reading in French ${ }^{\text {1,2 }}$ | 3 |
| Subtotal |  | 9 |
| Required French Courses |  |  |
| FREN 300 | French Grammar and Composition $1^{1,2}$ | 3 |
| FREN 330 | French Literature from the 18th Century to the Present ${ }^{1,2}$ | 3 |
| FREN 350 | French Linguistics and Phonetics ${ }^{1,2}$ | 3 |
| FREN 400 | French Grammar and Composition $2^{1,2}$ | 3 |
| Subtotal |  | 12 |
| Required Literature Course |  |  |
| Select one of | owing: | 3 |
| FREN 404 | Exploring French Culture through Media ${ }^{1,2}$ |  |
| FREN 430 | French Literature 12th to 17th Century ${ }^{1,2}$ |  |
| Required Civilization Course |  |  |
| Select one of | owing: | 3 |
| FREN 305 | France through the Ages 1,2 |  |
| FREN 306 | France and Francophone Identities Today 1,2 |  |

## Required Conversation Course

Select one of the following:

| FREN 301 | French Conversation $2^{1,2}$ |
| :--- | :--- |
| FREN 401 | French Conversation $3^{1,2}$ |

Electives at the $\mathbf{3 0 0}$ level and above
If any of the basic skill courses are waived, choose as many
electives as necessary to reach a total of 30 credits in the major.
Required Capstone Project
See Advisor for specific information related to requirements

## Study Abroad

Study Abroad is highly recommended. Please see advisor for information.

Total Hours
1 Course counts for $50 \%$ of Major requirements and Major GPA.
2 A grade of " C " or better is required.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

The department of Modern Languages encourages students to engage in the following areas to deepen their educational experience:

1. International study programs (short-term, semester, and year-long)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership development
5. Service-learning classes
6. Career education and development
7. Internships
8. Field Experiences
9. Volunteering (schools, world language competition, language clubs, communities)

MODERN LANGUAGES AND CULTURES - BA (5 45)
Concentration in French (FREN)
This program is effective as of Fall 2019
Revised 02.2020
UCC RISP 2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| FREN 101 | French Language and Culture I | 3 |
| ENGL 102 | Critical Writing | 3 |
| Rock Studies Course |  | 3 |
| Rock Studies Course |  | 3 |
| \{SUBJ 139\} | University Seminar ${ }^{2}$ | 3 |
|  | Hours | 15 |
| Spring |  |  |
| FREN 102 | French Language and Culture II | 3 |
| Rock Studies Course |  | 3 |
| Rock Studies Course |  | 3 |
| Rock Studies Course |  | 3 |
| Rock Studies Course |  | 3 |
|  | Hours | 15 |
| Second Year |  |  |
| Fall |  |  |
| FREN 103 | French Language and Culture III | 3 |
| ENGL 104 | Critical Reading | 3 |
| Rock Studies Course |  | 3 |
| Rock Studies Course |  | 3 |
| Rock Studies Course |  | 3 |
| Declare a Thematic Thread ${ }^{1}$ |  |  |
|  | Hours | 15 |
| Spring |  |  |
| FREN 220 | Reading in French | 3 |
| Rock Studies Course |  | 3 |
| Rock Studies Course |  | 3 |
| Elective |  | 3 |
| Elective |  | 3 |
|  | Hours | 15 |


| Third Year |  |  |
| :--- | :--- | ---: |
| Fall |  |  |
| FREN 201 | French Conversation 1 | 3 |
| Elective | 3 |  |
| Elective | 3 |  |
| Elective | 3 |  |
| Elective | Hours | 3 |
|  | $\mathbf{3}$ |  |


| Spring |  |  |
| :---: | :---: | :---: |
| FREN 300 | French Grammar and Composition 1 | 3 |
| FREN 301 or FREN 401 | French Conversation 2 or French Conversation 3 | 3 |
| Elective |  | 3 |
| Elective |  | 3 |
| Elective |  | 3 |
|  | Hours | 15 |

## Fourth Year

Fall
FREN 400 French Grammar and Composition 23

## FREN 305

or FREN 306

| Elective |  | 3 |
| :---: | :---: | :---: |
| Elective |  | 3 |
| Elective |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| FREN 330 | French Literature from the 18th Century to the Present | 3 |
| FREN 350 | French Linguistics and Phonetics | 3 |
| FREN 404 or FREN 430 | Exploring French Culture through Media or French Literature 12th to 17th Century | 3 |
| Elective |  | 3 |
| Elective |  | 3 |
|  | Hours | 15 |
|  | Total Hours** | 20 |

1

## Major Code: 545

Concentration Code: FREN
Revised: 11-2019
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Modern Languages and Cultures, Bachelor of Arts (BA) - Concentration in Professional French <br> Program Learning Outcomes

- Communication: Communicate in other language than English
- Standard 1.1: Students engage in conversations, provide and obtain information, express feelings and emotions, and exchange opinions.
- Standard 1.2: Students understand and interpret written and spoken language on a variety of topics.
- Standard 1.3: Students present information, concepts, and ideas to an audience of listeners or readers on a variety of topics.
- Communities: Participate in multilingual communities at home \& around the world
- Standard 5.1: Students use the language both within and beyond the school setting.
- Standard 5.2: Students show evidence of becoming life-long learners by using the language for personal enjoyment and enrichment.
- Comparisons: Develop insight into the nature of language and culture
- Standard 4.1: Students demonstrate understanding of the nature of language through comparisons of the language studied and their own.
- Standard 4.2: Students demonstrate understanding of the concept of culture through comparisons of the cultures studied and their own.
- Connections: Connect with other disciplines and acquire information
- Standard 3.1: Students reinforce and further their knowledge of other disciplines through the foreign language.
- Standard 3.2: Students acquire information and recognize the distinctive viewpoints that are only available through the foreign language and its cultures.
- Cultures: Gain knowledge and understanding of other cultures
- Standard 2.1: Students demonstrate an understanding of the relationship between the practices and perspectives of the culture studied.
- Standard 2.2: Students demonstrate an understanding of the relationship between the products and perspectives of the culture studied.


## Related Links

Modern Languages and Cultures - Professional French, BA Program Page (https://www.sru.edu/academics/majors-and-minors/professional-french-modern-languages-and-cultures/)

Modern Languages and Cultures Department Page (https://www.sru.edu/ academics/colleges-and-departments/cla/departments/modern-languages-and-cultures/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Modern Language Requirement | $0-9$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major/Concentration Requirements | 30 |
| Electives | 48 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar $^{1}$ | 3 |


| ENGL 102 | Critical Writing | 3 |
| :---: | :---: | :---: |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Sciences Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Sciences Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |
| Thematic Thread |  |  |
| Select 12 Credits (p.1378) ${ }^{2}$ |  | 12 |
| Total Hours |  | 42 |
| Course offered in multiple subjects; cannot take course in first major subject. |  |  |
| 2 From at lea departmen | tegories; no more than 6 credits fro dits must be 300 -level or above. |  |

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete $0-9$ credits | $0-9$ |  |
| Total Hours | $\mathbf{0 - 9}$ |  |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code Title | Hours |
| :---: | :---: |
| Complete one of the following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |
| ESAP 110 Beginning Algebra |  |
| Total Hours | 0-3 |
| Computer Competency |  |
| Code Title | Hours |
| Demonstrate "computer competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |
| Select one of the following at SRU or another post-secondary institution: |  |
| CPSC 100 Introduction to Computing for Liberal Arts |  |


| CPSC 110 | Computer Concepts |
| :--- | :--- |
| CPSC 130 | Introduction to Computing and <br> Programming |
| PE 202 | Technology for Wellness |

Total Hours

## Major/Concentration Requirements

- 15 major credits must be taken at SRU or PASSHE
- 15 major credits must be taken at the 300 level or above


## Code Title

Hours

## Basic Skill Courses

Exemption from the basic skills courses may be possible based on a placement exam given by the Modern Languages Department. Both English and Native French speakers should consult the Modern Languages and Cultures Department for information. CLEP, AP, and OPI credits are accepted for some of the following courses.


## French Electives - $\mathbf{3 0 0}$ level and above

For students who exempt from Basic Skills. (Choose as many 0-12 electives as necessary to reach 30 credits).

## Total Hours

1 Course counts for $50 \%$ of Major requirements and Major GPA
2 A grade of " C " or better is required.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Additional Requirements

Code Title Hours
Course and Explanation
Major, Minor or Certificate
Student must complete a Minor or Major or Certificate in any other discipline:

Completed a Minor in a Selected Field of Study or a Major or Certificate in any other discipline
Non Credit Requirement

Student must select one of the following:
Students' research must be conducted in their minor area or second major and the final product will be a written paper and an oral presentation using the French language.
Students can choose from three (3) options to complete the Capstone Experience requirement: Internship Presentation, Study Abroad Presentation or Research Presentation, depending on their area of interest.
The Internship Experience must be approved by the Modern Language and Cultures chair and the student's advisor in Modern Languages.

## Co-curricular and Experiential Learning

The department of Modern Languages encourages students to engage in the following areas to deepen their educational experience:

1. International study programs (short-term, semester, and year-long)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership development
5. Service-learning classes
6. Career education and development
7. Internships
8. Field Experiences
9. Volunteering (schools, world language competition, language clubs, communities)

MODERN LANGUAGES AND CULTURES - BA (5 45)
Concentration in Professional French (FRPR)
This program is effective as of Fall 2019
Revised 7-2019
UCC RISP 2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall |  |  |
| FREN 101 | French Language and Culture I | 3 |
| ENGL 102 | Critical Writing | 3 |
| \{SUBJ 139\} | University Seminar ${ }^{2}$ | 3 |
| Rock Studies Course | 3 |  |
| Rock Studies Course | Hours | $\mathbf{3}$ |
|  | $\mathbf{1 5}$ |  |

## Spring

FREN 102
French Language and Culture II

| Rock Studies Course |  | 3 |
| :---: | :---: | :---: |
| Rock Studies Course |  | 3 |
| Rock Studies Course |  | 3 |
| Rock Studies Course |  | 3 |
|  | Hours | 15 |
| Second Year |  |  |
| Fall |  |  |
| FREN 103 | French Language and Culture III | 3 |
| ENGL 104 | Critical Reading | 3 |
| Rock Studies Course |  | 3 |
| Elective |  | 3 |
| Elective |  | 3 |
| Declare a Thematic Thread ${ }^{1}$ |  |  |
|  | Hours | 15 |
| Spring |  |  |
| FREN 220 | Reading in French | 3 |
| Rock Studies Course |  | 3 |
| Rock Studies Course |  | 3 |
| Rock Studies Course |  | 3 |
| Elective |  | 3 |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| FREN 201 | French Conversation 1 | 3 |
| Minor |  | 3 |
| Minor |  | 3 |
| Rock Studies Course |  | 3 |
| Elective |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| FREN 300 | French Grammar and Composition 1 | 3 |
| FREN 301 | French Conversation 2 | 3 |
| Minor |  | 3 |
| Minor |  | 3 |
| Elective |  | 3 |
|  | Hours | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| FREN 303 | Professional French | 3 |
| FREN 305 or FREN 306 | France through the Ages or France and Francophone Identities Today | 3 |
| FREN 400 | French Grammar and Composition 2 | 3 |
| Minor |  | 3 |
| Elective |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| FREN 350 | French Linguistics and Phonetics | 3 |
| Minor |  | 3 |
| Minor |  | 3 |
| Elective |  | 3 |



## Modern Languages and Cultures, Bachelor of Arts (BA) - Concentration in Spanish

## Program Learning Outcomes

- Communication: Communicate in other language than English
- Standard 1.1: Students engage in conversations, provide and obtain information, express feelings and emotions, and exchange opinions.
- Standard 1.2: Students understand and interpret written and spoken language on a variety of topics.
- Standard 1.3: Students present information, concepts, and ideas to an audience of listeners or readers on a variety of topics.
- Communities: Participate in multilingual communities at home \& around the world
- Standard 5.1: Students use the language both within and beyond the school setting.
- Standard 5.2: Students show evidence of becoming life-long learners by using the language for personal enjoyment and enrichment.
- Comparisons: Develop insight into the nature of language and culture
- Standard 4.1: Students demonstrate understanding of the nature of language through comparisons of the language studied and their own.
- Standard 4.2: Students demonstrate understanding of the concept of culture through comparisons of the cultures studied and their own.
- Connections: Connect with other disciplines and acquire information
- Standard 3.1: Students reinforce and further their knowledge of other disciplines through the foreign language.
- Standard 3.2: Students acquire information and recognize the distinctive viewpoints that are only available through the foreign language and its cultures.
- Cultures: Gain knowledge and understanding of other cultures
- Standard 2.1: Students demonstrate an understanding of the relationship between the practices and perspectives of the culture studied.
- Standard 2.2: Students demonstrate an understanding of the relationship between the products and perspectives of the culture studied.


## Related Links

Modern Languages and Cultures - Spanish, BA Program Page (https:// www.sru.edu/academics/majors-and-minors/spanish/)

Modern Languages and Cultures Department Page (https://www.sru.edu/ academics/colleges-and-departments/cla/departments/modern-languages-and-cultures/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher
Summary*

| Citle | Hours |
| :--- | ---: |
| Code | 42 |
| Rock Studies Requirements | $0-9$ |
| Modern Language Requirement | $0-3$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | 30 |
| Major/Concentration Requirements | 48 |
| Electives |  |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: | 3 |  |
| COMM 200 |  | Civil Discourse: Theory \& Practice |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |

Subtotal 15

| Integrated Inquiry |  |
| :--- | ---: |
| Creative and Aesthetic Inquiry | 3 |
| Select 3 Credits (p. 1378) |  |
| Humanities Inquiry | 3 |
| Select 3 Credits (p. 1378) | 3 |
| Social Science Inquiry | 3 |
| Select 3 Credits (p. 1378) |  |
| Natural Sciences Inquiry |  |



## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete 0-9 credits | $0-9$ |  |
| Total Hours | $\mathbf{0 - 9}$ |  |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code Title | Hours |
| :--- | ---: |
| Complete one of the following: | $0-3$ |
| Meet required minimum SAT or ACT math score OR |  |


| ESAP 110 | Beginning Algebra |  |
| :--- | :--- | :--- |
| Total Hours | $\mathbf{0 - 3}$ |  |

## Computer Competency

Code Title Hours

Demonstrate "computer competency" by one of the following: 0-3
Pass Computer Competency Exam OR
Select one of the following at SRU or another post-secondary institution:

| CPSC 100 | Introduction to Computing for Liberal Arts |
| :--- | :--- |
| CPSC 110 | Computer Concepts |
| CPSC 130 | Introduction to Computing and <br>  <br> Programming |
| Tetal Hours 202 | Technology for Wellness |
| $\mathbf{0 - 3}$ |  |

## Major/Concentration Requirements

- 15 major credits must be taken at SRU or PASSHE
- 15 major credits must be taken at the 300 level or above

| Code | Hours |  |
| :--- | ---: | ---: |
| Basic Skill Courses | He |  |
| Exemption from the basic skills courses may be possible based <br> on the placement exam given by Modern Languages. CLEP, AP <br> and OPI credits are accepted for some of the following courses. |  |  |
| SPAN 103 Spanish Language \& Culture III |  |  |
| or SPAN 104 Situational Spanish | 3 |  |


| SPAN 200 | Writing in Spanish for the Professions I ${ }^{1,2}$ | 3 |
| :---: | :---: | :---: |
| SPAN 201 | Speaking in Spanish for the Professions I 1,2 | 3 |
| SPAN 220 | Understanding Hispanic Cultures Through Reading ${ }^{1,2}$ | 3 |
| Subtotal |  | 12 |
| Required Spanish Grammar Courses |  |  |
| SPAN 300 | Writing in Spanish for the Professions II ${ }^{1,2}$ | 3 |
| SPAN 301 | Speaking in Spanish for the Professions II 1,2 | 3 |
| SPAN 400 | Writing in Spanish for the Professions III ${ }^{1,2}$ | 3 |
| SPAN 401 | Speaking in Spanish for the Professions III 1,2 | 3 |
| Subtotal |  | 12 |
| Required Spanish Civilization Course |  |  |
| Select one of the following: |  |  |
| SPAN 305 | Spain Today ${ }^{1,2}$ |  |
| SPAN 307 | U.S. Latino Cultures ${ }^{1,2}$ |  |
| SPAN 326 | The Civilization of Spanish America: Precolumbian to 19th Century ${ }^{1,2}$ |  |
| SPAN 328 | Latin American Today ${ }^{1,2}$ |  |
| Subtotal |  | 3 |
| Required Spanish Literature Course ( 300 \& 400 Level) |  |  |
| Select three credits from the following: |  |  |
| SPAN 330 | Spanish Literature 1800 to Present ${ }^{1,2}$ |  |
| SPAN 332 | Spanish American Literature - 19th Century to Present |  |
| SPAN 431 | Exploring Spanish Culture through Media 1,2 |  |
| SPAN 432 | Exploring Latin American Cultures through Media |  |
| Subtotal |  | 3 |
| Electives at the $\mathbf{3 0 0}$ level and above |  |  |
| Select zero to nine credits of SPAN electives at 300 level and above ${ }^{1,2,3}$ |  |  |
| Required Capstone Project |  |  |
| See Advisor for specific information related to requirements |  |  |
| Study Abroad - Optional |  |  |
| See Advisor for details |  |  |
| Total Hours |  | 30 |
| Course counts for $50 \%$ of Major requirements and Major GPA. <br> 2 A grade of "C" or better is required. <br> 3 Except SPAN 302, SPAN 309 or SPAN 335. <br> * Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course. |  |  |
| 4 Criminology and Homeland Security majors may take SPAN 104 in place of SPAN 103 |  |  |
| Co-curricular and Experiential Learning |  |  |
| The departme the following | odern Languages encourages students to en deepen their educational experience: |  |


| Declare a Thematic Thread ${ }^{1}$ |  |  |
| :---: | :---: | :---: |
|  | Hours | 15 |
| Spring |  |  |
| SPAN 201 | Speaking in Spanish for the Professions I | 3 |
| SPAN 220 | Understanding Hispanic Cultures Through Reading | 3 |
| Rock Studies Course |  | 3 |
| Rock Studies Course |  | 3 |
| Rock Studies Course |  | 3 |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| SPAN 200 | Writing in Spanish for the Professions I | 3 |
| SPAN 301 | Speaking in Spanish for the Professions II | 3 |
| Elective |  | 3 |
| Elective |  | 3 |
| Elective |  | 3 |
| Elective |  | 3 |
|  | Hours | 18 |
| Spring |  |  |
| SPAN 300 | Writing in Spanish for the Professions II | 3 |
| SPAN 305 or SPAN 328 | Spain Today or Latin American Today | 3 |
| Elective |  | 3 |
| Elective |  | 3 |
| Elective |  | 3 |
|  | Hours | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| SPAN 400 | Writing in Spanish for the Professions III | 3 |
| Elective |  | 3 |
| Elective |  | 3 |
| Elective |  | 3 |
| Elective |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| SPAN 401 | Speaking in Spanish for the Professions III | 3 |
| SPAN 431 <br> or SPAN 432 | Exploring Spanish Culture through Media or Exploring Latin American Cultures through Media | 3 |
| Elective |  | 3 |
| Elective |  | 3 |
| Elective |  | 3 |
|  | Hours | 15 |
|  | Total Hours** | 123 |

1 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/ ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UIdNTi4u)to declare a thread.
*Course offered in multiple subjects; cannot take course in first major subject.

Major Code: 545
Concentration Code: SPAN
Revised: 10.06.20
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Modern Languages and Cultures, Bachelor or Arts (BA) - Concentration in Professional Spanish <br> Program Learning Outcomes

- Communication: Communicate in other language than English
- Standard 1.1: Students engage in conversations, provide and obtain information, express feelings and emotions, and exchange opinions.
- Standard 1.2: Students understand and interpret written and spoken language on a variety of topics.
- Standard 1.3: Students present information, concepts, and ideas to an audience of listeners or readers on a variety of topics.
- Communities: Participate in multilingual communities at home \& around the world
- Standard 5.1: Students use the language both within and beyond the school setting
- Standard 5.2: Students show evidence of becoming life-long learners by using the language for personal enjoyment and enrichment
- Comparisons: Develop insight into the nature of language and culture
- Standard 4.1: Students demonstrate understanding of the nature of language through comparisons of the language studied and their own.
- Standard 4.2: Students demonstrate understanding of the concept of culture through comparisons of the cultures studied and their own.
- Connections: Connect with other disciplines and acquire information
- Standard 3.1: Students reinforce and further their knowledge of other disciplines through the foreign language.
- Standard 3.2: Students acquire information and recognize the distinctive viewpoints that are only available through the foreign language and its cultures.
- Cultures: Gain knowledge and understanding of other cultures
- Standard 2.1: Students demonstrate an understanding of the relationship between the practices and perspectives of the culture studied.
- Standard 2.2: Students demonstrate an understanding of the relationship between the products and perspectives of the culture studied.


## Related Links

Modern Languages and Cultures - Professional Spanish, BA Program Page (https://www.sru.edu/academics/majors-and-minors/professionalspanish/)

Modern Languages and Cultures Department Page (https://www.sru.edu/ academics/colleges-and-departments/cla/departments/modern-languages-and-cultures/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

Code Title Hours

Rock Studies Requirements 42
$\begin{array}{ll}\text { Modern Language Requirement } & \text { 0-9 }\end{array}$
Other Basic Requirements 0-3
Computer Competency 0-3
Major/Concentration Requirements 30

Electives 48

* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Sciences Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Sciences Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |

Thematic Thread

| Select 12 Credits $(\mathrm{p} .1378)^{2}$ | 12 |
| :--- | :--- |

$\begin{array}{ll}\text { Total Hours } & 42\end{array}$
1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete $0-9$ credits | $0-9$ |  |
| Total Hours | $\mathbf{0 - 9}$ |  |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra | $\mathbf{0 - 3}$ |
| Total Hours |  |  |

## Computer Competency

Code Title Hours

Demonstrate "computer competency" by one of the following: 0-3
Pass Computer Competency Exam OR
Select one of the following at SRU or another post-secondary institution:

| CPSC 100 | Introduction to Computing for Liberal Arts |
| :--- | :--- |
| CPSC 110 | Computer Concepts |
| CPSC 130 | Introduction to Computing and |
|  | Programming |
| PE 202 | Telless |

PE 202 Technology for Wellness
Total Hours

## Major/Concentration Requirements

- 15 major credits must be taken at SRU or PASSHE
- 15 major credits must be taken at the 300 level or above


## Code Title Hours

Basic Skill Courses or 300/400 Spanish Electives
Exemption from the basic skills courses may be possible based on a placement exam given by the Modern Languages Department. CLEP, AP and OPI credits are accepted for some of the following courses.

| SPAN 103 <br> or SPAN 104 | Spanish Language \& Culture III ${ }^{1,2,4}$ <br> Situational Spanish | 3 |
| :---: | :--- | :---: |
| SPAN 200 | Writing in Spanish for the Professions I ${ }^{1,2}$ | 3 |
| SPAN 201 | Speaking in Spanish for the Professions I <br> I,2 | 3 |


| SPAN 220 | Understanding Hispanic Cultures Through Reading ${ }^{1,2}$ | 3 |
| :---: | :---: | :---: |
| Subtotal |  | 12 |
| Required Spanish Courses |  |  |
| SPAN 300 | Writing in Spanish for the Professions II 1,2 | 3 |
| SPAN 301 | Speaking in Spanish for the Professions II 1,2 | 3 |
| SPAN 303 | Developing Communicative and Cultural Competence for the Workplace ${ }^{1,2}$ | 3 |
| SPAN 400 | Writing in Spanish for the Professions III ${ }^{1,2}$ | 3 |
| SPAN 401 | Speaking in Spanish for the Professions III 1,2 | 3 |
| Subtotal |  | 15 |
| Literature and Culture Courses |  |  |
| Select one of | owing: | 3 |
| SPAN 302 | Communication in Spanish for the Elementary Classroom ${ }^{1,2}$ |  |
| SPAN 305 | Spain Today ${ }^{1,2}$ |  |
| SPAN 307 | U.S. Latino Cultures ${ }^{1,2}$ |  |
| SPAN 309 | Hispanic Civilization for the K-12 Classroom 1,2 |  |
| SPAN 318 | Hispanic Children's Literature for the K-12 Classroom ${ }^{1,2}$ |  |
| SPAN 326 | The Civilization of Spanish America: Precolumbian to 19th Century ${ }^{1,2}$ |  |
| SPAN 328 | Latin American Today ${ }^{\text {1,2 }}$ |  |
| SPAN 330 | Spanish Literature 1800 to Present ${ }^{2}$ |  |
| SPAN 332 | Spanish American Literature - 19th Century to Present ${ }^{2}$ |  |
| SPAN 350 | The Sounds of Spanish ${ }^{2}$ |  |
| SPAN 431 | Exploring Spanish Culture through Media ${ }^{2}$ |  |
| SPAN 432 | Exploring Latin American Cultures through Media ${ }^{2}$ |  |
| Electives at the $\mathbf{3 0 0}$ level and above |  |  |
| Select zero to nine credits: $1,2,3$ |  | 0-9 |
| Total Hours |  | 30 |
| 1 Course counts for 50\% of Major requirements and Major GPA |  |  |
| 2 A grade of "C" or better is required. |  |  |
| 3 Except SPAN 302, SPAN 309 or SPAN 335 |  |  |
| 4 Criminology and Homeland Security majors may take SPAN 104 in place of SPAN 103 |  |  |
| * Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course. |  |  |
| Additional Requirements |  |  |
| Code | Title |  |
| Course and Explanation |  |  |
| Major, Minor or Certificate |  |  |
| Student must complete a Minor or Major or Certificate in any other discipline: |  |  |
| Completed a Minor in a Selected Field of Study or a Major or Certificate in any other discipline |  |  |
| Non Credit Requirement |  |  |

## Student must select one of the following:

Students' research must be conducted in their minor area or second major and the final product will be a written paper and an oral presentation using the French language.
Students can choose from three (3) options to complete the Capstone Experience requirement: Internship Presentation, Study Abroad Presentation or Research Presentation, depending on their area of interest.
The Internship Experience must be approved by the Modern Language and Cultures chair and the student's advisor in Modern Languages.

## Co-curricular and Experiential Learning

The department of Modern Languages encourages students to engage in the following areas to deepen their educational experience:

1. International study programs (short-term, semester, and year-long)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership development
5. Service-learning classes
6. Career education and development
7. Internships
8. Field Experiences
9. Volunteering (schools, world language competition, language clubs, communities)

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MODERN LANGUAGES AND CULTURES - BA (5 45)
Concentration in Professional Spanish (SPPR)
This program is effective as of Fall 2020
Revised 10.06.20
UCC 09.15.20

## Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall |  |  |
| SPAN 101 | Spanish Language \& Culture I | 3 |
| ENGL 102 | Critical Writing | 3 |
| \{SUBJ 139\} | University Seminar ${ }^{2}$ | 3 |
| Rock Studies Course | 3 |  |
| Rock Studies Course | $\mathbf{3}$ |  |
|  | Hours | $\mathbf{1 5}$ |

## Spring

SPAN 102
Spanish Language \& Culture II

| Rock Studies Course |  | 3 |
| :---: | :---: | :---: |
| Rock Studies Course |  | 3 |
| Rock Studies Course |  | 3 |
| Rock Studies Course |  | 3 |
|  | Hours | 15 |
| Second Year |  |  |
| Fall |  |  |
| SPAN 103 <br> or SPAN 104 | Spanish Language \& Culture III or Situational Spanish | 3 |
| Rock Studies Course |  | 3 |
| Rock Studies Course |  | 3 |
| Rock Studies Course |  | 3 |
| Declare a Thematic Thread ${ }^{1}$ |  |  |
|  | Hours | 12 |
| Spring |  |  |
| SPAN 201 | Speaking in Spanish for the Professions I | 3 |
| SPAN 220 | Understanding Hispanic Cultures Through Reading | 3 |
| Rock Studies Course |  | 3 |
| Rock Studies Course |  | 3 |
| Elective |  | 3 |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| SPAN 200 | Writing in Spanish for the Professions I | 3 |
| SPAN 301 | Speaking in Spanish for the Professions II | 3 |
| Elective |  | 3 |
| Minor |  | 3 |
| Minor |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| SPAN 300 | Writing in Spanish for the Professions II | 3 |
| Select one of the following: |  | 3 |
| SPAN 305 | Spain Today |  |
| SPAN 328 | Latin American Today |  |
| SPAN 431 | Exploring Spanish Culture through Media |  |
| SPAN 432 | Exploring Latin American Cultures through Media |  |
| Minor |  | 3 |
| Minor |  | 3 |
| Elective |  | 3 |
|  | Hours | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| SPAN 400 | Writing in Spanish for the Professions III | 3 |
| Minor |  | 3 |
| Minor |  | 3 |
| Elective |  | 3 |
| Elective |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| SPAN 303 | Developing Communicative and Cultural Competence for the Workplace | 3 |


| SPAN 401 | Speaking in Spanish for the Professions III | 3 |
| :---: | :---: | :---: |
| Elective |  | 3 |
| Elective |  | 3 |
| Elective |  | 3 |
|  | Hours | 5 |
|  | Total Hours** | 117 |
| 1 Work with your Academic Adviser to declare a Thematic <br> Thread by the end of your fall semester in your second <br> year. Click here (https://forms.office.com/Pages/ <br> ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9klM7Wtmwv- <br> VJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UIdNTi4u)to declare a thread. <br> 2 *Course offered in multiple subjects; cannot take course in first major subject. <br> Major Code: 545 <br> Concentration Code: SPPR <br> Revised: 10.06.20 <br> ** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year. |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

## Professional French, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Professional French, Minor Program Page (https://www.sru.edu/ academics/majors-and-minors/professional-french-modern-languages-and-cultures/)

Modern Language and Cultures Department Page (https://www.sru.edu/ academics/colleges-and-departments/cla/departments/modern-languages-and-cultures/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.00 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor at SRU
- A minimum of 6 credit hours must be upper division at the 300/400 level.
- A minor shall be no fewer than 18 credits.
- No minimum number of credits from outside the student's major.
- Minimum 2.0 CGPA

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required French Courses |  |  |
| FREN 102 | French Language and Culture II |  |
| FREN 103 | French Language and Culture III $^{1}$ | 3 |


| FREN 201 | French Conversation $1{ }^{1}$ | 3 |
| :---: | :---: | :---: |
| FREN 220 | Reading in French ${ }^{1}$ | 3 |
| FREN 303 | Professional French ${ }^{1}$ | 3 |
| Select one (or more) of the following to reach 18 credits: |  | 3 |
| FREN 300 | French Grammar and Composition $1^{1}$ |  |
| FREN 301 | French Conversation $2^{1}$ |  |
| FREN 350 | French Linguistics and Phonetics ${ }^{1}$ |  |
| Total Hours |  | 18 |

1 A grade of " C " or better is required.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Minor in Professional French (28B)
This program is effective Spring 2019
Revised 04.09.2020

## Professional Japanese, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Professional Japanese, Minor Program Page (https://www.sru.edu/ academics/majors-and-minors/professional-japanese-(minor)/)

Modern Language and Cultures Department Page (https://www.sru.edu/ academics/colleges-and-departments/cla/departments/modern-languages-and-cultures/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (300/ 400 level)
- A minor shall be no fewer than 18 credits.


## Code

Title
Hours
Required Japanese Courses
JAPN 101 Japanese Language and Culture I ${ }^{1}$

| JAPN 102 | Japanese Language and Culture II ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| JAPN 103 | Japanese Language and Culture III ${ }^{1}$ | 3 |
| JAPN 202 | Intermediate Japanese I ${ }^{1}$ | 3 |
| JAPN 303 | Professional Japanese ${ }^{1}$ | 3 |
| Select one (or more) of the following to reach 18 JAPN credits: |  | 3 |
| JAPN 300 | Reading \& Writing Japanese ${ }^{1}$ |  |
| JAPN 315 | Japanese Study Abroad ${ }^{1}$ |  |
| Total Hours |  | 18 |

1 A grade of " C " or better is required.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN PROFESSIONAL JAPANESE (49A)
This program is effective Spring 2019
Revised 04.09.2020

## Professional Spanish, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Professional Spanish, Minor Program Page (https://www.sru.edu/ academics/majors-and-minors/professional-spanish/)

Modern Language and Cultures Department Page (https://www.sru.edu/ academics/colleges-and-departments/cla/departments/modern-languages-and-cultures/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.00 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits
- Please Note: Based on the Placement Test administered by the Department of Modern Languages \& Cultures, a student may exempt any or all of the courses at the 100 and 200 levels.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Spanish Courses |  |  |
| SPAN 103 | Spanish Language \& Culture III ${ }^{1}$ | 3 |
| SPAN 200 | Writing in Spanish for the Professions $I^{1}$ | 3 |
| SPAN 201 | Speaking in Spanish for the Professions I ${ }^{1}$ | 3 |
| SPAN 220 | Understanding Hispanic Cultures Through Reading ${ }^{1}$ | 3 |
| Select one of the following: |  | 3 |
| SPAN 302 | Communication in Spanish for the Elementary Classroom (for College of Education students only) ${ }^{1}$ |  |
| SPAN 303 | Developing Communicative and Cultural Competence for the Workplace ${ }^{1}$ |  |
| Select one of the following: |  | 3 |
| SPAN 300 | Writing in Spanish for the Professions II ${ }^{1}$ |  |
| SPAN 301 | Speaking in Spanish for the Professions II ${ }^{1}$ |  |
| SPAN 305 | Spain Today ${ }^{1}$ |  |
| SPAN 307 | U.S. Latino Cultures ${ }^{1}$ |  |
| SPAN 309 | Hispanic Civilization for the K-12 Classroom (12-week course) ${ }^{1}$ |  |
| SPAN 318 | Hispanic Children's Literature for the K-12 Classroom (12-week course) ${ }^{1}$ |  |
| SPAN 328 | Latin American Today ${ }^{1}$ |  |
| SPAN 330 | Spanish Literature 1800 to Present ${ }^{1}$ |  |
| SPAN 340 | Introduction to Translation ${ }^{1}$ |  |
| SPAN 350 | The Sounds of Spanish ${ }^{1}$ |  |
| SPAN 400 | Writing in Spanish for the Professions III ${ }^{1}$ |  |
| SPAN 401 | Speaking in Spanish for the Professions III 1 |  |
| SPAN 431 | Exploring Spanish Culture through Media ${ }^{1}$ |  |
| SPAN 432 | Exploring Latin American Cultures through Media ${ }^{1}$ |  |
| SEFE 323 | Teaching World Languages |  |
| Total Hours |  | 18 |

1 A grade of " C " or better is required.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN PROFESSIONAL SPANISH (84C)
This program is effective as of Fall 2020
UCC 03.05.20
Revised 08.17.20

## Spanish, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Spanish, Minor Program Page (https://www.sru.edu/academics/majors-and-minors/spanish/)

Modern Language and Cultures Department Page (https://www.sru.edu/ academics/colleges-and-departments/cla/departments/modern-languages-and-cultures/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.00 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.
- Exemption from SPAN 101, SPAN 102, SPAN 103, SPAN 200, SPAN 201, SPAN 220 courses may be possible based on the outcome of the placement exam given by the Modern Languages Department. Both English and Native Spanish speakers should consult the Modern Languages and Cultures for information. CLEP, AP and OPI credits are acceptable for SPAN 200, SPAN 201, SPAN 220.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Spanish Courses |  |  |
| SPAN 103 | Spanish Language \& Culture III ${ }^{1}$ | 3 |
| SPAN 200 | Writing in Spanish for the Professions I ${ }^{1}$ | 3 |
| SPAN 201 | Speaking in Spanish for the Professions I | 3 |
| SPAN 220 | Understanding Hispanic Cultures Through $^{1}$ | 3 |

Select two courses at the 300/400 Level (required) ${ }^{1}$ 6

Select additional Spanish Courses to equal 18 credits in the Minor ${ }^{2}$

Total Hours
1 A grade of " $C$ " or better is required
2 Any Spanish course except SPAN 101, SPAN 102, or SPAN 104.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-
earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN SPANISH (84A)
Effective Fall 2020
Revised 08.17.2020
UCC 03.05.2020

## Music

| Chair | Secretary | Location | Department <br> Phone |
| :--- | :--- | :--- | :--- |
| Dr. Colleen Gray | Christine | 225 Swope Music 724-738-2063 |  |
|  | Williams | Hall |  |

Department Web Site URL (https://www.sru.edu/academics/colleges-and-departments/cla/departments/music/)
Department Fact Sheet URL (https://www.sru.edu/documents/programs/ factsheets/undergraduate/music-fs.pdf)

## Faculty

Candice Bain
Instructor
Music
M.M.T., Slippery Rock University
B.M., Arizona State University

## Amy Baker

Instructor
Music
M.M., Eastern Kentucky University
B.M., Cleveland Institute of Music

## Akash Bhatia

Instructor
Music

## Nicole Cochran

Instructor
Music
M.M., Westminster Choir College
B.M., Juilliard School

Warren Davidson
Assistant Professor
Music
D.M.A., West Virginia University
M.A., University of Pittsburgh
M.M., Duquesne University
B.S., Duquesne University

Cassandra Eisenreich
Assistant Professor
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D.M.A., University of Miami
M.M., University of Miami

## B.S., Slippery Rock University of PA

## David Glover

Associate Professor
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D.M.A., University of Texas (Austin)
M.M., Florida State University
B.M., University of North Florida

Colleen Gray
Assistant Professor
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D.M.A., West Virginia University
M.M., Duquesne University
B.S., West Chester University

## Susan Hadley

Professor
Music
Ph.D., Temple University
Dip. Ed., University of Western Australia
M.M.T., Temple University
B.M., University of Melbourne (Australia)

Nicole Hahna
Associate Professor
Music
Ph.D., Lesley University
M.S., Radford University
B.S., Appalachian State University

Brian Hart
Instructor
Music
Jonathan Helmick
Associate Professor
Music
D.M.A., University of Southern Mississippi
M.M.,University of Akron
B.A.T, University of Akron
B.M., University of Akron

## Micah Holt

Instructor
Music
D.M.A., University of Nevada
M.M., University of Louisville
B.A., University of North Colorado

## Yoona Jeong

Assistant Professo
Music
Heather Johnson
Instructor
Music
M.M., Dana School of Music at YSU
M.M., SUNY at Stony Brook
B.M., The Curtis Institute of Music

## Kenneth Karsh

Instructor
Music
M.M., Duquesne University
B.M., Duquesne University

## Jason Kush

Associate Professor
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D.M.A., University of Miami
M.M., University of Miami
B.S., Slippery Rock University of Pennsylvania

## Timothy Little

Assistant Professor
Music

Kathleen Melago
Professor
Music
D.M.A., Ohio State University
M.M., University of Northern Iowa
B.S., Slippery Rock University

## Vern Miller

Assistant Professor
Music
M.M., Temple University
B.M., Slippery Rock University

## Amanda Morrison

Instructor
Music
D.M., Florida State University
M.M., Florida State University
B.M., Duquesne University

Fred Perkins
Instructor
Music

## Kaylee Priddy

Instructor
Music
Paige Riggs
Instructor
Music
D.M.A., SUNY at Stony Brook
M.M., Indiana University
B.M., Eastman School of Medicine

## Renate Sakins

Instructor
Music
B.M., Temple University
B.S., University of Wisconsin

## Christopher Scott

Associate Professor
Music
D.M.A., University of Cincinnati
M.F.A., University of Cincinnati
B.A., Augustana College

## Brian Stahurski

Instructor
Music

## M.M., Duquesne University <br> B.A., Duquesne University

## Glenn Utsch

Assistant Professor
Music
Ed.D., Teachers College Columbia University
M.M.Ed., Teachers College Columbia University
M.M., Manhattan School of Music
B.M., West Chester University

## Philip VanOuse

Instructor
Music
M.M., Carnegie Mellon University
B.M., Cincinnati College

John Vera
Instructor
Music
M.M., Mannes College
B.M., Southern Methodist University

Timothi Williams
Instructor
Music
M.M., Penn State University
B.M., West Liberty University

## Programs

All first-year students who enter SRU in the Summer and Fall terms of 2019 and after will follow Rock Studies. Students who entered SRU before Spring 2019 will follow Liberal Studies. All new transfer students beginning Summer 2019 and after will follow Liberal Studies. We anticipate that transfer students will begin to enter under Rock Studies during the Summer/Fall term of 2021.

## Majors

- Music Education (PreK-12), Bachelor of Music (BM) (p. 945)
- Music Performance, Bachelor of Music (BM) (p. 955)
- Music Therapy, Bachelor of Music (BM) (p. 959)
- Music, Bachelor of Arts (BA) (p. 965)


## Minors

- Chamber Music Performance, Minor (p. 944)
- Music for Education, Minor (p. 950)
- Music for Education: Early Childhood, Minor (p. 951)
- Music for Education: Marching Arts, Minor (p. 952)
- Music for Education: Vocal Music, Minor (p. 953)
- Music History, Minor (p. 954)
- Music, Minor (p. 969)


## Courses

MUSI 029 - Clinical Integration Lab
This is a laboratory experience associated with Clinical Integration MUSI 229.

Corequisite(s): MUSI 229
Credits: 0
Term(s) Typically Offered: Offered Fall \& Spring Terms

## MUSI 101 - Exploring Music

A survey course designed to develop the student perception and understanding of changing musical styles and practices in Western culture.

Credits: 3
Term(s) Typically Offered: Offered Every Term

## MUSI 102 - Exploring World Music

A course designed to survey non-Western musical traditions and practices. Emphasis is given to the music of India, Russia, Japan, Africa, the Middle East, and the American Indian.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Creating Art, Political Arts, Transfer Thread Completion Course

MUSI 104 - Exploring American Music
A survey course designed to develop student knowledge and understanding of music composed and performed in the United States between 1620 and the present.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Being
American, Creating Art, Political Arts, Transfer Thread Completion Course
MUSI 105 - Exploring Jazz
The stylistic development of jazz and its relevance to society.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
MUSI 106 - Introduction to Jazz Performance
This course will introduce the high school music student to jazz pedagogy at the university level. Emphasis will be placed on performing skills, theory, improvisation, ear training and music technology. Course may be repeated up to four credits.

Credits: 1
Term(s) Typically Offered: Offered Summer Terms
MUSI 107 - Fundamentals of Music
Understanding and using music notation and terminology.
Credits: 3
Term(s) Typically Offered: Offered Summer Terms

## MUSI 108 - Flute Camp

The SRU "Flute Camp" will give high school flutists an opportunity to be on the SRU campus during the Summer Arts Academy for an intensive 2 week program involving all aspects of flute performance. Follow up involvement of the high school students during the fall semester will consist of their attendance at flute related university events and critical writing about the concerts/rehearsals/master classes they observed during the fall component.

Credits: 1
Term(s) Typically Offered: Offered Summer Terms

## MUSI 109 - Jazz Combo

Students will meet weekly with the appropriate faculty member to work on jazz performance in the small group (combo) setting. Study of phrasing, articulation, jazz theory, improvisation, and other jazz performance practices will be addressed. Students will be auditioned at the beginning of the semester for placement. At least one public performance will be given per semester. One hour of rehearsal time per week. One credit for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 111 - Introduction to Music Education

This course is designed to introduce the student to the field of music education. This course will be an introduction to planning and preparation for teaching music, including creating an effective classroom environment for teaching music, instructional delivery in music, historical background relevant to music education, copyright laws in the music classroom, instructional planning, diversity, and advocacy. Students will complete their Field Experience Level 1: Observation hours as a requirement of this course.

## Credits: 2

Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Education, Transfer Thread Completion Course

## MUSI 113-Saxophone Quartet

Students will meet weekly with the appropriate faculty member to work on literature selected for their performance ability level. Study of phrasing, articulation, balance, blend, intonation, and other performance practices will be addressed. Students will be auditioned at the beginning of the semester for placement. At least one public performance will be given per semester. Two hours per week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

## Credits: 1-2

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 114-Symphonic Wind Ensemble

Symphonic Wind Ensemble: A chamber ensemble composed of select musicians chosen by audition, performing contemporary literature as well as transcriptions for winds and percussion. Four and a half hours of week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 115 - Concert Choir

Auditioned mixed chorus of 50-70 singers that studies and performs a variety of music from Renaissance to 21 st century, classical to contemporary, a cappella and music accompanied by piano, chamber groups, and symphonic ensembles. Three hours per week rehearsal time. Multiple concerts are presented both on and off campus and on periodic tours. One to three credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. Entrance is by successful audition, held the first week of classes every semester; contact the instructor for information. The ensemble is also available without credit.

Credits: 1-3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 116 - Women's Choir

An ensemble of 30-40 women who perform choral music especially composed for female voices. This ensemble performs traditional and modern repertoire, with and without accompaniment. Concerts are presented on campus and on tours. Two and one-half hours per week rehearsal time. Multiple concerts are presented both on and off campus and on periodic tours. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. No audition is required. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 117-Chamber Singers

An elite chamber choir of 16-24 outstanding singers who perform challenging repertoire with a greater emphasis on a cappella music. Members of this group are expected to display initiative to prepare music to the highest possible level of their ability. Two and one-half hours per week rehearsal time. One or two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. Entrance is by successful audition, held the first week of classes every semester; contact the instructor for information. The ensemble is also available without credit.

Corequisite(s): MUSI 115
Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 118 - Marching Pride

The Marching Pride performs during the half time at football games, both home and away, and for other special events. Much of its music is specially arranged. Open to all students. Six hours a week rehearsal during the football season. One to six credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 6 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

## Credits: 1-6

Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Art \& Society, Creating Art, Education, Transfer Thread Completion Course

## MUSI 119-Concert Band

The Concert Band members are carefully selected to provide a balanced instrumentation of the best players. Music written for concert band is the main repertoire. Concerts on campus. Four hours a week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 5 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 120 - Jazz Ensemble

The SRU Jazz Ensemble performs jazz literature from all eras of jazz history including big band, bop, hard bop, fusion and contemporary. This ensemble often performs with guest artists of national and international stature, both on and off campus. Membership in this ensemble requires an audition. Three hours and forty-five minutes of rehearsal per week. One to three credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 121 - Orchestra

The orchestra is a string ensemble, with winds and percussion added when needed, which performs music from the orchestral repertoire. Admission by audition. Four hours a week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 122 - Chamber String Ensemble

The Chamber String Ensemble is a small ensemble selected for the study and performance of chamber music written for strings. Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 123-Brass Ensemble

The university's Brass Ensemble is a select ensemble of brass (and percussion) players who study and perform music from all historical periods. Both large brass choir works and small chamber brass works are performed. The ensemble performs on and off campus. Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 124-Woodwind Ensemble

The Woodwind Ensemble is a small select ensemble of woodwind players who study and perform music for woodwinds from all historical periods. Three hours a week rehearsal time. One credit for every semester of satisfactory participation is granted for this music performance group, with a maximum allowance of ten credits in any one music organization. Additional credits are possible with a waiver from the departmental chairperson. The ensemble is also available without credit.

Credits: 1
Thematic Thread(s): Transfer Thread Completion Course

## MUSI 125 - Percussion Ensemble

This small select ensemble of percussionists studies and performs music composed and transcribed for both percussion and mallet ensembles. Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 126 - Flute Choir

The SRU Flute Choir is made up of a select group of flutists who will rehearse and perform a variety of music written for flute ensemble. Audition required. Two and a half hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 127-Orientation to Music Therapy

Orientation to the field of music therapy through lectures, readings, and viewing music therapy sessions. The course includes an overview of music therapy history, principles, and foundations through a survey of music therapy literature and clinical applications.

Credits: 2
Term(s) Typically Offered: Offered Fall Terms

## MUSI 128 - Applied Alexander Technique

This course is an introduction to the Alexander Technique in which the students will examine their habitual movement patterns in order to encourage positive energy usage within the body. This technique heightens kinesthetic sensitivity, offering performers a control that is fluid and lively, thus lessening chances of performance injury. The principles of this technique are based on an understanding of human anatomy, which promotes ease, and freedom of movement, balance, flexibility, and coordination. Course may be repeated up to two credits.

## Credits: 1

## MUSI 129-Guitar, Ukulele, \& Bass Methods

A music education course designed to prepare music education majors to teach guitar, ukulele, string bass, and electric bass in elementary and secondary schools. It will also prepare students with the functional skills to use the guitar and ukulele as accompanying instruments.

## Credits: 1-2

Term(s) Typically Offered: Offered Fall Terms
Enrollment is limited to students with a program in Music Education (K-12).

## MUSI 131 - Class Piano I

For beginners with no previous keyboard experience. Fundamentals of note reading, beginning piano repertoire, melody harmonization and improvisation. Of particular value to the student desiring to gain a working knowledge of the piano either as a classroom tool or for personal use. Music majors only.

Credits: 1
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with department of Music.

## MUSI 132-Class Piano II

Continued development of skills begun in Class Piano I (MUSI 131). Music majors only.

Prerequisite: MUSI $131^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Spring Terms

## MUSI 133 - Class Voice I

Designed for the purpose of studying basic singing technique and thereby producing a good vocal tone; valuable to the student interested in improving his/her vocal skill. Music majors only.

Credits: 1
Term(s) Typically Offered: Offered Fall Terms

## MUSI 134 - Voice Methods

The pedagogy of singing is emphasized via individual teaching demonstrations thereby enabling students to improve their ability to communicate basic vocal principles to other students. Music majors only.

Prerequisite: MUSI $133^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Spring Terms
MUSI 137 - Functional Guitar for Music Therapy I
A study of the fundamental concepts needed to play and teach beginning guitar. Students must provide their own instruments. Music majors only.

Credits: 1
Term(s) Typically Offered: Offered Fall Terms

## MUSI 138 - Functional Guitar for Music Therapy II

Continued development of skills begun in Class Guitar I (MUSI 137).
Music majors only.
Prerequisite: MUSI $137^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Spring Terms
MUSI 139-University Seminar
University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## MUSI 140 - Low Brass Methods

A study of the fundamental concepts and skills needed to play and teach trombone, baritone horn, euphonium, and tuba to homogeneous and heterogeneous instrument groups in pre-K-12 instrumental music education setting. This includes the integration and application of national and state standards for music education.

## Credits: 2

Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students in the College of Liberal Arts college. Enrollment limited to students with department of Music.

MUSI 151-Music Theory and Analysis I
The student will study the grammar and literature of music through composition, analysis, listening, and performance. Three class meetings each week.

Credits: 2
Term(s) Typically Offered: Offered Fall Terms

## MUSI 154 - Musicianship Skills I

Students will develop aural and rhythmic skills through basic rhythm reading, sight- singing, intervals and pattern recognition, simple and compound meters, and basic harmonic progressions.

Credits: 1
Term(s) Typically Offered: Offered Fall Terms

## MUSI 165 - Applied Performance Voice

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 165, 265,365 may each be taken two times for a total of 18 credits; MUSI 465 may be taken four times for a total of 12 credits.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 166-Applied Performance Piano

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 166, 266, 366 may each be taken two times for a total of 18 credits; MUSI 466 may be taken four times for a total of 12 credits.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 167 - Applied Performance Strings

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 167, 267, 367 may each be taken two times for a total of 18 credits; MUSI 467 may be taken four times for a total of 12 credits.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 168 - Applied Performance Woodwind

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 168, 268, 368 may be taken two times for a total of 18 credits; MUSI 468 may be taken four times for a total of 12 credits.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 169-Applied Performance Brass

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 169, 269, 369 may each be taken two times for a total of 18 credits; MUSI 469 may be taken four times for a total of 12 credits.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 170 - Applied Performance Percussion

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits.
Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 170, 270 and 370 may each be taken two times for a total of 18 credits; MUSI 470 may be taken four times for a total of 12 credits.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 179-Applied Music

With the approval of the applied music teacher, lessons are available in piano, voice, and any of the standard string, brass, woodwind or percussion instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 181 - Applied Voice

With the approval of the applied music teacher, lessons are available in voice. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 182-Applied Strings

With the approval of the applied music teacher, lessons are available in standard string instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 183-Applied Brass

With the approval of the applied music teacher, lessons are available in standard brass instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 184-Applied Woodwinds

With the approval of the applied music teacher, lessons are available in standard woodwind instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

## Credits: 1

Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.
MUSI 185-Applied Percussion
With the approval of the applied music teacher, lessons are available in standard percussion instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

## Credits: 1

Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MUSI 192 - Tuba-Euphonium Ensemble

The SRU Tuba-Euphonium Ensemble is comprised of tuba and euphonium players who rehearse and perform a variety of music written for tuba-euphonium ensemble. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 193 - Jazz Lab Band

The SRU Jazz Lab Band is a rehearsal ensemble that performs one concert per academic semester. The group does require an audition which takes place in the first week of the Fall semester. If openings occur in the Spring semester, the director will hold an audition for the open seats only. The ensemble rehearses big band literature from every stylistic period in jazz history. The focus of the course is on developing sight-reading, jazz performance practice and techniques, stylistic interpretation, foundational ensemble techniques, jazz band rehearsal techniques, and exposure to the literature, history, and composers of jazz music. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 194 - World Percussion Ensemble

The SRU World Percussion Ensemble rehearses and performs the percussion music of cultures outside of Western Europe and the United States, concentrating on, but not exclusive to, the Caribbean (Trinidad and Tobago, Cuba, The Dominican Republic, and Puerto Rico), Asia (Japan, India, and Korea), South America (Brazil), and West Africa. Students learn the instruments, techniques, some choreography (when appropriate), and musical styles in multiple genres for at least one public performance each academic semester. The ensemble rehearses and performs on authentic instruments (whenever possible) or modern, commercially available substitutes. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats a re possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 195-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## MUSI 196 - Winter Guard

The Slippery Rock University Winter Guard is the indoor color guard performing ensemble. In this performing ensemble, students will combine the use of flags, sabers, mock rifles, and other equipment, as well as dance and interpretive movement, in shows for public performance and competition. Held in the spring semester the group performs in competition as part of the indoor marching arts circuit as well as for campus and community events. The course may be repeated up to 5 times. Additional repeats are possible with a waiver from the department chairperson.

Credits: 1-2
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
MUSI 199 - Fundamental Skills in Music Therapy
Designed to prepare music therapy majors in fundamental clinical skills in music therapy necessary for working with a variety of client populations. It includes identifying client needs, delineating goals and objectives, task analysis and treatment strategies (re-creative techniques) through the application of functional music skills. Group processes and leadership techniques appropriate for various clientele.

Prerequisites: MUSI $127^{\text {D }}$ and MUSI $137^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 2
Term(s) Typically Offered: Offered Spring Terms

## MUSI 201-Studies in Children's Music

Listening, moving, playing instruments, singing and creating using repertoire suitable for children of various developmental levels.

## Credits: 3

## MUSI 203-Musician's Health

This course is designed for music students, performing arts majors or any student who desires a deeper understanding of musicianship and performing artist wellness. An emphasis on healthy living for the performer including elimination of risk for injury will be discussed. The course will explore concepts such as ergonomics, good posture, and breathing and support. Students will learn about concepts such as effective practicing and the brain's perception of sound. Students will learn to identify and correct problems facing the performer when they arise.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms

## MUSI 204 - Art and Science of Performing

This course focuses on how to define, detect, and manage performance anxiety. Students will learn about the body's innate response to stress and pressure situations, and how to recognize maladaptive responses to pressure situations. Students will learn about conventional methods for treating performance anxiety as well as unconventional methods including self-analysis, meditation, guided imagery, and the Alexander technique. Pre-performance routines such as centering will be discussed. Students will learn about tools such as engaged practicing that will help to produce better performances. The concept of flow state will also be discussed.

Credits: 1
Term(s) Typically Offered: Offered Fall Terms

## MUSI 205-Music in Recreation

A practical study of the ways and means of planning effective music programs for leisure and recreation and developing the competencies needed by a music leader in recreation.

## Credits: 3

## MUSI 206 - Fundamentals of Conducting

In this course, students will learn the foundational skills necessary to conduct both instrumental and vocal ensembles. As an introductory course, it will serve as a catalyst for developing the lifelong conductorpractitioner regardless of area emphasis - vocal or instrumental.
Fundamental skills that will be developed include, but are not limited to: conducting patterns in stationary focal point conducting, expressive gesture, baton technique and basic transpositions.

Prerequisites: MUSI $253^{\text {D }}$ and MUSI $256^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with department of Music.

## MUSI 208-Clarinet and Saxophone Methods

A study of the fundamental concepts and skills needed to play and teach clarinet and saxophone to homogeneous and heterogeneous instrument groups in pre-K-12 instrumental music education setting. This includes the integration and application of national and state standards for music education.

Credits: 2
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students in the College of Liberal Arts college. Enrollment limited to students with department of Music.

## MUSI 209 - Jazz Combo

Students will meet weekly with the appropriate faculty member to work on jazz performance in the small group (combo) setting. Study of phrasing, articulation, jazz theory, improvisation, and other jazz performance practices will be addressed. Students will be auditioned at the beginning of the semester for placement. At least one public performance will be given per semester. One credit for every semester of satisfactory participation is granted for this music performance group, with a maximum allowance of ten credits in any one music organization. Additional credits are possible with a waiver from the departmental chairperson. The ensemble is also available without credit.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 212 - Fundamentals of Conducting Lab

This course is the lab component to MUSI 206: Fundamentals of Conducting and will include application of conducting skills through time on the podium.

Prerequisites: MUSI $253^{C}$ and MUSI $256^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students in the College of Liberal Arts college. Enrollment limited to students with department of Music.

## MUSI 213 - Saxophone Quartet

Students will meet weekly with the appropriate faculty member to work on literature selected for their performance ability level. Study of phrasing, articulation, balance, blend, intonation, and other performance practices will be addressed. Students will be auditioned at the beginning of the semester for placement. At least one public performance will be given per semester. Two hours per week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread
Completion Course

## MUSI 214 - Symphonic Wind Ensemble

Symphonic Wind Ensemble: A chamber ensemble composed of select musicians chosen by audition, performing contemporary literature as well as transcriptions for winds and percussion. Four and a half hours of week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 215 - Concert Choir

Auditioned mixed chorus of 50-70 singers that studies and performs a variety of music from Renaissance to 21 st century, classical to contemporary, a cappella and music accompanied by piano, chamber groups, and symphonic ensembles. Three hours per week rehearsal time. Multiple concerts are presented both on and off campus and on periodic tours. One to three credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. Entrance is by successful audition, held the first week of classes every semester; contact the instructor for information. The ensemble is also available without credit.

Credits: 1-3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 216 - Women's Choir

An ensemble of 30-40 women who perform choral music especially composed for female voices. This ensemble performs traditional and modern repertoire, with and without accompaniment. Concerts are presented on campus and on tours. Two and one-half hours per week rehearsal time. Multiple concerts are presented both on and off campus and on periodic tours. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. No audition is required. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 217 - Chamber Singers

An elite chamber choir of 16-24 outstanding singers who perform challenging repertoire with a greater emphasis on a cappella music. Members of this group are expected to display initiative to prepare music to the highest possible level of their ability. Two and one-half hours per week rehearsal time. One or two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. Entrance is by successful audition, held the first week of classes every semester; contact the instructor for information. The ensemble is also available without credit.

Corequisite(s): MUSI 215
Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 218 - Marching Pride

The Marching Pride performs during the half time at football games, both home and away, and for other special events. Much of its music is specially arranged. Open to all students. Six hours a week rehearsal during the football season. One to six credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 6 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-6
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Art \& Society, Creating Art, Education, Transfer Thread Completion Course

## MUSI 219 - Concert Band

The Concert Band members are carefully selected to provide a balanced instrumentation of the best players. Music written for concert band is the main repertoire. Concerts on campus. Four hours a week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 5 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 220 - Jazz Ensemble

The SRU Jazz Ensemble performs jazz literature from all eras of jazz history including big band, bop, hard bop, fusion and contemporary. This ensemble often performs with guest artists of national and international stature, both on and off campus. Membership in this ensemble requires an audition. Three hours and forty-five minutes of rehearsal per week. One to three credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

## Credits: 1-3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 221 - Orchestra

The orchestra is a string ensemble, with winds and percussion added when needed, which performs music from the orchestral repertoire. Admission by audition. Four hours a week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 222 - Chamber String Ensemble

The Chamber String Ensemble is a small ensemble selected for the study and performance of chamber music written for strings. Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 223-Brass Ensemble

The university's Brass Ensemble is a select ensemble of brass (and percussion) players who study and perform music from all historical periods. Both large brass choir works and small chamber brass works are performed. The ensemble performs on and off campus. Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 224 - Woodwind Ensemble

The Woodwind Ensemble is a small select ensemble of woodwind players who study and perform music for woodwinds from all historical periods. Three hours a week rehearsal time. One credit for every semester of satisfactory participation is granted for this music performance group, with a maximum allowance of ten credits in any one music organization. Additional credits are possible with a waiver from the departmental chairperson. The ensemble is also available without credit.

Credits: 1
Thematic Thread(s): Transfer Thread Completion Course

## MUSI 225 - Percussion Ensemble

This small select ensemble of percussionists studies and performs music composed and transcribed for both percussion and mallet ensembles.
Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 226 - Flute Choir

The SRU Flute Choir is made up of a select group of flutists who will rehearse and perform a variety of music written for flute ensemble. Audition required. Two and a half hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 228 - Therapeutic Musical Strategies

Designed to further prepare music majors in various therapeutic musical strategies (receptive and compositional techniques) through the application of functional music skills, group processes and leadership techniques appropriate for various clientele.
Prerequisites: MUSI 127 (may be taken concurrently) ${ }^{\text {D }}$ and MUSI $137^{* D}$ and MUSI $138^{* D}$ and MUSI 199 ${ }^{* D}$ (may be taken concurrently).
${ }^{D}$ Requires minimum grade of $D$.
Credits: 2
Term(s) Typically Offered: Offered Fall Terms

## MUSI 229 - Clinical Integration

A supervised clinical experience allowing the music therapy student practical experience in a variety of community health care agencies and educational settings.

Prerequisites: MUSI $127^{\text {D }}$ and MUSI $137^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Fall Terms

## MUSI 230-Clinical Integration

A supervised clinical experience allowing the music therapy student practical experience in a variety of community health care agencies and educational settings.

Prerequisites: MUSI $228^{\text {D }}$ and MUSI $229^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Spring Terms

## MUSI 233-Chamber Music Performance

A chamber music ensemble (of various instrumental and/or vocal combinations) which studies and performs music from many style periods. Two hours a week rehearsal time. Course may be repeated up to ten credits. Permission of the instructor.

## Credits: 1-2

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 234 - Class Piano III

Continued development of skills acquired in Class Piano II to prepare music majors for piano proficiency exam, including sight-reading, transposition, playing by ear, technique and repertoire. Music majors only.

Prerequisite: MUSI $132^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Fall Terms

## MUSI 235 - Class Piano IV

Continued development of skills acquired in Class Piano III to prepare music majors for piano proficiency exam, including sight-reading, transposition, playing by ear, technique and repertoire. Music majors only.
Prerequisite: MUSI $234^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Spring Terms

## MUSI 236 - Music Therapy Assessment, Measurement and Evaluation

This course will present professional standards of music therapy practice including assessment, documentation, and evaluation; as well as techniques and application of behavioral observation and measurement in music therapy.

Prerequisites: MUSI $127^{\mathrm{D}}$ and MUSI $199^{\mathrm{D}}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 2
Term(s) Typically Offered: Offered Spring Terms

## MUSI 237-Opera Performance

Performance of scenes, arias, or full operas, taking into consideration the interest and skill of each student. Four hours of rehearsal per week; more rehearsal as needed in weeks leading to performance. One to four credits for every semester of satisfactory participation is granted for this music performance group. Additional repeats are possible with a waiver from the department chairperson. Each course number may be repeated up to five times.

## Credits: 1-4

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 245 - Brass Methods

A study of the fundamental concepts needed to play and teach beginning brass instruments (French horn, trumpet, trombone, baritone horn, tuba) both as soloists and in ensemble.

Credits: 1
Term(s) Typically Offered: Offered Spring Terms

## MUSI 247 - Percussion Methods

A study of the fundamental concepts needed to play and teach beginning percussion instruments (pitched and non-pitched).

Credits: 1-2
Term(s) Typically Offered: Offered Fall Terms

## MUSI 253-Music Theory and Analysis II

This course is a continuation of Music Theory and Analysis I. The student will study musical literature written between 600-1750 through composition, analysis, aural discrimination, diatonic harmony, modal counterpoint, and performance. Three class meetings each week.

Prerequisite: MUSI $151^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 2
Term(s) Typically Offered: Offered Spring Terms
MUSI 254 - Music Theory and Analysis III
This course is a continuation of the Music Theory and Analysis I and II semesters in which the student will study the musical literature of the years 1750-1900 through the means of chromatic harmony, analysis, score reading, aural discrimination, composition and performance. Three class meetings each week.

Prerequisite: MUSI $253^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .

## Credits: 2

Term(s) Typically Offered: Offered Fall Terms

## MUSI 255 - Music Theory and Analysis IV

This course is a continuation of the Music Theory and Analysis I, II and III sequence. Musical literature of the 20th century will be approached through analysis, listening, score reading, composition and performance. Three class meetings per week.

Prerequisite: MUSI $254^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 2
Term(s) Typically Offered: Offered Spring Terms

## MUSI 256 - Musicianship Skills II

Students will build on the aural and rhythmic exercises established in Musicianship I through higher level rhythm reading, sight- singing, intervals and pattern recognition, simple, compound, and mixed meters, and harmonic progressions.

Prerequisites: MUSI $154^{\text {C }}$ and MUSI $253^{* C}$ (may be taken concurrently).
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Term(s) Typically Offered: Offered Spring Terms

## MUSI 257 - Musicianship Skills III

Students will build on the skills established in Musicianship II by working on advanced aural and rhythmic exercises through rhythm reading, sightsinging, intervals and pattern recognition, simple, compound, and mixed meters, and harmonic progressions.

Prerequisites: MUSI $256^{\text {C }}$ and MUSI $254^{* \mathrm{C}}$ (may be taken concurrently).
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Term(s) Typically Offered: Offered Fall Terms

## MUSI 258 - Musicianship Skills IV

Students will build on the skills established in Musicianship III by working on more complex and advanced aural and rhythmic exercises through rhythm reading, sight- singing, intervals and pattern recognition, simple, compound, and mixed meters, and harmonic progressions.

Prerequisites: MUSI $257^{\text {C }}$ and MUSI $255^{* C}$ (may be taken concurrently).
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 1
Term(s) Typically Offered: Offered Spring Terms

## MUSI 265 - Applied Performance Voice

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 165, 265, 365 may each be taken two times for a total of 18 credits; MUSI 465 may be taken four times for a total of 12 credits.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 266-Applied Performance Piano

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 166, 266, 366 may each be taken two times for a total of 18 credits; MUSI 466 may be taken four times for a total of 12 credits.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 267 - Applied Performance Strings

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 167, 267, 367 may each be taken two times for a total of 18 credits; MUSI 467 may be taken four times for a total of 12 credits.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 268 - Applied Performance

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 168, 268, 368 may be taken two times for a total of 18 credits; MUSI 468 may be taken four times for a total of 12 credits.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 269-Applied Performance Brass

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 169, 269, 369 may each be taken two times for a total of 18 credits; MUSI 469 may be taken four times for a total of 12 credits.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 270 - Applied Performance Percussion

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 170, 270 and 370 may each be taken two times for a total of 18 credits; MUSI 470 may be taken four times for a total of 12 credits.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 275 - Keyboard Music

This course will examine the music literature for western keyboard instruments using live and recorded performances.

## Credits: 3

## MUSI 276 - Songs \& Singers

This course will examine music literature for voice. Areas of consideration include solo songs, opera, oratorios, and vocal chamber music.

Credits: 3
MUSI 278 - Literature of the American Musical Theater
A study of the changing styles in the musical theater from 1860 to current Broadway musicals, rock operas, and operetta. Study conducted through the use of recordings, scores and participation.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## MUSI 279 - Applied Piano

With the approval of the applied music teacher, lessons are available in piano. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 281 - Applied Voice

With the approval of the applied music teacher, lessons are available in standard voice. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 282 - Applied Strings

With the approval of the applied music teacher, lessons are available in string instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 283 - Applied Brass

With the approval of the applied music teacher, lessons are available in standard brass instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.
MUSI 284 - Applied Woodwinds
With the approval of the applied music teacher, lessons are available in standard woodwind instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.
MUSI 285 - Applied Percussion
With the approval of the applied music teacher, lessons are available in standard percussion instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.
MUSI 288 - Music Education for Diverse Learners
This course is an introduction to historical and instructional foundations of using music with diverse learners. Major topics and developments in the field of special education, important terminology, and curricular issues are explored. Students will learn about the characteristics of students with specific needs, the educational effects of these needs, appropriate adaptations, as well as music education approaches used with diverse learners.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Education, Transfer Thread Completion Course

## MUSI 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MUSI 291 - Field Experience in Music 2: Pre-K Experience

In this course, students will complete Field Experience Level 2:
Exploration by observing and assisting in a pre-K music class taught by a certified music educator with teaching experience with pre-K students.

Prerequisite: MUSI $111^{\mathrm{C}}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment is limited to students with a program in Music Education (K-12), Music for Education or Music for Ed: Early Childhood. Enrollment limited to students in the College of Liberal Arts college.

## MUSI 292 - Tuba-Euphonium Ensemble

The SRU Tuba-Euphonium Ensemble is comprised of tuba and euphonium players who rehearse and perform a variety of music written for tuba-euphonium ensemble. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 293-Jazz Lab Band

The SRU Jazz Lab Band is a rehearsal ensemble that performs one concert per academic semester. The group does require an audition which takes place in the first week of the Fall semester. If openings occur in the Spring semester, the director will hold an audition for the open seats only. The ensemble rehearses big band literature from every stylistic period in jazz history. The focus of the course is on developing sight-reading, jazz performance practice and techniques, stylistic interpretation, foundational ensemble techniques, jazz band rehearsal techniques, and exposure to the literature, history, and composers of jazz music. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art

## MUSI 294 - World Percussion Ensemble

The SRU World Percussion Ensemble rehearses and performs the percussion music of cultures outside of Western Europe and the United States, concentrating on, but not exclusive to, the Caribbean (Trinidad and Tobago, Cuba, The Dominican Republic, and Puerto Rico), Asia (Japan, India, and Korea), South America (Brazil), and West Africa. Students learn the instruments, techniques, some choreography (when appropriate), and musical styles in multiple genres for at least one public performance each academic semester. The ensemble rehearses and performs on authentic instruments (whenever possible) or modern, commercially available substitutes. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats a re possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## MUSI 296 - Winter Guard

The Slippery Rock University Winter Guard is the indoor color guard performing ensemble. In this performing ensemble, students will combine the use of flags, sabers, mock rifles, and other equipment, as well as dance and interpretive movement, in shows for public performance and competition. Held in the spring semester the group performs in competition as part of the indoor marching arts circuit as well as for campus and community events. The course may be repeated up to 5 times. Additional repeats are possible with a waiver from the department chairperson.

Credits: 1-2
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## MUSI 299 - Diction for Singers

In this study of language diction for singers, students will learn the International Phonetic Alphabet and apply it to the singing of English and Italian songs. The course is open to all voice majors.

Prerequisites: MUSI $133^{\text {D }}$ or MUSI $181^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 1-2

Term(s) Typically Offered: Offered Fall Terms Even

## MUSI 300-Marching Band Techniques

Planning and preparation of half time shows using computer assisted design software and the "corps style" approach. Leadership skills, marching band pedagogy, and hand charting techniques will also be studied.

Prerequisite: MUSI 118 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 2
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the MUSIC UPPER DIV REVIEW STATUS attribute.

## MUSI 301 - Women and Music

Explores the musical contributions of women, a group often excluded from studies of music history, from the Middle Ages to the present. Emphasis will be placed on the changing roles of and attitudes towards women as composers, performers, teachers, writers, patrons, and instrument-builders. Focus will be on the music itself, as well as reception history and historical and sociological context. There will also be discussion on the role of gender in shaping musical ideology and experiences.

Prerequisite: MUSI $101^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Thematic Thread(s): Political Arts, Revolutions, Transfer Thread

## Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 304-Orchestral String Methods

A study of the fundamental concepts needed to play and teach beginning orchestral string instruments. No previous experience required.
Instruments are provided by the university.
Credits: 2
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 309 - Jazz Combo

Students will meet weekly with the appropriate faculty member to work on jazz performance in the small group (combo) setting. Study of phrasing, articulation, jazz theory, improvisation, and other jazz performance practices will be addressed. Students will be auditioned at the beginning of the semester for placement. At least one public performance will be given per semester. One hour of rehearsal time per week. One credit for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 312 - Music Therapy for Children

Application of music therapy techniques and materials in all areas of mental health and special education.
Prerequisites: MUSI $236^{\mathrm{D}}$ and (SPED $121^{\mathrm{D}}$ or SPED $122^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 313 - Saxophone Quartet

Students will meet weekly with the appropriate faculty member to work on literature selected for their performance ability level. Study of phrasing, articulation, balance, blend, intonation, and other performance practices will be addressed. Students will be auditioned at the beginning of the semester for placement. At least one public performance will be given per semester. Two hours per week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 314 - Symphonic Wind Ensemble

Symphonic Wind Ensemble: A chamber ensemble composed of select musicians chosen by audition, performing contemporary literature as well as transcriptions for winds and percussion. Four and a half hours of week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

## Credits: 1-4

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 315 - Concert Choir

Auditioned mixed chorus of 50-70 singers that studies and performs a variety of music from Renaissance to 21 st century, classical to contemporary, a cappella and music accompanied by piano, chamber groups, and symphonic ensembles. Three hours per week rehearsal time. Multiple concerts are presented both on and off campus and on periodic tours. One to three credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. Entrance is by successful audition, held the first week of classes every semester; contact the instructor for information. The ensemble is also available without credit.

Credits: 1-3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 316 - Women's Choir

An ensemble of 30-40 women who perform choral music especially composed for female voices. This ensemble performs traditional and modern repertoire, with and without accompaniment. Concerts are presented on campus and on tours. Two and one-half hours per week rehearsal time. Multiple concerts are presented both on and off campus and on periodic tours. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. No audition is required. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 317-Chamber Singers

An elite chamber choir of 16-24 outstanding singers who perform challenging repertoire with a greater emphasis on a cappella music. Members of this group are expected to display initiative to prepare music to the highest possible level of their ability. Two and one-half hours per week rehearsal time. One or two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. Entrance is by successful audition, held the first week of classes every semester; contact the instructor for information. The ensemble is also available without credit.

Corequisite(s): MUSI 315
Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 318-Marching Pride

The Marching Pride performs during the half time at football games, both home and away, and for other special events. Much of its music is specially arranged. Open to all students. Six hours a week rehearsal during the football season. One to six credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 6 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-6
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Art \& Society, Creating Art, Education, Transfer
Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 319-Concert Band

The Concert Band members are carefully selected to provide a balanced instrumentation of the best players. Music written for concert band is the main repertoire. Concerts on campus. Four hours a week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 5 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 320-Jazz Ensemble

The SRU Jazz Ensemble performs jazz literature from all eras of jazz history including big band, bop, hard bop, fusion and contemporary. This ensemble often performs with guest artists of national and international stature, both on and off campus. Membership in this ensemble requires an audition. Three hours and forty-five minutes of rehearsal per week. One to three credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 321 - Orchestra

The orchestra is a string ensemble, with winds and percussion added when needed, which performs music from the orchestral repertoire. Admission by audition. Four hours a week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

## Credits: 1-4

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread
Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 322 - Chamber String Ensemble

The Chamber String Ensemble is a small ensemble selected for the study and performance of chamber music written for strings. Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 323-Brass Ensemble

The university's Brass Ensemble is a select ensemble of brass (and percussion) players who study and perform music from all historical periods. Both large brass choir works and small chamber brass works are performed. The ensemble performs on and off campus. Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 324 - Woodwind Ensemble

The Woodwind Ensemble is a small select ensemble of woodwind players who study and perform music for woodwinds from all historical periods. Three hours a week rehearsal time. One credit for every semester of satisfactory participation is granted for this music performance group, with a maximum allowance of ten credits in any one music organization. Additional credits are possible with a waiver from the departmental chairperson. The ensemble is also available without credit.

Credits: 1
Thematic Thread(s): Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 325 - Percussion Ensemble

This small select ensemble of percussionists studies and performs music composed and transcribed for both percussion and mallet ensembles.
Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread
Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 326 - Flute Choir

The SRU Flute Choir is made up of a select group of flutists who will rehearse and perform a variety of music written for flute ensemble. Audition required. Two and a half hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 327 - Psychology of Music

This course combines the study of 1) a survey and analysis of music therapy research in order to provide a foundation for developing skills in formulating a research question, reviewing the literature, designing a study, examining ethical questions related to research, analyzing data and writing reports; and 2) psychological and physiological foundations of musical behavior.

Prerequisites: (PSYC $105^{\circ}$ or PSYC $100^{\circ}$ ) and MUSI $236^{\text {D }}$
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 329-Clinical Integration

A supervised clinical experience allowing the music therapy student practical experience in a variety of community health care agencies and educational settings.

Prerequisite: MUSI $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 330 - Clinical Integration

A supervised clinical experience allowing the music therapy student practical experience community health care agencies and educational settings.

Prerequisite: MUSI 329 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 332 - Vocal Conducting

This course is designed to give the student a practical knowledge of choral conducting techniques and a theoretical understanding of the Vocal Ensemble and its function from auditions through performance.
Prerequisites: MUSI $133^{\text {D }}$ and MUSI $151^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 333 - Instrumental Conducting

The practical aspects of learning to conduct the instrumental ensemble. Students will focus on developing expressive gestures to enhance the basic techniques. Score study, acoustical properties of the instruments, ensemble precision, balance and intonation will be addressed.

Prerequisite: MUSI $151^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 334 - Vocal \& Choral Methods

The course is designed to prepare the student to teach elementary and secondary vocal and choral music, including choosing appropriate teaching materials, incorporating relevant technology, sequencing and differentiating instruction, integrating and applying national and state standards for music education, supervising a music program, and becoming aware of professional organizations, workshops, and conferences.

Prerequisite: MUSI $206{ }^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 2
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 335 - Early Childhood, Elementary, and Secondary General Music

## Methods

A music education course designed to prepare the music education major to teach general music to students in grades preK-12 through the study of appropriate musical literature, methodologies, and materials.
Prerequisite: MUSI $258{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 2
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 336 - Instrumental Methods

Instrumental methods is a music education course designed to prepare the student for a career in elementary and secondary instrumental music, including selecting appropriate literature, repair of instruments, public relations, incorporating relevant technology, sequencing and differentiating instruction, integrating and applying national and state standards for music education, and rehearsal techniques.

Prerequisites: MUSI $129^{C}$ and MUSI $140^{C}$ and MUSI $206^{C}$ and MUSI $208^{C}$ and MUSI $247^{\mathrm{C}}$ and MUSI $304^{\mathrm{C}}$ and MUSI $376^{\mathrm{C}}$ and MUSI $377^{\mathrm{C}}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 2

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 337 - Instrumental Rehearsal Techniques

In this course for music education majors, students will analyze and conduct beginning and intermediate musical scores for concert band and orchestra. The student conductor will identify performance errors and learn specific rehearsal techniques to improve the ensemble's performance. Students must register for MUSI 339 concurrently with this course to complete field experience in the public schools as part of the requirements of this course.

Prerequisites: MUSI $245^{\mathrm{D}}$ and MUSI $206^{\mathrm{D}}$ and MUSI $247^{\mathrm{D}}$ and MUSI $304^{\mathrm{D}}$ and MUSI $374^{\text {D }}$ and MUSI $406^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Corequisite(s): MUSI 339
Credits: 1
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY or MUSIC UPPER DIV REVIEW STATUS attributes. Enrollment limited to students with department of Music.

## MUSI 339-Rehearsal Techniques Field Experience

In this course, students will complete field experience with a focus on ensemble rehearsals in the public schools, supervised by university faculty who are certified music educators.

Prerequisites: MUSI $245^{\mathrm{D}}$ and MUSI $206^{\mathrm{D}}$ and MUSI $247^{\mathrm{D}}$ and MUSI $304^{\mathrm{D}}$ and MUSI $374^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Corequisite(s): MUSI 407
Credits: 1
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY or MUSIC UPPER DIV REVIEW STATUS attributes. Enrollment limited to students with department of Music.

## MUSI 350-Computer Technology in Music

This course will introduce students to the technologies that are prevalent in the music and arts world today. Students will study the history of music and technology and work with today's computer music technologies such as, DC-Rom and MIDI, as well as creating software through the use of the program Hypercard.

Prerequisite: MUSI $255^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 2
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 351 - Arranging \& Orchestration

This course covers the basic concepts of arranging relative to instrumental and vocal groups. Emphasis is placed on the making of arrangements in addition to the transcription of composition.

Prerequisite: MUSI $255^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 2
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 352 - Music Technology

This course will cover the basic techniques, operation and creative use of recording equipment, electronic music equipment, and computer equipment through practical experience in the Department of Music's recording studio, electronic music studio, and computer music laboratory. Application of music technology in music education, composition, performance, and studio work will be addressed.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 353 - Music Methods Block Field Experience

In this course, students will complete field experience with a focus on elementary, secondary and/or instrumental music in the schools, supervised by university faculty who are certified music educators.

Prerequisites: MUSI $129^{\mathrm{D}}$ and MUSI $140^{\mathrm{D}}$ and MUSI $206^{\mathrm{D}}$ and MUSI $207^{\mathrm{D}}$ and MUSI $208^{\mathrm{D}}$ and MUSI $247^{\mathrm{D}}$ and MUSI $304^{\mathrm{D}}$ and MUSI $375^{\mathrm{D}}$ and MUSI $376^{\text {D }}$ and MUSI $377^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Corequisite(s): MUSI 334, MUSI 335, MUSI 336 and MUSI 354 Credits: 1
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY or MUSIC UPPER DIV REVIEW STATUS attributes. Enrollment limited to students with department of Music.

## MUSI 354 - Integrated Music Methods Lab

A combined course designed to integrate general music, choral, and instrumental methods principles and lab teaching experiences for students in the Music Methods Block. Prerequisite: Admission to Teacher Candidacy Required

Corequisite(s): MUSI 334, MUSI 335, MUSI 336 and MUSI 353
Credits: 1
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER
CANDIDACY or MUSIC UPPER DIV REVIEW STATUS attributes.
Enrollment limited to students in the College of Liberal Arts college. Enrollment limited to students with department of Music.

## MUSI 359 - History of Music I

A survey of musical styles from the ages of classical Greece and Rome through the Baroque period. Important composers and their literature will be discussed in relation to artistic, social, political, and economic conditions of their period. A reading knowledge of music is essential.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 360 - Keyboard Improvisation

Melody harmonization and improvisation at the keyboard in 20th century popular and jazz styles. One class meeting and one laboratory session each week.

Prerequisite: MUSI $235^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D . Credits: 1
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 361 - Instrumental Improvisation

This course teaches the basic concepts of improvisation, chord notation and chord styles in popular and jazz music scales. Open to all instrumentalists.

Prerequisite: MUSI $254^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 365 - Applied Performance Voice

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 165, 265, 365 may each be taken two times for a total of 18 credits; MUSI 465 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 366 - Applied Performance Piano

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 166, 266, 366 may each be taken two times for a total of 18 credits; MUSI 466 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 367 - Applied Performance Strings

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 167, 267, 367 may each be taken two times for a total of 18 credits; MUSI 467 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 368-Applied Performance

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits.
Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 168, 268, 368 may be taken two times for a total of 18 credits; MUSI 468 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 369-Applied Performance Brass

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 169, 269, 369 may each be taken two times for a total of 18 credits; MUSI 469 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $203^{C}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 370-Applied Performance

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 170, 270 and 370 may each be taken two times for a total of 18 credits; MUSI 470 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.
MUSI 373 - History of Music II
This course examines the music and culture from the period of the Rococo to the present. Lectures, readings, performances and listening sessions develop the student's musical understanding of the period. A reading knowledge of music is essential.

Prerequisite: MUSI $151^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 374 - Woodwind Methods

A study of the fundamental concepts needed to play and teach beginning instruments of the woodwind family and the factors peculiar to each instrument (flute, oboe, clarinet, bassoon and saxophone). Students must register for MUSI 375 concurrently with this course to complete field experience in the public schools as part of the requirements of this course.

Corequisite(s): MUSI 375
Credits: 1
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER
CANDIDACY attribute.

## MUSI 375 - Woodwind Methods Field Experience

In this course, students will complete field experience with a focus on teaching individual and/or group instrumental lessons in the public schools, supervised by university faculty who are certified music educators. Acceptance into Teacher Candidacy.

Corequisite(s): MUSI 374
Credits: 1
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY or MUSIC UPPER DIV REVIEW STATUS attributes. Enrollment limited to students with department of Music.

## MUSI 376 - Flute, Oboe, \& Bassoon Methods

A study of the fundamental concepts and skills needed to play and teach flute, oboe, and bassoon to homogeneous and heterogeneous instrument groups in pre-K-12 instrumental music education setting. This includes the integration and application of national and state standards for music education. Pre-requisites: Admission to Teacher Candidacy required

Corequisite(s): MUSI 375
Credits: 2
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY or MUSIC UPPER DIV REVIEW STATUS attributes.
Enrollment limited to students in the College of Liberal Arts college. Enrollment limited to students with department of Music.

## MUSI 377 - High Brass Methods

A study of the fundamental concepts and skills needed to play and teach trumpet and French horn to homogeneous and heterogeneous instrument groups in pre-K-12 instrumental music education setting. This includes the integration and application of national and state standards for music education.

## Credits: 2

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students in the College of Liberal Arts college. Enrollment limited to students with department of Music.

## MUSI 379-Applied Piano

With the approval of the applied music teacher, lessons are available in standard piano. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 381 - Applied Voice

With the approval of the applied music teacher, lessons are available in standard voice. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 382 - Applied Strings

With the approval of the applied music teacher, lessons are available in standard string instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 1

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 383-Applied Brass

With the approval of the applied music teacher, lessons are available in standard brass instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 1

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 384 - Applied Woodwinds

With the approval of the applied music teacher, lessons are available in standard woodwind instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 385 - Applied Percussion

With the approval of the applied music teacher, lessons are available in standard percussion instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 387 - Applied Counterpoint I

This study and practice of writing music according to contrapuntal theory of the 16th century. Course may be repeated for up to 3 credits.

Prerequisite: MUSI $255^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 388 - Applied Counterpoint II

The study and practice of writing music according to contrapuntal theory of the 18th century. Course may be repeated for up to 3 credits.

Prerequisite: MUSI $255^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 389-Applied Composition

Compositional techniques relative to the student's interest will be studied through an analysis of works by major composers. Although no definite idiom is prescribed, contemporary techniques are encouraged. May be repeated for up to three credits.

Prerequisite: MUSI $255^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 391-Applied Electronic Composition

A course designed to present the elements involved in electronic composition. The student will compose using magnetic tape, computer, and synthesizer. Course may be repeated for up to 3 credits.
Prerequisites: MUSI $255^{\text {D }}$ or MUSI $352^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 1

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 392- Tuba-Euphonium Ensemble

The SRU Tuba-Euphonium Ensemble is comprised of tuba and euphonium players who rehearse and perform a variety of music written for tuba-euphonium ensemble. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread

## Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 393-Jazz Lab Band

The SRU Jazz Lab Band is a rehearsal ensemble that performs one concert per academic semester. The group does require an audition which takes place in the first week of the Fall semester. If openings occur in the Spring semester, the director will hold an audition for the open seats only. The ensemble rehearses big band literature from every stylistic period in jazz history. The focus of the course is on developing sight-reading, jazz performance practice and techniques, stylistic interpretation, foundational ensemble techniques, jazz band rehearsal techniques, and exposure to the literature, history, and composers of jazz music. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 394 - World Percussion Ensemble

The SRU World Percussion Ensemble rehearses and performs the percussion music of cultures outside of Western Europe and the United States, concentrating on, but not exclusive to, the Caribbean (Trinidad and Tobago, Cuba, The Dominican Republic, and Puerto Rico), Asia (Japan, India, and Korea), South America (Brazil), and West Africa. Students learn the instruments, techniques, some choreography (when appropriate), and musical styles in multiple genres for at least one public performance each academic semester. The ensemble rehearses and performs on authentic instruments (whenever possible) or modern, commercially available substitutes. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats a re possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## MUSI 396 - Winter Guard

The Slippery Rock University Winter Guard is the indoor color guard performing ensemble. In this performing ensemble, students will combine the use of flags, sabers, mock rifles, and other equipment, as well as dance and interpretive movement, in shows for public performance and competition. Held in the spring semester the group performs in competition as part of the indoor marching arts circuit as well as for campus and community events. The course may be repeated up to 5 times. Additional repeats are possible with a waiver from the department chairperson

Credits: 1-2
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 399- Diction for Singers II

In this study of language diction for singers, students will continue the study of the International Phonetic Alphabet and apply it to the singing of German and French art songs. The course is open to all voice majors.

Credits: 1-2
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Music, Music - Voice, Music Education (K-12), Music Educ-Voice (K-12), Music Performance, Music Performance-Voice, Music Therapy or Music Therapy-Voice.

MUSI 402 - Teaching General Music Through Distance Education
This course is designed to provide students with the knowledge and skills necessary to effectively teach general music through distance or cyber education.

Prerequisites: PE $411^{\mathrm{C}}$ and PE $421^{\mathrm{C}}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## MUSI 403 - Teaching Music Performance Through Distance Education

This course is designed to provide students with the knowledge and skills necessary to effectively teach music performance through distance or cyber education.

Prerequisites: PE $302^{C}$ and PE $303^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## MUSI 404 - Field Experience Immersion in Music

In this course, students will participate in field experience through observing, assisting and teaching while being immersed in the culture of a different population. Travel expenses, which may include lodging, airfare, meals and other expenses, will be required as part of this course. Admission to Degree Candidacy required.

Credits: 1
Term(s) Typically Offered: Offered Winter Terms Even
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY or MUSIC UPPER DIV REVIEW STATUS attributes. Enrollment limited to students with department of Music.

## MUSI 406 - Advanced Conducting

In this course, students will develop advanced skills of conducting instrumental and vocal ensembles, including but not limited to: expanding technique beyond stationary focal point conducting to variable focal point conducting, developing gestural vocabulary guided by the Laban Method and developing advanced score study and analysis.

Prerequisite: MUSI $206{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 2
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 407 - Choral Rehearsal Techniques

In this course for music education majors, students will analyze and conduct beginning and intermediate musical scores for choir. The student conductor will identify performance errors and learn to use various rehearsal techniques to improve the ensemble's performance. Students will also survey and learn performance practice for choral literature of all historical stylistic periods, and discuss numerous aspects of choral pedagogy, such as designing curriculum for and administrating a choral program.

Prerequisites: MUSI $406^{C}$ and (MUSI $115^{C}$ or MUSI $215^{C}$ or MUSI $315^{C}$ or MUSI $415^{\text {C }}$ )
${ }^{C}$ Requires minimum grade of $C$.
Corequisite(s): MUSI 339
Credits: 1
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY or MUSIC UPPER DIV REVIEW STATUS attributes. Enrollment limited to students with department of Music.

MUSI 408 - Professional Preparation for the Music Job Search
In this class, which is designed for music majors, students will create a resume, cover letter, and a portfolio; will engage in interview practice; and will form strategies for approaching the job search. The course is intended to be taken by students who will be entering the job search soon

Credits: 1
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1 or Senior 2

Enrollment limited to students with department of Music.

## MUSI 409 - Jazz Combo

Students will meet weekly with the appropriate faculty member to work on jazz performance in the small group (combo) setting. Study of phrasing, articulation, jazz theory, improvisation, and other jazz performance practices will be addressed. Students will be auditioned at the beginning of the semester for placement. At least one public performance will be given per semester. One hour of rehearsal time per week. One credit for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 413 - Saxophone Quartet

Students will meet weekly with the appropriate faculty member to work on literature selected for their performance ability level. Study of phrasing, articulation, balance, blend, intonation, and other performance practices will be addressed. Students will be auditioned at the beginning of the semester for placement. At least one public performance will be given per semester. Two hours per week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 414 - Symphonic Wind Ensemble

Symphonic Wind Ensemble: A chamber ensemble composed of select musicians chosen by audition, performing contemporary literature as well as transcriptions for winds and percussion. Four and a half hours of week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 415 - Concert Choir

Auditioned mixed chorus of 50-70 singers that studies and performs a variety of music from Renaissance to 21 st century, classical to contemporary, a cappella and music accompanied by piano, chamber groups, and symphonic ensembles. Three hours per week rehearsal time. Multiple concerts are presented both on and off campus and on periodic tours. One to three credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. Entrance is by successful audition, held the first week of classes every semester; contact the instructor for information. The ensemble is also available without credit.

Credits: 1-3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 416 - Women's Choir

An ensemble of 30-40 women who perform choral music especially composed for female voices. This ensemble performs traditional and modern repertoire, with and without accompaniment. Concerts are presented on campus and on tours. Two and one-half hours per week rehearsal time. Multiple concerts are presented both on and off campus and on periodic tours. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. No audition is required. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 417 - Chamber Singers

An elite chamber choir of 16-24 outstanding singers who perform challenging repertoire with a greater emphasis on a cappella music. Members of this group are expected to display initiative to prepare music to the highest possible level of their ability. Two and one-half hours per week rehearsal time. One or two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. Entrance is by successful audition, held the first week of classes every semester; contact the instructor for information. The ensemble is also available without credit.

Corequisite(s): MUSI 415
Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread

## Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 418 - Marching Pride

The Marching Pride performs during the half time at football games, both home and away, and for other special events. Much of its music is specially arranged. Open to all students. Six hours a week rehearsal during the football season. One to six credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 6 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-6
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Art \& Society, Creating Art, Education, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 419 - Concert Band

The Concert Band members are carefully selected to provide a balanced instrumentation of the best players. Music written for concert band is the main repertoire. Concerts on campus. Four hours a week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 5 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 420-Jazz Ensemble

The SRU Jazz Ensemble performs jazz literature from all eras of jazz history including big band, bop, hard bop, fusion and contemporary. This ensemble often performs with guest artists of national and international stature, both on and off campus. Membership in this ensemble requires an audition. Three hours and forty-five minutes of rehearsal per week. One to three credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 421-Orchestra

The orchestra is a string ensemble, with winds and percussion added when needed, which performs music from the orchestral repertoire. Admission by audition. Four hours a week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 422 - Chamber String Ensemble

The Chamber String Ensemble is a small ensemble selected for the study and performance of chamber music written for strings. Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread

## Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 423 - Brass Ensemble

The university's Brass Ensemble is a select ensemble of brass (and percussion) players who study and perform music from all historical periods. Both large brass choir works and small chamber brass works are performed. The ensemble performs on and off campus. Two hours a week rehearsal time. One credit for every semester of satisfactory participation is granted for this music performance group, with a maximum allowance of ten credits in any one music organization. Additional credits are possible with a waiver from the departmental chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 424 - Woodwind Ensemble

The Woodwind Ensemble is a small select ensemble of woodwind players who study and perform music for woodwinds from all historical periods. Three hours a week rehearsal time. One credit for every semester of satisfactory participation is granted for this music performance group, with a maximum allowance of ten credits in any one music organization. Additional credits are possible with a waiver from the departmental chairperson. The ensemble is also available without credit.

Credits: 1
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## MUSI 425 - Percussion Ensemble

This small select ensemble of percussionists studies and performs music composed and transcribed for both percussion and mallet ensembles. Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## MUSI 426 - Flute Choir

The SRU Flute Choir is made up of a select group of flutists who will rehearse and perform a variety of music written for flute ensemble. Audition required. Two and a half hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 428 - Music Therapy Advanced Topics

Seminar in professional ethics, disability studies, race theory, and feminism.

Prerequisites: MUSI $327^{\mathrm{D}}$ and MUSI $330^{\mathrm{D}}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Music, Music Education ( $\mathrm{K}-12$ ), Music Performance or Music Therapy.

## MUSI 431 - Pedagogy

Acquaintance with the philosophy, theories, techniques, materials, and practical applications of teaching applied music on the student's major instrument of study. Laboratory experience under the supervision of the instructor will be an integral part of the course.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 432 - Clinical Integration

A supervised clinical experience allowing the music therapy student practical experience in a variety of community health care agencies and educational settings.

Prerequisite: MUSI $330^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 433 - Clinical Integration

A supervised clinical experience allowing the music therapy student practical experience in a variety of community health care agencies and educational settings.

Credits: 1
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 437 - Opera Performance

Performance of scenes, arias, or full operas, taking into consideration the interest and skill of each student. Four hours of rehearsal per week; more rehearsal as needed in weeks leading to performance. One to four credits for every semester of satisfactory participation is granted for this music performance group. Additional repeats are possible with a waiver from the department chairperson. Each course number may be repeated up to five times.

Credits: 1-4
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread
Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 440 - Music Therapy for Adult Clients

Application of music therapy techniques and materials in all areas of mental health, corrections, and special education. Emphasis is placed on adult populations and group dynamics.

Prerequisites: MUSI $312^{\text {D }}$ and MUSI $432{ }^{\text {D }}$ and PSYC $276^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 450 - Music Therapy Internship

A continuous six-month internship in an approved music therapy program under the direction of a Board Certified Music Therapist. Required of all candidates for graduation.
Prerequisites: MUSI $428^{D}$ and MUSI $440^{D}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-12
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students in the BM 5273 program.

## MUSI 455 - Student Teaching - Music

Under the guidance of a cooperating teacher and university supervisor, students engage in two eight-week assignments on a full-time basis in specified school districts and attend scheduled seminars. Supervisors assign additional requirements.

Prerequisites: MUSI $334^{\mathrm{D}}$ and MUSI $335^{\mathrm{D}}$ and MUSI $336^{\mathrm{D}}$ and MUSI $337^{\mathrm{D}}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 12
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER
CANDIDACY or MUSIC UPPER DIV REVIEW STATUS attributes.
Enrollment limited to students with department of Music.

## MUSI 465 - Applied Performance Voice

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 165, 265, 365 may each be taken two times for a total of 18 credits; MUSI 465 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 466 - Applied Performance Piano

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 166, 266, 366 may each be taken two times for a total of 18 credits; MUSI 466 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 467 - Applied Performance Strings

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 167, 267, 367 may each be taken two times for a total of 18 credits; MUSI 467 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 468 - Applied Performance

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 168, 268, 368 may be taken two times for a total of 18 credits; MUSI 468 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 469 - Applied Performance Brass

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits.
Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 169, 269, 369 may each be taken two times for a total of 18 credits; MUSI 469 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 470 - Applied Performance

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 170, 270 and 370 may each be taken two times for a total of 18 credits; MUSI 470 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $230^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 473 - History of Music III

This course examines the musical events from approximately 1890 to the present. Lectures, readings, performances and listening sessions develop the students' musical understanding of the period. A reading knowledge of music is essential.

Prerequisite: MUSI $151^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 479-Applied Piano

With the approval of the applied music teacher, lessons are available in standard piano. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisite: minimum score of $Y$ in 'Musicianship Health Competency' Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 481 - Applied Voice

With the approval of the applied music teacher, lessons are available in standard voice. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 482 - Applied Strings

With the approval of the applied music teacher, lessons are available in standard string instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 483-Applied Brass

With the approval of the applied music teacher, lessons are available in standard brass instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 484 - Applied Woodwinds

With the approval of the applied music teacher, lessons are available in standard woodwind instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 485 - Applied Percussion

With the approval of the applied music teacher, lessons are available in standard percussion instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $203^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 487 - Applied Counterpoint I

This study and practice of writing music according to contrapuntal theory of the 16th century. Course may be repeated for up to 3 credits.

Prerequisite: MUSI $255^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 488 - Applied Counterpoint II

The study and practice of writing music according to contrapuntal theory of the 18th century. Course may be repeated for up to 3 credits.

Prerequisite: MUSI $255^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 489 - Applied Composition

Compositional techniques relative to the student's interest will be studied through an analysis of works by major composers. Although no definite idiom is prescribed, contemporary techniques are encouraged. May be repeated for up to three credits.

Prerequisite: MUSI 255 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 490 - Independent Study

Students have an opportunity to study selected areas in greater concentration under the direction of a music faculty. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 491 - Applied Electronic Composition

A course designed to present the elements involved in electronic composition. The student will compose using magnetic tape, computer, and synthesizer. Course may be repeated for up to 3 credits.

Prerequisites: MUSI $255^{\text {D }}$ or MUSI $352^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 492 - Tuba-Euphonium Ensemble

The SRU Tuba-Euphonium Ensemble is comprised of tuba and euphonium players who rehearse and perform a variety of music written for tuba-euphonium ensemble. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit

Credits: 1-2
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 493 - Jazz Lab Band

The SRU Jazz Lab Band is a rehearsal ensemble that performs one concert per academic semester. The group does require an audition which takes place in the first week of the Fall semester. If openings occur in the Spring semester, the director will hold an audition for the open seats only. The ensemble rehearses big band literature from every stylistic period in jazz history. The focus of the course is on developing sight-reading, jazz performance practice and techniques, stylistic interpretation, foundational ensemble techniques, jazz band rehearsal techniques, and exposure to the literature, history, and composers of jazz music. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 494 - World Percussion Ensemble

The SRU World Percussion Ensemble rehearses and performs the percussion music of cultures outside of Western Europe and the United States, concentrating on, but not exclusive to, the Caribbean (Trinidad and Tobago, Cuba, The Dominican Republic, and Puerto Rico), Asia (Japan, India, and Korea), South America (Brazil), and West Africa. Students learn the instruments, techniques, some choreography (when appropriate), and musical styles in multiple genres for at least one public performance each academic semester. The ensemble rehearses and performs on authentic instruments (whenever possible) or modern, commercially available substitutes. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats a re possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 496 - Winter Guard

The Slippery Rock University Winter Guard is the indoor color guard performing ensemble. In this performing ensemble, students will combine the use of flags, sabers, mock rifles, and other equipment, as well as dance and interpretive movement, in shows for public performance and competition. Held in the spring semester the group performs in competition as part of the indoor marching arts circuit as well as for campus and community events. The course may be repeated up to 5 times. Additional repeats are possible with a waiver from the department chairperson.

Credits: 1-2
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 499 - Applied Recital

The purpose of this course is to give the performance majors an opportunity to perform a full recital on their major instrument. It will be taken in addition to study in the student's major applied area. Course may be repeated up to two credits.

## Credits: 1

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Music Performance.

## Chamber Music Performance, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Music Performance Program Page (https://www.sru.edu/academics/ majors-and-minors/music-performance/)

Music Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/music/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## CURRICULUM GUIDE

## GPA REQUIREMENT

Minor GPA: 2.00 or higher

## MINOR REQUIREMENTS

- Students must complete at least 9 credit hours of MUSI in their minor from SRU.
- Students must complete at least 6 credit hours in their minor from SRU.
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above).
- A minor shall be no fewer than 18 credits.
- Students must earn a grade of "C" or higher in all coursework.
Code Title Hours

Required Foundations of Performance Coursework

| MUSI 203 | Musician's Health | 1 |
| :--- | :--- | :--- |
| MUSI 204 | Art and Science of Performing | 1 |

Chamber Music Electives
Select 16 credits - at least 6 credits must be at 300/400 level; at least
12 chamber ensemble experiences are required

| MUSI 109-409 | Jazz Combo |
| :--- | :--- |
| MUSI 113-413 | Saxophone Quartets |
| MUSI 117-417 | Chamber Singers |
| MUSI 120-420 | Jazz Ensemble |
| MUSI 122-422 | Chamber String Ensemble |
| MUSI 123-423 | Brass Ensemble |
| MUSI 125-425 | Percussion Ensemble |
| MUSI 126-426 | Flute Choir |
| MUSI 192-492 | Tuba-Euphonium Ensemble |
| MUSI 193-493 | Jazz Lab Band |
| MUSI 194-494 | World Percussion Ensemble |


| MUSI 196-496 | Winter Guard |
| :--- | :--- |
| MUSI 206 | Fundamentals of Conducting ${ }^{1}$ |
| MUSI 212 | Fundamentals of Conducting Lab $^{1}$ |
| MUSI 233 | Chamber Music Performance $^{1}$ |
| MUSI 237,437 | Opera Performance $^{1}$ |
| MUSI 360 | Keyboard Improvisation $^{1}$ |
| MUSI 361 | Instrumental Improvisation $^{1}$ |
| MUSI 406 | Advanced Conducting ${ }^{1}$ |
| Total Hours |  |

1 Four credits in Chamber Music electives may come from Chamber Music experiences.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN CHAMBER MUSIC PERFORMANCE (56F)
Revised 06.03.2021
UCC 02.16.2021

## Music Education (PreK-12), Bachelor of Music (BM)

The Bachelor of Music in Music Education prepares individuals to teach instrumental, vocal, and general music to students in grades PreK-12. For additional information about our Music Education Program, contact the following faculty:

- Dr. Cassandra Eisenreich (Elementary Music)
- Dr. Jonathan Helmick (Band and Conducting)
- Dr. Kathleen Melago (Division Head of Music Education \& Student Teacher Training)

For information regarding auditions for the Music Department, please click here (https://www.sru.edu/academics/colleges-and-departments/ cla/departments/music/auditions/).

## Program Learning Outcomes

- The student will be able to identify and interpret the basic elements of music both visually and aurally, including analyzing musical compositions, focusing on theoretical and historical aspects.
- The student will be able to identify and explain the significance of music of a variety of historical periods, cultures, and composers.
- The student will be able to harmonize, transpose, compose, arrange, and orchestrate music using knowledge of music theory and instrumental and vocal characteristics.
- The student will be able to perform as a member of a musical ensemble demonstrating proper techniques of ensemble performance such as balance and blend, as well as musical and social interaction and cooperation, to achieve shared goals.
- The student will be able to perform his/her primary instrument with appropriate techniques of posture, breathing, tone production, articulation/bowing, diction, intonation, expression, and style.
- The student will be able to demonstrate knowledge of instrumental/ vocal repertoire by performing music of different styles, periods, and composers.
- The student will be able to analyze a written score and effectively apply basic conducting patterns, techniques, expression, and rehearsal techniques to realize musical events through the use of gesture with vocal and instrumental ensembles.
- The student will be able to play scales, accompaniments, song repertoire, songs by ear, and transpose melodies with harmonization on the guitar.
- The student will be able to explain and identify jazz concepts and styles and improvise.
- The student will be able to play scales, repertoire, hymns, vocal scores, accompaniments, songs by ear, and transposed melodies with harmonization on the piano.
- The student will be able to employ creative strategies to express feelings, perform music, and select resources and procedures for instruction with their students.
- The student will be able to identify instrumental/vocal strengths and weaknesses and provide appropriate instruction to improve performance of students/self.
- The student will be able to use technology in composition, performance, analysis, teaching, and research.
- Using informal and formal assessment measures, the student will be able to assess the musical skills of their students, including identifying and correcting discrepancies between an aural perception of performance and visual perception of the music score, implementing developmental and remedial experiences that will provide alternate ways for their students to achieve musical objectives when needed.
- The student will be able to create a positive learning environment by using classroom management procedures and motivational techniques that provide their students with opportunities for optimal learning.
- The student will be able to perform tuning, warm-ups, technical exercises, repertoire, and general maintenance/health as applicable on string, brass, woodwind, and percussion instruments and the voice, appropriate for beginning to intermediate students.
- The student will be able to apply concepts of stationary fundamentals, moving fundamentals, staging, sound design, and general effect to successfully create, perform, and instruct both drill and music as a part of the contemporary marching arts.
- The student will be able to promote and implement multicultural and interdisciplinary awareness.
- The student will be able to draw upon knowledge of emotional, intellectual, social, physical, and psychological development while planning, assessing, and teaching students of all ages by creating instructional plans with objectives, standards, materials, procedures, accommodations, assessment, and reflection.
- The student will be able to use critical-thinking skills and communicate effectively in oral, written, and electronic modes.
- The student will be able to exhibit professional attributes and personal characteristics that contribute toward excellence in teaching, including attaining a level of musicianship necessary to present oneself as a role model for students and demonstrating professional responsibility by successfully completing organizational and administrative responsibilities.


## Related Links

Music Education, BM Program Page (https://www.sru.edu/academics/ majors-and-minors/music-education/)

Music Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/music/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Overall GPA for Teacher Candidacy: 2.8 or higher GPA required to graduate: 3.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 87 |
|  |  |
| * All undergraduate degree programs require a minimum of | 120 credits. |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  | 3 |
| SUBJ 139 | University Seminar 1 | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: |  |  |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  |  |
| Integrated Inquiry |  | 3 |
| Creative and Aesthetic Inquiry |  |  |
| Select one of the following: |  |  |
| MUSI 114-414 | Symphonic Wind Ensemble |  |
| MUSI 115-415 | Concert Choir |  |
| MUSI 116-416 | Women's Choir |  |
| MUSI 118-418 | Marching Pride |  |
| MUSI 119-419 | Concert Band |  |
| MUSI 121-421 | Orchestra |  |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  |  |


| Social Science Inquiry |  |  |
| :---: | :---: | :---: |
| Requirement Waived |  |  |
| Natural Sciences Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Sciences Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 12 |
| Additional Rock Studies Requirements |  |  |
| SPED 121 | Overview of Special Education | 3 |
| CDEV 248 | Human Development and Education | 3 |
| SEFE 326 | ELL Strategies and Practice | 3 |
| SEFE 342 | Educational Psychology for Diverse Learners | 3 |
| MATH 113 | Mathematics as a Liberal Art (or higher level Math) | 3 |
| Subtotal |  | 15 |
| Total Hours |  | 42 |
| Course offered in multiple subjects; cannot take course in first major subject. |  |  |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required | minimum SAT or ACT math score OR |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | $\mathbf{0 - 3}$ |

## Computer Competency

| Code | Title | Hours |
| :--- | :--- | ---: |
| Demonstrate "computer competency" by one of the following: | $0-3$ |  |
| Pass Computer Competency Exam OR |  |  |

## Major Requirements

- 44 major credits must be taken at SRU or PASSHE
- 44 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Music Courses |  |  |
| Students must earn a "C" or higher in Musicianship Skills, Music |  |  |
| Theory and Music Ed courses ${ }^{1}$ |  |  |
| MUSI 111 | Introduction to Music Education |  |
| MUSI 129 | Guitar, Ukulele, \& Bass Methods |  |


| MUSI 133 | Class Voice I ${ }^{2,3}$ | 1 |
| :---: | :---: | :---: |
| MUSI 140 | Low Brass Methods ${ }^{2,3}$ | 2 |
| MUSI 151 | Music Theory and Analysis ${ }^{2,3}$ | 2 |
| MUSI 154 | Musicianship Skills ${ }^{2,3}$ | 1 |
| MUSI 203 | Musician's Health ${ }^{2,3}$ | 1 |
| MUSI 206 | Fundamentals of Conducting ${ }^{2,3}$ | 1 |
| MUSI 208 | Clarinet and Saxophone Methods ${ }^{2,3}$ | 2 |
| MUSI 212 | Fundamentals of Conducting Lab ${ }^{2,3}$ | 1 |
| MUSI 247 | Percussion Methods ${ }^{\text {2,3 }}$ | 2 |
| MUSI 253 | Music Theory and Analysis II ${ }^{2,3}$ | 2 |
| MUSI 254 | Music Theory and Analysis III ${ }^{2,3}$ | 2 |
| MUSI 255 | Music Theory and Analysis IV ${ }^{2,3}$ | 2 |
| MUSI 256 | Musicianship Skills II ${ }^{2,3}$ | 1 |
| MUSI 257 | Musicianship Skills III ${ }^{2,3}$ | 1 |
| MUSI 258 | Musicianship Skills IV ${ }^{2,3}$ | 1 |
| MUSI 288 | Music Education for Diverse Learners ${ }^{2,3}$ | 3 |
| MUSI 291 | Field Experience in Music 2: Pre-K Experience ${ }^{2}$ | 1 |
| MUSI 300 | Marching Band Techniques ${ }^{2,3}$ | 2 |
| MUSI 304 | Orchestral String Methods ${ }^{2,3}$ | 2 |
| MUSI 334 | Vocal \& Choral Methods ${ }^{2,3}$ | 2 |
| MUSI 335 | Early Childhood, Elementary, and Secondary General Music Methods ${ }^{2,3}$ | 2 |
| MUSI 336 | Instrumental Methods ${ }^{2,3}$ | 2 |
| MUSI 337 | Instrumental Rehearsal Techniques ${ }^{\text {2,3 }}$ | 1 |
| MUSI 339 | Rehearsal Techniques Field Experience ${ }^{2}$ | 1 |
| MUSI 353 | Music Methods Block Field Experience ${ }^{2}$ | 1 |
| MUSI 354 | Integrated Music Methods Lab ${ }^{2,3}$ | 1 |
| MUSI 359 | History of Music I ${ }^{2}$ | 3 |
| Select one of the following: |  | 1 |
| MUSI 360 | Keyboard Improvisation ${ }^{2}$ |  |
| MUSI 361 | Instrumental Improvisation ${ }^{2}$ |  |
| MUSI 373 | History of Music II ${ }^{2}$ | 3 |
| MUSI 375 | Woodwind Methods Field Experience ${ }^{2}$ | 1 |
| MUSI 376 | Flute, Oboe, \& Bassoon Methods ${ }^{\text {2,3 }}$ | 2 |
| MUSI 377 | High Brass Methods ${ }^{2,3}$ | 2 |
| MUSI 406 | Advanced Conducting ${ }^{2,3}$ | 2 |
| MUSI 407 | Choral Rehearsal Techniques ${ }^{2,3}$ | 1 |
| Subtotal |  | 59 |

## Major Applied - Must all be in the same instrument

Students must earn a "C" or better in each semester of applied major study. Four credits at the $300+$ level are required.
Select two credits of the following:

| MUSI 179 | Applied Music $^{2}$ |
| :--- | :--- |
| MUSI 181 | Applied Voice $^{2}$ |
| MUSI 182 | Applied Strings (Violin, Viola, Cello, Bass) ${ }^{2}$ |
| MUSI 183 | Applied Brass (Trumpet, Horn, Trombone, <br> Tuba, Euphonium) |
| MUSI 184 | Applied Woodwinds (Oboe, Clarinet, <br> Bassoon, Flute, Saxophone) |
| MUSI 185 | Applied Percussion $^{2}$ |

Select two credits of the following:

| MUSI 281 | Applied Voice ${ }^{2}$ |
| :---: | :---: |
| MUSI 282 | Applied Strings (Violin, Viola, Cello, Bass) ${ }^{2}$ |
| MUSI 283 | Applied Brass (Trumpet, Horn, Trombone, Tuba, Euphonium) ${ }^{2}$ |
| MUSI 284 | Applied Woodwinds (Oboe, Clarinet, Bassoon, Flute, Saxophone) ${ }^{2}$ |
| MUSI 285 | Applied Percussion ${ }^{2}$ |
| Select two credits of the following: |  |
| MUSI 379 | Applied Piano ${ }^{2}$ |
| MUSI 381 | Applied Voice ${ }^{2}$ |
| MUSI 382 | Applied Strings (Violin, Viola, Cello, Bass) ${ }^{2}$ |
| MUSI 383 | Applied Brass (Trumpet, Horn, Trombone, Tuba, Euphonium) ${ }^{2}$ |
| MUSI 384 | Applied Woodwinds (Oboe, Clarinet, Bassoon, Flute, Saxophone) ${ }^{2}$ |
| MUSI 385 | Applied Percussion ${ }^{2}$ |
| Select one credit of the following: |  |
| MUSI 479 | Applied Piano ${ }^{2}$ |
| MUSI 481 | Applied Voice ${ }^{2}$ |
| MUSI 482 | Applied Strings (Violin, Viola, Cello, Bass) ${ }^{2}$ |
| MUSI 483 | Applied Brass (Trumpet, Horn, Trombone, Tuba, Euphonium) ${ }^{2}$ |
| MUSI 484 | Applied Woodwinds (Oboe, Clarinet, Bassoon, Flute, Saxophone) ${ }^{2}$ |
| MUSI 485 | Applied Percussion ${ }^{2}$ |
| Subtotal |  |

## Minor Applied - Instrumental and Voice Majors Only

Students must earn a "C" or better in each semester of applied major study.
Select one of the following: 0-4

| MUSI 131 | Class Piano I |
| :--- | :--- |
| \& MUSI 132 | and Class Piano II |
| \& MUSI 234 | and Class Piano III |
| \& MUSI 235 | and Class Piano IV ${ }^{2,3}$ |
| MUSI 179-479 | Applied Piano ${ }^{2,3}$ |

Subtotal

## Minor Applied - Piano Majors Only

Students must earn a "C" or better in each semester of applied major study.
Select four credits: 0-4

| MUSI 181-481 | Applied Voice ${ }^{2}$ |
| :--- | :--- |
| MUSI 182-482 | Applied Strings (Violin, Viola, Cello, Bass) ${ }^{2}$ |
| MUSI 183-483 | Applied Brass (Trumpet, Horn, Trombone, <br> Tuba, Euphonium) 2 |
| MUSI 184-484 | Applied Woodwinds (Oboe, Clarinet, <br> Bassoon, Flute, Saxophone) |
| MUSI 185-485 | Applied Percussion 2 |

Subtotal

## Additional Voice Major Requirements

Two credits:

| MUSI 299 | Diction for Singers ${ }^{2,3}$ |
| :--- | :--- |
| MUSI 399 | Diction for Singers II |

Subtotal
Large Ensemble Participation

Four semesters must be at the 300+ level. The student must earn a "C" or better in each semester to satisfy the requirement. Students must play in one large ensemble every semester up to 7 semesters.

| Select eight credits over seven semesters; nine credits over seven <br> semesters for String majors | $8-9$ |
| :--- | :---: |
| Large Ensembles (p. 948) | $8-9$ |
| Subtotal <br> Professional Education <br> MUSI 455 <br> Total Hours |  |

1 Voice majors -exempt from MUSI 133 and MUSI 203
String majors -exempt from MUSI 203
2 Course counts for $50 \%$ of Major requirements and Major GPA
3 Grade of "C" or better required.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Large Ensemble Participation

Instrumental music education majors must take one semester of concert choir and/or women's ensemble, two semesters of marching pride, and two semesters of concert band. The remaining semesters may include wind ensemble, concert band, marching band or orchestra. One semester of MUSI 121, MUSI 221, MUSI 321, or MUSI 421 (Orchestra) is additionally required for flute, oboe, clarinet, bassoon, horn, trumpet, trombone, tuba and percussion music education majors.

Saxophone music education majors must take two semesters of marching band and two semesters of concert band or wind ensemble, and one semester of concert choir and/or women's ensemble. The remaining semesters (three semesters for education and therapy majors) may be selected from jazz ensemble, wind ensemble, concert band, or marching pride.

Piano music education majors must take one semester of marching pride, one semester of concert choir and/or women's ensemble, and a choice of instrumental or vocal ensembles to complete the program.

String music education majors must take one semester of concert choir and/or women's ensemble, one semester of marching pride, plus seven semesters of orchestra.

Voice music education majors must take one semester of marching pride, plus seven semesters of concert choir and/or women's ensemble.

Euphonium education majors must take two semesters of marching pride, two semesters of concert band, one semester of concert choir and/ or women's ensemble, and three semesters of either marching pride, concert band or wind ensemble.

## Important Information for Music Education Majors

- Piano Proficiency: Music education students are expected to achieve piano proficiency by the end of Class Piano IV. Applied piano majors will follow the same proficiency schedule as the class piano students. Students will not be permitted to take the methods block or student teach until the proficiency is passed. See guidelines. Piano Majors will select another instrument for their minor applied requirement but still must pass the piano proficiencies.
- Enrollment in one semester of Marching Band (semester I or III) is a prerequisite to Marching Band Techniques.
- Music Education majors have a choice of Instrumental Improvisation or Keyboard Improvisation.
- Students must pre-register for student teaching one year in advance and must be admitted into Teacher Candidacy.
- Six credits of Math (MATH 113 or higher) required prior to admission to Teacher Candidacy
- Intro to Music Education (MUSI 111), Critical Writing (ENGL 102), Critical Reading (ENGL 104), High Incidence Disabilities (SPED 121) and Human Development (CDEV 248)are required for admission to Teacher Candidacy.


## Completed Requirements Checklist <br> Requirement Description

- Music Education: Freshman Review
- Music Education: Upper Division Review
- Teacher Candidacy Review
- Musicianship Skills Proficiency
- Musicianship Health Competency: Can be satisfied by passing the eight
- Musicianship Health Competency quizzes with scores of $70 \%$ or higher OR by earning a C or better in MUSI 203, Musician's Health.
- Piano Proficiency
- Music Methods Competencies


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership development
5. Career education and development
6. Internships
7. Field Experiences
8. Student Teaching
9. Volunteering (schools, health care facilities, churches, communities)

MUSIC EDUCATION - BM (5233)
This program is effective as of Fall 2019.
Revised 7-2019
UCC 3.26.2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| Major Applied - 100 level |  | 1 |
| Large Ensemble | or instrument) - 100 level (Arts Inq. I) | 1 |
| MUSI 111 | Introduction to Music Education | 2 |
| MUSI 118 or MUSI 115 | Marching Pride (string majors - band) ${ }^{2}$ or Concert Choir | 1 |
| MUSI 129 | Guitar, Ukulele, \& Bass Methods | 2 |
| MUSI 131 | Class Piano ${ }^{1}$ | 1 |
| MUSI 151 | Music Theory and Analysis I | 2 |
| MUSI 154 | Musicianship Skills I | 1 |
| Select one of the following: |  | 1 |
| MUSI 133 | Class Voice I (instrumental majors only) |  |
| MUSI 299 | Diction for Singers (voice majors only) |  |
| SUBJ 139 | University Seminar ${ }^{3}$ | 3 |
|  | Hours | 15 |

Spring
Major Applied -100 level

Large Ensemble - 100 level (Arts Inquiry 2) 1
MUSI 132 Class Piano II $^{1} \quad 1$
MUSI 140 Low Brass Methods 2

MUSI 253 Music Theory and Analysis II 2
MUSI $256 \quad$ Musicianship Skills II 1
Select one of the following: 1

| MUSI 203 | Musician's Health (piano and non-string inst. Majors) |  |
| :---: | :---: | :---: |
| MUSI 215 | Concert Choir (string majors) |  |
| MUSI 399 | Diction for Singers II (voice majors only) |  |
| ENGL 102 | Critical Writing ${ }^{4}$ | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| SPED 121 | Overview of Special Education | 3 |
|  | Hours | 18 |

## Second Year

Fall

| Major Applied -200 level | 1 |  |
| :--- | :--- | :---: |
| Large Ensemble -200 level (Arts Inquiry 3) | 1 |  |
| MUSI 206 | Fundamentals of Conducting | 1 |
| MUSI 208 | Clarinet and Saxophone Methods | 2 |
| MUSI 212 | Fundamentals of Conducting Lab | 1 |
| MUSI 234 | Class Piano III ${ }^{1}$ | 1 |
| MUSI 247 | Percussion Methods | 2 |
| MUSI 254 | Music Theory and Analysis III | 2 |
| MUSI 257 | Musicianship Skills III | 1 |
| MATH 113 | Mathematics as a Liberal Art | 3 |
| ENGL 104 | Critical Reading ${ }^{4}$ | 3 |
|  | Hours | $\mathbf{1 8}$ |

## Spring

Major Applied - 200 level


## Spring

Major Applied - 300 level 1
Large Ensemble - 300 level 1
MUSI $334 \quad$ Vocal \& Choral Methods (w/Field 2 Experience) ${ }^{5}$

| MUSI 335 | Early Childhood, Elementary, and <br> Secondary General Music Methods (w/ <br> Field Experience) $^{5}$ | 2 |
| :--- | :--- | :---: |
| MUSI 336 | Instrumental Methods (w/Field Experience) <br> 5 | 2 |
| MUSI 353 | Music Methods Block Field Experience | 1 |
| MUSI 354 | Integrated Music Methods Lab | 1 |
| MUSI 361 | Instrumental Improvisation ${ }^{8}$ | 1 |
| MUSI 373 | History of Music II | 3 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :--- | :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy | $\mathbf{1 7}$ |

## Fourth Year

Fall
Major Applied - 400 level 1
Large Ensemble - 400 level 1

| MUSI 337 | Instrumental Rehearsal Techniques (w/ <br>  <br>  <br> Field Exp.) <br>  <br> MUSI 339 | 1 |
| :--- | :--- | :--- |
| MUSI 360 | Rehearsal Techniques Field Experience | 1 |
| MUSI 407 | Keyboard Improvisation ${ }^{8}$ | 1 |
|  | Choral Rehearsal Techniques (w/Field Exp.) | 1 |


| SCI 102 | Understanding the Physical World |  |
| :---: | :---: | :---: |
| SEFE 342 | Educational Psychology for Diver Learners | 3 |
| Humanities Inquiry (p. 1378) |  |  |
|  | ours |  |
| Spring <br> Student Teaching ${ }^{7}$ |  |  |
|  | Hour |  |
|  | otal Hou |  |
| 1 Piano \& Skills Proficiencies: Music education students are expected to achieve proficiency by the end of Class Piano IV and Musicianship Skills IV. Applied piano majors will follow the same proficiency schedule as the class piano students. Students will not be permitted to take the methods block or student teach until the proficiencies are passed. See guidelines. Piano Majors will select another instrument for their minor applied requirement but still must pass the piano proficiencies. |  |  |
| Enrollment in one semester of Marching Band (semester I or III) is a prerequisite to MUSI 300. |  |  |
| Course offered in multiple subjects; cannot take course in first major subject |  |  |
| Six credits of math (MATH 113 or higher), Critical Reading (ENGL 102), Critical Reading (ENGL 104), High Incidence (SPED 121), Intro to Music Education (MUSI 111), and Human Development (CDEV 248) are required for admission to Teacher Candidacy. |  |  |
| Acceptance to Teacher Candidacy is a prerequisite for the following courses: MUSI 334, MUSI 335, MUSI 336, MUSI 337, MUSI 339, MUSI 353, MUSI 374, MUSI 375, MUSI 407, MUSI 455. |  |  |
| Enrollment in one semester of Concert Choir is a prerequisite for Choral Rehearsal Techniques. |  |  |
| 7 Students must pre-register for student teaching one year in advance and must be admitted into Teacher Candidacy. |  |  |
| Students must take either MUSI 360 or MUSI 36 |  |  |
| 9 MUSI 291 may be taken in Second Year, Fall Semester. |  |  |
| Music Education Upper-Division Review will be scheduled during Semester IV. Complete requirements for Teacher Candidacy by October 15 or March 15. Observation due for Freshman Review AND Field Experience II: Exploration due for Upper Division Review, both of which occur in March or April. |  |  |
| ** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year. |  |  |

Major Code: 5233
Revised:10.28.2021

## Music for Education, Minor

The Minor in Music for Education minor is the most flexible of our four minors in music for education at SRU. This minor allows the student to tailor their interest towards developing skills that could be used for volunteer or paid positions with school or community music opportunities, such as serving on marching band staffs, directing or
assisting with community musicals or choirs, working in early childhood centers, or leading music for camps.

The minor also allows students majoring in education (elementary, middle-level, secondary, etc.) an opportunity to stack credentials, providing a competitive edge for supplemental teaching opportunities in their local districts.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Music Education Program Page (https://www.sru.edu/academics/ majors-and-minors/music-education/)

Music Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/music/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## CURRICULUM GUIDE

## GPA REQUIREMENT

Minor GPA: 2.00 or higher

## MINOR REQUIREMENTS

- Students must complete at least 9 credit hours of MUSI in their minor from SRU.
- Students must complete at least 6 credit hours in their minor from SRU.
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above).
- A minor shall be no fewer than 18 credits.
- Students must earn a grade of "C" or higher in all coursework.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Foundations of Music Coursework |  |  |
| MUSI 151 | Music Theory and Analysis I | 2 |
| MUSI 154 | Musicianship Skills I | 1 |
| MUSI 203 | Musician's Health | 1 |
| MUSI 253 | Music Theory and Analysis II | 2 |
| MUSI 256 | Musicianship Skills II | 1 |
| Required Foundations of Music Education Coursework |  |  |
| MUSI 111 | Introduction to Music Education | 2 |
| MUSI 288 | Music Education for Diverse Learners | 3 |
| Performance Study |  | 2 |
| Select 2 credits from the following: |  |  |
| MUSI 131 | Class Piano I |  |
| MUSI 132 | Class Piano II |  |
| MUSI 133 | Class Voice I |  |
| MUSI 134 | Voice Methods |  |
| MUSI 137 | Functional Guitar for Music Therapy I |  |
| MUSI 138 | Functional Guitar for Music Therapy II |  |
| MUSI 179 | Applied Music |  |
| MUSI 181 | Applied Voice |  |
| MUSI 182 | Applied Strings |  |
| MUSI 183 | Applied Brass |  |
| MUSI 184 | Applied Woodwinds |  |


| MUSI 185 | Applied Percussion |  |
| :---: | :---: | :---: |
| MUSI 234 | Class Piano III |  |
| MUSI 235 | Class Piano IV |  |
| MUSI 279 | Applied Piano |  |
| MUSI 281 | Applied Voice |  |
| MUSI 282 | Applied Strings |  |
| MUSI 283 | Applied Brass |  |
| MUSI 284 | Applied Woodwinds |  |
| MUSI 285 | Applied Percussion |  |
| Ensembles |  |  |
| Select 4 credits total, 1 at each level ( $1 \mathrm{XX}, 2 \mathrm{XX}, 3 \mathrm{XX}, 4 \mathrm{XX}$ ); 1 credit may come from these Chamber Ensembles |  | 4 |
| MUSI 109-409 | Jazz Combo ${ }^{1}$ |  |
| MUSI 113-413 | Saxophone Quartets ${ }^{1}$ |  |
| MUSI 114-414 | Symphonic Wind Ensemble |  |
| MUSI 115-415 | Concert Choir |  |
| MUSI 116-416 | Women's Choir |  |
| MUSI 117-417 | Chamber Singers ${ }^{1}$ |  |
| MUSI 118-418 | Marching Pride |  |
| MUSI 119-419 | Concert Band |  |
| MUSI 120-420 | Jazz Ensemble |  |
| MUSI 121-421 | Orchestra |  |
| MUSI 122-422 | Chamber String Ensemble ${ }^{1}$ |  |
| MUSI 123-423 | Brass Ensemble ${ }^{1}$ |  |
| MUSI 125-425 | Percussion Ensemble ${ }^{1}$ |  |
| MUSI 126-426 | Flute Choir ${ }^{1}$ |  |
| MUSI 192-492 | Tuba-Euphonium Ensemble ${ }^{1}$ |  |
| MUSI 193-493 | Jazz Lab Band ${ }^{1}$ |  |
| MUSI 194-494 | World Percussion Ensemble ${ }^{1}$ |  |
| MUSI 196-496 | Winter Guard |  |
| MUSI 233 | Chamber Music Performance ${ }^{1}$ |  |
| MUSI 237, 437 | Opera Performance ${ }^{1}$ |  |
| Music Education Electives |  |  |

Select 7 credits - at least 4 credits must be at the 300/400 level 7

| MUSI 129 | Guitar, Ukulele, \& Bass Methods |
| :--- | :--- |
| MUSI 140 | Low Brass Methods |
| MUSI 204 | Art and Science of Performing |
| MUSI 206 | Fundamentals of Conducting |
| MUSI 208 | Clarinet and Saxophone Methods |
| MUSI 212 | Fundamentals of Conducting Lab |
| MUSI 247 | Percussion Methods |
| MUSI 291 | Field Experience in Music 2: Pre-K |
| MUSI 300 | Marching Band Techniques |
| MUSI 304 | Orchestral String Methods |
| MUSI 334 | Vocal \& Choral Methods |
| MUSI 335 | Early Childhood, Elementary, and |
| MUSI 336 | Secondary General Music Methods |
| MUSI 337 | Instrumental Methods |
| MUSI 354 | Instrumental Rehearsal Techniques |
| MUSI 376 | Flute, Oboe, \& Bassoon Methods |
| MUSI 377 | High Brass Methods |


| MUSI 406 | Advanced Conducting |  |
| ---: | :--- | :--- |
| MUSI 407 | Choral Rehearsal Techniques |  |
| Total Hours |  | $\mathbf{2 5}$ |

1 Ensembles requirement must include 4 credits, 1 credit at each level ( $1 \times X, 2 X X, 3 X X, 4 X X$ ). Only 1 credit may come from Chamber Ensembles.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN MUSIC FOR EDUCATION (56B)
Revised 08.05.2021
UCC 02.16.2021

## Music for Education: Early Childhood, Minor

The Minor in Music for Education: Early Childhood minor is designed to support students interested in developing their skills at using music with young children. The minor includes studies in music performance and teaching, including a field experience with preK music.

The minor also allows students majoring in Early Childhood Education an opportunity to stack credentials, providing a competitive edge in the job market.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Music Education Program Page (https://www.sru.edu/academics/ majors-and-minors/music-education/)

Music Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/music/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## CURRICULUM GUIDE

GPA REQUIREMENT
Minor GPA: 2.00 or higher

## MINOR REQUIREMENTS

- Students must complete at least 9 credit hours of MUSI in their minor from SRU.
- Students must complete at least 6 credit hours in their minor from SRU.
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above).
- A minor shall be no fewer than 18 credits.
- Students must earn a grade of "C" or higher in all coursework.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Foundations of Music Coursework |  |  |
| MUSI 151 | Music Theory and Analysis I | 2 |
| MUSI 154 | Musicianship Skills I | 1 |
| MUSI 203 | Musician's Health | 1 |
| MUSI 253 | Music Theory and Analysis II | 2 |
| MUSI 256 | Musicianship Skills II | 1 |


| Required Foundations of Music Education Coursework |  |  |
| :--- | :--- | :--- |
| MUSI 111 | Introduction to Music Education | 2 |
| MUSI 288 | Music Education for Diverse Learners | 3 |
| MUSI 291 | Field Experience in Music 2: Pre-K |  |
|  | Experience | 1 |
| MUSI 335 | Early Childhood, Elementary, and <br> Secondary General Music Methods | 2 |
| Performance Study |  |  |

Select 2 credits from the following: 2

| MUSI 131 | Class Piano I |
| :--- | :--- |
| MUSI 132 | Class Piano II |
| MUSI 133 | Class Voice I |
| MUSI 134 | Voice Methods |
| MUSI 137 | Functional Guitar for Music Therapy I |
| MUSI 138 | Functional Guitar for Music Therapy II |
| MUSI 179 | Applied Music |
| MUSI 181 | Applied Voice |
| MUSI 182 | Applied Strings |
| MUSI 183 | Applied Brass |
| MUSI 184 | Applied Woodwinds |
| MUSI 185 | Applied Percussion |
| MUSI 234 | Class Piano III |
| MUSI 235 | Class Piano IV |
| MUSI 279 | Applied Piano |
| MUSI 281 | Applied Voice |
| MUSI 282 | Applied Strings |
| MUSI 283 | Applied Brass |
| MUSI 284 | Applied Woodwinds |
| MUSI 285 | Applied Percussion |
| Ensembles |  |

Select 4 credits total, 1 at each level (1XX, 2XX, 3XX, 4XX); 1
credit may come from these Chamber Ensembles

| MUSI 109-409 | Jazz Combo $^{1}$ |
| :--- | :--- |
| MUSI 113-413 | Saxophone Quartets $^{1}$ |
| MUSI 114-414 | Symphonic Wind Ensemble $^{\text {MUSI 115-415 }}$ |
| Concert Choir |  |
| MUSI 116-416 | Women's Choir |
| MUSI 117-417 | Chamber Singers $^{1}$ |
| MUSI 118-418 | Marching Pride |


| MUSI 119-419 | Concert Band |  |
| :---: | :---: | :---: |
| MUSI 120-420 | Jazz Ensemble |  |
| MUSI 121-421 | Orchestra |  |
| MUSI 122-422 | Chamber String Ensemble ${ }^{1}$ |  |
| MUSI 123-423 | Brass Ensemble ${ }^{1}$ |  |
| MUSI 125-425 | Percussion Ensemble ${ }^{1}$ |  |
| MUSI 126-426 | Flute Choir ${ }^{1}$ |  |
| MUSI 192-492 | Tuba-Euphonium Ensemble ${ }^{1}$ |  |
| MUSI 193-493 | Jazz Lab Band ${ }^{1}$ |  |
| MUSI 194-494 | World Percussion Ensemble ${ }^{1}$ |  |
| MUSI 196-496 | Winter Guard ${ }^{1}$ |  |
| MUSI 233 | Chamber Music Performance ${ }^{1}$ |  |
| MUSI 237, 437 | Opera Performance ${ }^{1}$ |  |
| Music Education Electives |  |  |
| Select 4 credits - at least 2 credits must be at the 300/400 level |  | 4 |
| MUSI 129 | Guitar, Ukulele, \& Bass Methods |  |
| MUSI 204 | Art and Science of Performing |  |
| MUSI 206 | Fundamentals of Conducting |  |
| MUSI 212 | Fundamentals of Conducting Lab |  |
| MUSI 247 | Percussion Methods |  |
| MUSI 334 | Vocal \& Choral Methods |  |
| MUSI 406 | Advanced Conducting |  |

Total Hours
1 Ensembles requirement must include 4 credits, 1 credit at each level (1XX, 2XX, 3XX, 4XX). Only 1 credit may come from Chamber Ensembles.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN MUSIC FOR EDUCATION: EARLY CHILDHOOD (56D) Revised 08.05.2021
UCC 02.16.2021

## Music for Education: Marching Arts, Minor

To access Minor Requirements, please view the Curriculum Guide tab.
The Minor in Music for Education: Marching Arts minor is designed to support students interested in the marching arts (marching band, winter guard, indoor drumline, etc.) and to provide a competitive edge in the form of a credential for those interested in working with ensembles
professionally or as volunteers. The flexible minor allows the student to tailor their interest towards developing skills in drill writing, movement fundamentals, marching band pedagogy, winter guard, color guard, and teaching woodwinds, brass, and/or percussion.

The minor also allows students majoring in education (elementary, middle-level, secondary, etc.) an opportunity to stack credentials, providing a competitive edge for supplemental teaching opportunities in their local districts.

## Related Links

Music Education Program page (https://www.sru.edu/academics/majors-and-minors/music-education/)

Music Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/music/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## CURRICULUM GUIDE

GPA REQUIREMENT
Minor GPA: 2.00 or higher

## MINOR REQUIREMENTS

- Students must complete at least 9 credit hours of MUSI in their minor from SRU.
- Students must complete at least 6 credit hours in their minor from SRU.
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above).
- A minor shall be no fewer than 18 credits.
- Students must earn a grade of "C" or higher in all coursework.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Foundations of Music Coursework |  |  |
| MUSI 151 | Music Theory and Analysis I | 2 |
| MUSI 154 | Musicianship Skills I | 1 |
| MUSI 203 | Musician's Health | 1 |
| MUSI 204 | Art and Science of Performing | 1 |
| MUSI 253 | Music Theory and Analysis II | 2 |
| MUSI 256 | Musicianship Skills II | 1 |
| Required Foundations of Music Education Coursework |  |  |
| MUSI 111 | Introduction to Music Education | 2 |
| MUSI 288 | Music Education for Diverse Learners | 3 |
| MUSI 300 | Marching Band Techniques | 2 |
| Performance Study |  |  |
| Select 2 credits from the following: |  | 2 |
| MUSI 131 | Class Piano I |  |
| MUSI 132 | Class Piano II |  |
| MUSI 133 | Class Voice I |  |
| MUSI 134 | Voice Methods |  |
| MUSI 137 | Functional Guitar for Music Therapy I |  |
| MUSI 138 | Functional Guitar for Music Therapy II |  |
| MUSI 179 | Applied Music |  |
| MUSI 181 | Applied Voice |  |


| MUSI 182 | Applied Strings |  |
| :---: | :---: | :---: |
| MUSI 183 | Applied Brass |  |
| MUSI 184 | Applied Woodwinds |  |
| MUSI 185 | Applied Percussion |  |
| MUSI 234 | Class Piano III |  |
| MUSI 235 | Class Piano IV |  |
| MUSI 279 | Applied Piano |  |
| MUSI 281 | Applied Voice |  |
| MUSI 282 | Applied Strings |  |
| MUSI 283 | Applied Brass |  |
| MUSI 284 | Applied Woodwinds |  |
| MUSI 285 | Applied Percussion |  |
| Ensembles |  |  |
| Select 4 credits total, | 1 at each level ( $1 \mathrm{XX}, 2 \mathrm{XX}, 3 \mathrm{XX}, 4 \mathrm{XX}$ ) | 4 |
| MUSI 118-418 | Marching Pride |  |
| MUSI 196-496 | Winter Guard |  |
| Music Education Electives |  |  |
| Select 4 credits - at lea | ast 2 credits must be at the 300/400 level | 4 |
| MUSI 140 | Low Brass Methods |  |
| MUSI 206 | Fundamentals of Conducting |  |
| MUSI 208 | Clarinet and Saxophone Methods |  |
| MUSI 212 | Fundamentals of Conducting Lab |  |
| MUSI 247 | Percussion Methods |  |
| MUSI 336 | Instrumental Methods |  |
| MUSI 337 | Instrumental Rehearsal Techniques |  |
| MUSI 376 | Flute, Oboe, \& Bassoon Methods |  |
| MUSI 377 | High Brass Methods |  |
| MUSI 406 | Advanced Conducting |  |
| Total Hours |  | 25 |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN MUSIC FOR EDUCATION: MARCHING ARTS (56C) Revised 06.03.2021
UCC 02.16.2021

## Music for Education: Vocal Music, Minor

The Minor in Music for Education: Vocal Music minor is designed to support students who enjoy singing and to provide a competitive edge in
the form of a credential for those interested in working with vocal music professionally or as volunteers. The flexible minor allows the student to tailor their interest towards developing skills in performance, conducting, and vocal and choral methods.

The minor also allows students majoring in education (elementary, middle-level, secondary, etc.) an opportunity to stack credentials, providing a competitive edge for supplemental teaching opportunities in their local districts.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Music Education Program Page (https://www.sru.edu/academics/ majors-and-minors/music-education/)

Music Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/music/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## CURRICULUM GUIDE

## GPA REQUIREMENT

Minor GPA: 2.00 or higher

## MINOR REQUIREMENTS

- Students must complete at least 9 credit hours of MUSI in their minor from SRU.
- Students must complete at least 6 credit hours in their minor from SRU.
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above).
- A minor shall be no fewer than 18 credits.
- Students must earn a grade of "C" or higher in all coursework.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Foundations of Music Coursework |  |  |
| MUSI 151 | Music Theory and Analysis I | 2 |
| MUSI 154 | Musicianship Skills I | 1 |
| MUSI 203 | Musician's Health | 1 |
| MUSI 253 | Music Theory and Analysis II | 2 |
| MUSI 256 | Musicianship Skills II | 1 |
| Required Foundations of Music Education Coursework |  |  |
| MUSI 111 | Introduction to Music Education | 2 |
| MUSI 288 | Music Education for Diverse Learners | 3 |
| MUSI 334 | Vocal \& Choral Methods | 2 |
| Performance Study |  | 2 |
| Select 2 credits from the following: |  |  |
| MUSI 131 | Class Piano I |  |
| MUSI 132 | Class Piano II |  |
| MUSI 133 | Class Voice I |  |
| MUSI 134 | Voice Methods |  |
| MUSI 179 | Applied Music |  |
| MUSI 181 | Applied Voice |  |
| MUSI 234 | Class Piano III |  |
| MUSI 235 | Class Piano IV |  |


| MUSI 279 | Applied Piano |  |
| :---: | :---: | :---: |
| MUSI 281 | Applied Voice |  |
| Ensembles |  |  |
| Select 4 credits total, 1 | at each level ( $1 \times X, 2 X X, 3 X X, 4 X X)$ | 4 |
| MUSI 115-415 | Concert Choir |  |
| MUSI 116-416 | Women's Choir |  |
| MUSI 117-417 | Chamber Singers |  |
| MUSI 237, 437 | Opera Performance |  |
| Music Education Electives |  |  |
| Select 5 credits - at lea | st 2 credits must be at the 300/400 level | 5 |
| MUSI 204 | Art and Science of Performing |  |
| MUSI 206 | Fundamentals of Conducting |  |
| MUSI 212 | Fundamentals of Conducting Lab |  |
| MUSI 335 | Early Childhood, Elementary, and Secondary General Music Methods |  |
| MUSI 406 | Advanced Conducting |  |
| MUSI 407 | Choral Rehearsal Techniques |  |
| Total Hours |  | 25 |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN MUSIC FOR EDUCATION: VOCAL MUSIC (56E)
Revised 08.05.2021
UCC 02.16.2021

## Music History, Minor

## 18 Credit Hours

The Minor in Music History is designed for the student interested in exploring music history through required and elective music courses as well as musical literature through ensemble performance.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Music Education Program Page (https://www.sru.edu/academics/ majors-and-minors/music-education/)

Music Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/music/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## CURRICULUM GUIDE

GPA REQUIREMENT
Minor GPA: 2.00 or higher

## MINOR REQUIREMENTS

- Students must complete at least 9 credit hours of MUSIC in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Foundational Course |  |  |
| MUSI 101 | Exploring Music | 3 |
| Music Literature |  |  |
| Select 3 credits of ensemble study to include 1 at each level (1XX, 2XX, 3XX) OR one 3 -credit course from MUSI 276 or 278 |  | 3 |
| MUSI 109-409 | Jazz Combo |  |
| MUSI 113-413 | Saxophone Quartets |  |
| MUSI 114-414 | Symphonic Wind Ensemble |  |
| MUSI 115-415 | Concert Choir |  |
| MUSI 116-416 | Women's Choir |  |
| MUSI 117-417 | Chambers Singers |  |
| MUSI 118-418 | Marching Pride |  |
| MUSI 119-419 | Concert Band |  |
| MUSI 120-420 | Jazz Ensemble |  |
| MUSI 121-421 | Orchestra |  |
| MUSI 122-422 | Chamber String Ensemble |  |
| MUSI 123-423 | Brass Ensemble |  |
| MUSI 125-425 | Percussion Ensemble |  |
| MUSI 126-426 | Flute Choir |  |
| MUSI 192-492 | Tuba-Euphonium Ensemble |  |
| MUSI 193-493 | Jazz Lab Band |  |
| MUSI 194-494 | World Percussion Ensemble |  |
| MUSI 196-496 | Winter Guard |  |
| MUSI 233 | Chamber Music Performance |  |
| MUSI 237-437 | Opera Performance |  |
| MUSI 276 | Songs \& Singers |  |
| MUSI 278 | Literature of the American Musical Theat |  |
| Electives |  |  |
| Select 12 credits of the following with 6 credits at 300/400 level |  | 12 |
| MUSI 102 | Exploring World Music |  |
| MUSI 104 | Exploring American Music |  |
| MUSI 105 | Exploring Jazz |  |
| MUSI 276 | Songs \& Singers |  |
| MUSI 278 | Literature of the American Musical Theat |  |
| MUSI 301 | Women and Music |  |
| MUSI 359 | History of Music I |  |
| MUSI 373 | History of Music II |  |
| Total Hours |  | 18 |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## MINOR IN MUSIC HISTORY (56G)

Revised 07.28.21
UCC 04.13.2021

## Music Performance, Bachelor of Music (BM)

The Bachelor of Music in Music Performance prepares students to develop the highest level of performing skills. For more information on the BM in Music Performance, please contact Dr. Jason Kush.

For information regarding auditions for the Music Department, please click here (https://www.sru.edu/academics/colleges-and-departments/ cla/departments/music/auditions/).

## Program Learning Outcomes

- The student will be able to identify and analyze the basic elements of music both visually and aurally including analyzing musical compositions focusing on theoretical and historical aspects.
- The student will be able to identify, explain and appreciate music of different historical periods, cultures, and composers.
- The student will be able to use critical thinking skills and communicate effectively in oral, written, and electronic mode.
- The student will be able to harmonize, transpose, compose, arrange, and orchestrate music utilizing concepts of the basic elements of music as well as instrumental and vocal characteristics.
- The student will be able to demonstrate basic conducting patterns, techniques, expressions, and rehearsal techniques with vocal and instrumental ensembles.
- The student will be able to understand and appreciate the creative process of the arts by exploring creative ways to express feelings, perform music, and select resources and procedures for instruction/ therapy with their students/clients.
- The student will be able to play scales, accompaniments, song repertoire, songs by ear, and transpose melodies with harmonization on the guitar.
- The student will be able to explain and identify jazz concepts and styles and perform clinical instrumental improvisation techniques.
- The student will be able to perform as a member of a musical ensemble demonstrating proper techniques of ensemble performance such as balance and blend, as well as musical and social interaction, and cooperation to achieve shared goals.
- The student will be able to play scales, repertoire, hymns, music therapy literature, accompaniments, songs by ear, and transposed melodies with harmonization on the piano.
- The student will be able to sing or play his/her primary instrument with appropriate techniques of posture, breathing, tone production, articulation/bowing, diction, intonation, expression, and style.
- The student will be able to demonstrate knowledge of instrumental/ vocal repertoire by performing music of different styles, periods, and composers.
- The student will perform in a student recital or performance class every semester.
- The student will be able to identify instrumental/vocal strengths and weaknesses.
- The student will be able to use technology in composition, performance, analysis, teaching and research.


## Related Links

Music Performance, BM Program Page (https://www.sru.edu/academics/ majors-and-minors/music-performance/)

Music Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/music/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Modern Language Proficiency (Voice Majors Only) | $0-6$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 78 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: | 3 |  |
| COMM 200 |  | Civil Discourse: Theory \& Practice |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy | 15 |
| Subtotal |  |  |

Integrated Inquiry
Creative and Aesthetic Inquiry


1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be $300-$ level or above.

## Modern Language Proficiency: Voice Majors Only

Language proficiency at the 102 class level is required in French, German or Italian. Exemption by placement or examination is possible

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete $0-6$ credits | $0-6$ |  |
| Total Hours | $\mathbf{0 - 6}$ |  |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| CodeTitle <br> Complete one of the following: | Hours |
| :--- | ---: |
|  | $0-3$ |

Meet required minimum SAT or ACT math score OR
ESAP $110 \quad$ Beginning Algebra
$\begin{array}{ll}\text { Total Hours } & \mathbf{0 - 3}\end{array}$

## Computer Competency

Code Title Hours

Demonstrate "computer competency" by one of the following: 0-3
Pass Computer Competency Exam OR
Select one of the following at SRU or another post-secondary institution:
CPSC 100 Introduction to Computing for Liberal Arts
CPSC 110 Computer Concepts
CPSC 130 Introduction to Computing and
Programming

PE 202
Technology for Wellness
Total Hours

## Major Requirements

- 39 major credits must be taken at SRU or PASSHE
- 39 major credits must be taken at the 300 level or above
Code Title


## Hours

## Required Music Courses

Students must earn a 'C' or better in each semester of Musicianship Skills and Music Theory

| MUSI 151 | Music Theory and Analysis I 1,2 | 2 |
| :---: | :---: | :---: |
| MUSI 154 | Musicianship Skills I ${ }^{\text {1,2 }}$ | 1 |
| MUSI 203 | Musician's Health | 1 |
| MUSI 204 | Art and Science of Performing | 1 |
| MUSI 206 | Fundamentals of Conducting ${ }^{1}$ | 1 |
| MUSI 253 | Music Theory and Analysis II ${ }^{1,2}$ | 2 |
| MUSI 254 | Music Theory and Analysis III 1,2 | 2 |
| MUSI 255 | Music Theory and Analysis IV ${ }^{1,2}$ | 2 |
| MUSI 256 | Musicianship Skills II ${ }^{1,2}$ | 1 |
| MUSI 257 | Musicianship Skills III ${ }^{1,2}$ | 1 |
| MUSI 258 | Musicianship Skills IV ${ }^{1,2}$ | 1 |
| MUSI 350 | Computer Technology in Music ${ }^{1}$ | 2 |
| MUSI 351 | Arranging \& Orchestration ${ }^{1}$ | 2 |
| MUSI 359 | History of Music $I^{1}$ | 3 |
| Select one | wing: | 1 |


| MUSI 360 | Keyboard Improvisation ${ }^{1}$ |  |
| :---: | :---: | :---: |
| MUSI 361 | Instrumental Improvisation ${ }^{1}$ |  |
| MUSI 373 | History of Music II ${ }^{1}$ | 3 |
| MUSI 406 | Advanced Conducting | 2 |
| MUSI 431 | Pedagogy ${ }^{1}$ | 1 |
| MUSI 473 | History of Music III ${ }^{1}$ | 3 |
| Subtotal |  | 32 |

Major Applied - Must all be in same instrument.
Students must earn a "C" or better in each semester of applied major study

Select Four semesters at the 300+ level or higher (required):24

| MUSI 165-465 | Applied Performance Voice ${ }^{1,2}$ |
| :---: | :---: |
| MUSI 166-466 | Applied Performance Piano 1,2 |
| MUSI 167-467 | Applied Performance Strings (Violin, Viola, Cello, Bass) ${ }^{1,2}$ |
| MUSI 168-468 | Applied Performance Woodwinds (Flute, Oboe, Clarinet, Saxophone, Bassoon) ${ }^{1,2}$ |
| MUSI 169-469 | Applied Performance Brass (Trumpet, Horn, Trombone, Euphonium, Tuba) ${ }^{1,2}$ |
| MUSI 170-470 | Applied Performance Percussion ${ }^{1,2}$ |

## Minor Applied Courses

Select one of the following based on instrument:4

Instrumental and Voice Majors Only
Class Piano can be counted toward the minor applied. Students must earn a ' C ' or better each semester to move on to the next level.
Select one of the following:

| MUSI 131 | Class Piano I |
| :--- | :--- |
| \& MUSI 132 | and Class Piano II |
| \& MUSI 234 | and Class Piano III |
| \& MUSI 235 | and Class Piano IV ${ }^{1,2}$ |
| MUSI 179-479 | Applied Piano ${ }^{1,2}$ |

Piano Majors Only
Class Piano cannot be counted toward the minor applied. Piano majors must select another instrument. Students must earn a 'C' or better each semester to move on to the next level.

Select four credits:


MUSI 114-414 Wind Ensemble BRXWP 1,2
MUSI 115-415 Concert Choir VPG ${ }^{1}$
MUSI 118-418 Marching Pride BRXWGP ${ }^{1}$
MUSI 119-419 Concert Band BRXWP ${ }^{1}$
MUSI 120-420 Jazz Ensemble XGPBW ${ }^{1}$
MUSI 121-421 Orchestra BRPSW ${ }^{1}$
Subtotal

## Music Electives

Voice Majors must take the following two courses in addition to 8 credits from the electives listed below:

Required Music Electives - Voice Majors Only

| MUSI 299 | Diction for Singers |
| :--- | :--- |
| MUSI 399 | Diction for Singers II |

All performance majors select twelve credits, Voice majors select 12
eight credits; six credits must be at the 300 level or higher.

| MUSI 109-409 | Jazz Combo ${ }^{1}$ |
| :---: | :---: |
| MUSI 113-413 | Saxophone Quartet ${ }^{1}$ |
| MUSI 114-414 | Wind Ensemble ${ }^{1}$ |
| MUSI 115-415 | Concert Choir ${ }^{1}$ |
| MUSI 117-417 | Chamber Singers ${ }^{1}$ |
| MUSI 118-418 | Marching Pride ${ }^{1}$ |
| MUSI 119-419 | Concert Band ${ }^{1}$ |
| MUSI 121-421 | Orchestra ${ }^{1}$ |
| MUSI 122-422 | Chamber Strings ${ }^{1}$ |
| MUSI 123-423 | Brass Ensemble ${ }^{1}$ |
| MUSI 126-426 | Flute Choir ${ }^{1}$ |
| MUSI 129 | Guitar, Ukulele, \& Bass Methods ${ }^{1}$ |
| MUSI 133 | Class Voice I (Instrumental majors only) ${ }^{1}$ |
| MUSI 134 | Voice Methods ${ }^{1}$ |
| MUSI 137 | Functional Guitar for Music Therapy I ${ }^{1}$ |
| MUSI 138 | Functional Guitar for Music Therapy II ${ }^{1}$ |
| MUSI 140 | Low Brass Methods ${ }^{1}$ |



1 Course counts for $50 \%$ of Major requirements and Major GPA
2 Grade of " $C$ " or better required.
3 Students must play in one large ensemble every semester up to 8 semesters. One semester of MUSI 121, MUSI 221, MUSI 321, or MUSI 421 (Orchestra) is additionally required for flute, oboe, clarinet, bassoon, horn, trumpet, trombone, tuba and percussion music education majors.
$B=$ Brass majors
G = Guitar majors
$R=$ Percussion majors
P = Piano majors
X = Saxophone majors
$S=$ Strings majors
$\mathrm{V}=$ Voice majors
W = Woodwind majors

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership development

Career education and development
Internships
Field Experiences
8. Student Teaching
9. Volunteering (schools, health care facilities, churches, communities)

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MUSIC PERFORMANCE - BM (5253)
This program is effective as of Fall 2019.
Revised 10.28.2021
UCC 3.26.2019

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| Major Applied - 100 level |  | 3 |
| Minor Applied (Class Piano I) |  | 1 |
| Large Ensemble (major instrument) -100 level (Arts Inq. I) |  | 1 |
| MUSI 151 | Music Theory and Analysis I | 2 |
| MUSI 154 | Musicianship Skills I | 1 |
| MUSI 204 | Art and Science of Performing | 1 |
| Integrated Inquiry/Thread (voice majors take foreign language) 2,3 |  | 3 |
| SUBJ 139 | University Seminar ${ }^{4}$ | 3 |
| Voice Majors - Select the following course: |  | 1-2 |
| MUSI 299 | Diction for Singers (voice majors only) ${ }^{1}$ |  |
|  | Hours | 16-17 |
| Spring |  |  |
| Major Applied -100 level |  | 3 |
| Minor Applied (Class Piano II) |  | 1 |
| Large Ensemble -100 level (Arts Inquiry 2) |  | 1 |
| MUSI 253 | Music Theory and Analysis II | 2 |
| MUSI 256 | Musicianship Skills II | 1 |
| Music Electives (voice majors take MUSI 399) |  | 1-2 |
| Integrated Inquiry/Thread (voice majors take foreign language) 2,3 |  | 3 |
| MUSI 203 | Musician's Health (piano and non-string inst. Majors) | 1 |
| MATH 117 | Quantitative Reasoning | 3 |
|  | Hours | 16-17 |
| Second Year |  |  |
| Fall |  |  |
| Major Applied -200 level |  | 3 |
| Minor Applied (Class Piano III) |  | 1 |
| Large Ensemble -200 level (Arts Inquiry 3) |  | 1 |
| MUSI 206 | Fundamentals of Conducting | 1 |
| MUSI 212 | Fundamentals of Conducting Lab | 1 |


| MUSI 254 | Music Theory and Analysis III | 2 |
| :---: | :---: | :---: |
| MUSI 257 | Musicianship Skills III | 1 |
| ENGL 102 | Critical Writing | 3 |
| Integrated Inquiry/Thread |  | 3 |
| Declare a Thematic Thread ${ }^{6}$ |  |  |
|  | Hours | 16 |
| Spring |  |  |
| Major Applied -200 level |  | 3 |
| Minor Applied (Class Piano IV) |  | 1 |
| Large Ensemble -200 Level |  | 1 |
| MUSI 255 | Music Theory and Analysis IV | 2 |
| MUSI 258 | Musicianship Skills IV | 1 |
| MUSI 406 | Advanced Conducting (w/Lab) | 2 |
| Music Electives |  | 2 |
| ENGL 104 | Critical Reading | 3 |

Advanced Standing Review scheduled at the completion of 60 credits


| Spring |  |
| :--- | ---: |
| Major Applied $\mathbf{- 4 0 0}$ level | 3 |
| Large Ensemble $\mathbf{- 4 0 0}$ level | 1 |
| Applied Recital | 1 |
| Music Electives ${ }^{5}$ | 2 |
| Thread |  |
|  | Hours |
|  | Total Hours** |

Voice majors must take Diction I and II. These classes will be offered on a rotational basis. If you begin your program in an even year you will take these classes in your freshmen year. If you begin your program in an odd year you will take them in your sophomore year.

Course offered in multiple subjects; cannot take course in first major subject
5 See BM Progress Sheet for additional information on 300+ level requirement
6 Work with your Academic Adviser to declare a Thematic
Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/
ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UldNTi4u)to declare a thread.

Major Code: 5253
Revised: 03.2021
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Music Therapy, Bachelor of Music (BM)

For information regarding auditions for the Music Department, please click here (https://www.sru.edu/academics/colleges-and-departments/ cla/departments/music/auditions/).

## Apply Now

To learn more about how to apply to the SRU Music Therapy Program, click here (https://www.sru.edu/documents/academics/departments/ music/How-to-Apply-SRU-MT.pdf).

## About Our Program

The SRU Music Therapy Program celebrated 40 years of music therapy in 2017 with the founder of the SRU MT Program, Dr. Sue Shuttleworth, and the Director of Music Therapy, Dr. Susan Hadley providing remarks about the strong history of our program. We have three full-time music therapy faculty teaching in the program as well as an on-campus clinic to train music therapy students throughout their studies at SRU.

The Bachelor of Music in Music Therapy prepares students to engage in musical experiences with a diverse range of people to assist them in
reaching optimal health and personal growth. For additional information about our music therapy program, contact the music therapy faculty members:

- Susan Hadley, Ph.D., MT-BC (Director of Music Therapy \& Coordinator of Graduate Music Therapy Program)
- Nicole Hahna, Ph.D., MT-BC, Fellow of the Association for Music \& Imagery (Coordinator of Undergraduate Music Therapy Program)
- Vern Miller, MMT, MT-BC (Coordinator of Clinical Placements \& Coordinator of Equivalency Program)


## Certification \& Licensure

SRU's Music Therapy Program is approved by the American Music Therapy Association. Students completing this program are eligible to sit for the national board certification exam (http://www.cbmt.org/) to obtain the Music Therapist-Board Certified (MT-BC) credential. Pennsylvania does not require state licensing; however, some states do require licensing for music therapists. If you are interested in practicing in another state, please contact the licensing board in that state.

## Our Clinic

Check out this video on our music therapy program: https:// www.youtube.com/watch?v=v2kG-qEXYh4\#action=share (https:// www.youtube.com/watch/?v=v2kG-qEXYh4\#action=share)

## Our Students

Our SRU music therapy students experience many opportunities for clinical work, music therapy research, and collaboration with the music therapy faculty. Here is a video featuring one of our students: https:// www.youtube.com/watch?v=jwCeOcCIRys (https://www.youtube.com/ watch/?v=jwCeOcClRys)

## SRU Music Therapy Success Story

Learn more about SRU's Music Therapy Program from a student's perspective here (https://youtu.be/jwCeOcClRys/).

## Program Learning Outcomes

- The student will be able to identify and analyze the basic elements of music both visually and aurally including analyzing musical compositions focusing on theoretical and historical aspects.
- The student will be able to identify, explain and appreciate music of different historical periods, cultures, and composers.
- The student will be able to use critical thinking skills and communicate effectively in oral, written, and electronic mode.
- The student will be able to harmonize, transpose, compose, arrange, and orchestrate music utilizing concepts of the basic elements of music as well as instrumental and vocal characteristics.
- The student will be able to demonstrate basic conducting patterns, techniques, expressions, and rehearsal techniques with vocal and instrumental ensembles.
- The student will be able to understand and appreciate the creative process of the arts by exploring creative ways to express feelings, perform music, and select resources and procedures for instruction/ therapy with their students/clients.
- The student will be able to play scales, accompaniments, song repertoire, songs by ear, and transpose melodies with harmonization on the guitar.
- The student will be able to explain and identify jazz concepts and styles and perform clinical instrumental improvisation techniques.
- The student will be able to perform as a member of a musical ensemble demonstrating proper techniques of ensemble performance such as balance and blend, as well as musical and social interaction, and cooperation to achieve shared goals.
- The student will be able to play scales, repertoire, hymns, music therapy literature, accompaniments, songs by ear, and transposed melodies with harmonization on the piano.
- The student will be able to sing or play his/her primary instrument with appropriate techniques of posture, breathing, tone production, articulation/bowing, diction, intonation, expression, and style.
- The student will be able to demonstrate knowledge of instrumental/ vocal repertoire by performing music of different styles, periods, and composers.
- The student will perform in a student recital or performance class every semester.
- The student will be able to identify instrumental/vocal strengths and weaknesses.
- The student will be able to use technology in composition, performance, analysis, teaching and research.
- The student will demonstrate knowledge, skills, and/or abilities in clinical foundations in the areas of exceptionality, principles of therapy, and the therapeutic relationship.
- The student will demonstrate knowledge, skills, and/or abilities in music foundations in the areas of music theory and history, composition and arranging skills, major performance medium skills, keyboard skills, guitar skills, voice skills, non-symphonic instrumental skills, improvisation skills, conducting skills and/or movement skills.
- The student will demonstrate knowledge, skills and/or abilities in music therapy in the areas of foundations and principles, client assessment, treatment planning, therapy implementation, therapy evaluation, documentation, and/or termination/discharge planning.
- The student will demonstrate knowledge, skills, and/or abilities in the professional role, ethics, and interdisciplinary collaboration.
- The student will demonstrate knowledge and skills in research methodology.
- The student will participate in and benefit from supervision and/or perform administrative duties.
- Demonstrate a basic foundation on voice, piano, guitar, and percussion. Lead and accompany proficiently on instruments including, but not limited to voice, piano, guitar, and percussion. Sing in tune with a pleasing quality and adequate volume both with accompaniment and acapella.


## Related Links

Music Therapy, BM Program Page (https://www.sru.edu/academics/ majors-and-minors/music-therapy/)

Music Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/music/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 3.0 or higher
Overall GPA: 2.0 or higher

| Summary* |  |
| :--- | ---: |
| Code $\quad$ Title | Hours |
| Rock Studies Requirements | 42 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major/Concentration Requirements | 83 |
| *All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |

Select one of the following: 3

| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |

Integrated Inquiry
Creative and Aesthetic Inquiry
Select one of the following:

| MUSI 114-414 | Symphonic Wind Ensemble |
| :---: | :--- |
| MUSI 115-415 | Concert Choir |
| MUSI 116-416 | Women's Choir |
| MUSI 118-418 | Marching Pride |
| MUSI 119-419 | Concert Band |
| MUSI 121-421 | Orchestra |
| Humanities Inquiry |  |


| Select 3 Credits | 378) | 3 |
| :---: | :---: | :---: |
| Social Science Inquiry |  |  |
| PSYC 105 | Introduction to Psychology | 3 |
| Natural Sciences Inquiry |  |  |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| or BIOL 217 | Anatomy and Physiology II with Lab |  |
| or BIOL 110 | The Human Body. Fundamentals of Physiology |  |


| Physical Sciences Inquiry |  |
| :--- | :--- |
| SCI $102 \quad$ Understanding the Physical World |  |

Subtotal 15

| Additional Rock Studies Requirements (12 Credits) |  |
| :--- | :--- | :--- |
| SPED 121 | Overview of Special Education |
| or SPED 122 | Low Incidence Disabilities |$\quad 30$


| GNDR 415 |  |
| :--- | :--- |
| HONR 492 | Feminist Perspectives in the Disciplines |
| Total Hours |  |
| 1 | Innovation for Positive Change |
| Course offered in multiple subjects; cannot take course in first major <br> subject. |  |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major/Concentration Requirements

- 42 major credits must be taken at SRU or PASSHE
- 42 major credits must be taken at the 300 level or above


## Code Title Hours

## Required Music Courses

Students must earn a ' C ' or higher in Musicianship Skills and
Music Theory courses and in Functional Guitar ${ }^{1}$
Select one of the following: 1-2

| MUSI 133 | Class Voice I (BGRPXSVW) ${ }^{2}$ |  |
| :---: | :---: | :---: |
| MUSI 299 | Diction for Singers (V) ${ }^{2}$ |  |
| MUSI 134 | Voice Methods ${ }^{2}$ | 1 |
| MUSI 137 | Functional Guitar for Music Therapy ${ }^{2.3}$ | 1 |
| MUSI 138 | Functional Guitar for Music Therapy II ${ }^{2,3}$ | 1 |
| MUSI 151 | Music Theory and Analysis I ${ }^{\text {2,3 }}$ | 2 |
| MUSI 154 | Musicianship Skills I ${ }^{2,3}$ | 1 |
| MUSI 206 | Fundamentals of Conducting ${ }^{2}$ | 1 |
| MUSI 247 | Percussion Methods ${ }^{2,3}$ | 1-2 |
| MUSI 253 | Music Theory and Analysis II ${ }^{2,3}$ | 2 |
| MUSI 254 | Music Theory and Analysis III ${ }^{\text {2,3 }}$ | 2 |
| MUSI 255 | Music Theory and Analysis IV ${ }^{2,3}$ | 2 |
| MUSI 256 | Musicianship Skills II ${ }^{2,3}$ | 1 |
| MUSI 257 | Musicianship Skills III ${ }^{2,3}$ | 1 |
| MUSI 258 | Musicianship Skills IV ${ }^{2,3}$ | 1 |


| MUSI 350 | Computer Technology in Music $^{2}$ | 2 |
| :--- | :--- | ---: |
| MUSI 351 | Arranging \& Orchestration ${ }^{2}$ | 2 |
| MUSI 359 | History of Music I ${ }^{2,3}$ | 3 |
| MUSI 360 | Keyboard Improvisation $^{2}$ | 1 |
| MUSI 361 | Instrumental Improvisation $^{2}$ | 1 |
| MUSI 373 | History of Music II $^{2}$ | 3 |
| MUSI 473 | History of Music III $^{2}$ | 3 |
| Subtotal |  | $33-35$ |

## Required Music Therapy Courses

Students must earn a ' C ' grade or higher in all music therapy courses

| MUSI 127 | Orientation to Music Therapy ${ }^{\text {2,3 }}$ | 2 |
| :---: | :---: | :---: |
| MUSI 199 | Fundamental Skills in Music Therapy ${ }^{\text {2,3 }}$ | 2 |
| MUSI 228 | Therapeutic Musical Strategies ${ }^{2,3}$ | 2 |
| MUSI 229 | Clinical Integration ${ }^{\text {2,3 }}$ | 1 |
| MUSI 230 | Clinical Integration ${ }^{\text {2,3 }}$ | 1 |
| MUSI 236 | Music Therapy Assessment, Measurement and Evaluation ${ }^{2,3,5}$ | 2 |
| MUSI 312 | Music Therapy for Children ${ }^{2,3,5}$ | 3 |
| MUSI 327 | Psychology of Music ${ }^{\text {2,3,5 }}$ | 3 |
| MUSI 329 | Clinical Integration ${ }^{2,3}$ | 1 |
| MUSI 330 | Clinical Integration ${ }^{2,3}$ | 1 |
| MUSI 428 | Music Therapy Advanced Topics ${ }^{\text {2,3,5 }}$ | 3 |
| MUSI 432 | Clinical Integration ${ }^{2,3}$ | 1 |
| MUSI 433 | Clinical Integration ${ }^{2,3}$ | 1 |
| MUSI 440 | Music Therapy for Adult Clients ${ }^{2,3,5}$ | 3 |
| Subtotal |  | 26 |

## Additional Requirements

Required Courses Outside of Major Department
PSYC 276 Introduction to Abnormal Psychology ${ }^{2} 3$

Subtotal

## Major Applied - Must all be in same instrument

Students must earn a "C" or better in each semester of applied major study. Four credits at the $300+$ level are required.
Select one of the following:

| MUSI 179 | Applied Music ${ }^{2}$ |
| :---: | :---: |
| MUSI 181 | Applied Voice ${ }^{2}$ |
| MUSI 182 | Applied Strings (Violin, Viola, Cello, Bass, Guitar) ${ }^{2}$ |
| MUSI 183 | Applied Brass (Trumpet, Horn, Trombone, Tuba, Euphonium) ${ }^{2}$ |
| MUSI 184 | Applied Woodwinds (Oboe, Clarinet, Bassoon, Flute, Saxophone) ${ }^{2}$ |
| MUSI 185 | Applied Percussion ${ }^{2}$ |

Select one of the following:
MUSI 279 Applied Piano ${ }^{2}$
MUSI 281 Applied Voice ${ }^{2}$
MUSI 282 Applied Strings (Violin, Viola, Cello, Bass, Guitar) ${ }^{2}$
MUSI 283 Applied Brass (Trumpet, Horn, Trombone, Tuba, Euphonium) ${ }^{2}$
MUSI 284 Applied Woodwinds (Oboe, Clarinet, Bassoon, Flute, Saxophone) ${ }^{2}$
MUSI 285 Applied Percussion ${ }^{2}$

| Select one of the following: |  |
| :--- | :--- |
| MUSI 379 | Applied Piano ${ }^{2}$ |
| MUSI 381 | Applied Voice ${ }^{2}$ |
| MUSI 382 | Applied Strings (Violin, Viola, Cello, Bass, <br> Guitar) |
| MUSI 383 | Applied Brass (Trumpet, Horn, Trombone, <br> Tuba, Euphonium) |
| MUSI 384 | Applied Woodwinds (Oboe, Clarinet, <br> Bassoon, Flute, Saxophone) ${ }^{2}$ |
| MUSI 385 | Applied Percussion ${ }^{2}$ |

Select one of the following:

| MUSI 479 | Applied Piano $^{2}$ |
| :--- | :--- |
| MUSI 481 | Applied Voice ${ }^{2}$ |
| MUSI 482 | Applied Strings (Violin, Viola, Cello, Bass, <br> Guitar) |
| MUSI 483 | Applied Brass (Trumpet, Horn, Trombone, <br> Tuba, Euphonium) |
| MUSI 484 | Applied Woodwinds (Oboe, Clarinet, <br> Bassoon, Flute, Saxophone) |
| MUSI 485 | Applied Percussion ${ }^{2}$ |

Subtotal

## Minor Applied

Select one of the following based on instrument: 4
Voice and Instrumental Majors Only
Select four credits of the following:

| MUSI 131 | Class Piano I |
| :---: | :--- |
| \& MUSI 132 | and Class Piano II |
| \& MUSI 234 | and Class Piano III |
| \& MUSI 235 | and Class Piano IV ${ }^{2,3}$ |
| MUSI 179-479 | Applied Piano 2,3 |
| Piano Majors Only ${ }^{6}$ |  |

Class Piano cannot be counted toward the minor applied. Piano majors must select another instrument. Students must earn a ' C ' or better each semester to move on to the next level.

Select four credits:

| MUSI 181-481 | Applied Voice ${ }^{2}$ |
| :--- | :--- |
| MUSI 182-482 | Applied Strings (Violin, Viola, Cello, Bass) |
| MUSI 183-483 | Applied Brass (Trumpet, Horn, Trombone, <br> Tuba, Euphonium) $^{2}$ |
| MUSI 184-484 | Applied Woodwinds (Oboe, Clarinet, <br> Bassoon, Flute, Saxophone) |
| MUSI 185-485 | Applied Percussion ${ }^{2}$ |

## Large Ensemble Participation

Four semesters must be at the 300+ level (4 credits over 7 semesters) Students must earn a 'C' or better in each semester to satisfy this requirement.
Select one of the following:

| MUSI 114 | Symphonic Wind Ensemble (BRXW) |
| :--- | :--- |


| MUSI 214 | Symphonic Wind Ensemble (BRXW) ${ }^{4}$ |  |
| :---: | :---: | :---: |
| MUSI 215 | Concert Choir (VP) ${ }^{4}$ |  |
| MUSI 218 | Marching Pride (BRXW) ${ }^{4}$ |  |
| MUSI 219 | Concert Band (BRXW) ${ }^{4}$ |  |
| MUSI 220 | Jazz Ensemble (XG) ${ }^{4}$ |  |
| MUSI 221 | Orchestra (BRPSW) ${ }^{4}$ |  |
| Select one of the following: |  | 2 |
| MUSI 314 | Symphonic Wind Ensemble (BRXW) ${ }^{4}$ |  |
| MUSI 315 | Concert Choir (VP) ${ }^{4}$ |  |
| MUSI 318 | Marching Pride (BRXW) ${ }^{4}$ |  |
| MUSI 319 | Concert Band (BRXW) ${ }^{4}$ |  |
| MUSI 320 | Jazz Ensemble (XG) ${ }^{4}$ |  |
| MUSI 321 | Orchestra (BRPSW) ${ }^{4}$ |  |
| Select one of the following: |  | 2 |
| MUSI 414 | Symphonic Wind Ensemble (BRXW) ${ }^{4}$ |  |
| MUSI 415 | Concert Choir (VP) ${ }^{4}$ |  |
| MUSI 418 | Marching Pride (BRXW) ${ }^{4}$ |  |
| MUSI 419 | Concert Band (BRXW) ${ }^{4}$ |  |
| MUSI 420 | Jazz Ensemble (XG) ${ }^{4}$ |  |
| MUSI 421 | Orchestra (BRPSW) ${ }^{4}$ |  |
| Subtotal |  | 7 |
| Internship Requirements |  |  |
| MUSI 450 | Music Therapy Internship | 12 |
| Total Hours |  |  |

1 Voice majors -exempt from MUSI 133.
2 Course counts for $50 \%$ of Major requirements and Major GPA
3 Grade of "C" or better required.
4 Students must play in one large ensemble every semester up to 7 semesters.
$B=$ Brass majors
G = Guitar majors
R = Percussion majors
$\mathrm{P}=$ Piano majors
X = Saxophone majors
$\mathrm{S}=$ Strings majors
$\mathrm{V}=$ Voice majors
W = Woodwind majors
5 Successful completion of upper division review prior to registration.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Additional Information: Internship Requirements

- MUSI 450 Music Therapy Internship must be taken for 2 semesters, either for 7 credits for 900 hours ( 1 semester at 6 credits \& 1 semester at 1 credit) or for 12 credits for 1040 hours ( 1 semester at 6 credits \& 1 semester at 6 credits). The total pre-and post-internship music therapy clinical hours must equal at least 1200 hours.
- MT Majors are required to maintain a 2.0 overall GPA and 3.0 major GPA to remain in the program. All MT majors must successfully pass an Upper-Division Review (UDR) and Exit Interview to remain in the program. Failure to maintain the required GPA and/or pass UDR or the


## 2

Exit Interview will mean that a student has to re-apply and re-audition for the MT program.

## Completed Requirement Checklist

## Requirement

- Piano Proficiency
- Music Therapy Skills Proficiency 2
- Music Therapy Skills Proficiency 4
- Music Therapy Upper Division Review
- Music Therapy Portfolio
- Musicianship Health Competency: Can be satisfied by passing the eight Musicianship Health Competency quizzes with scores of $70 \%$ or higher or by earning a C or better in MUSI 203, Musician's Health.
- Music Therapy Exit Interview


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership development
5. Career education and development
6. Internships
7. Field Experiences
8. Student Teaching
9. Volunteering (schools, health care facilities, churches, communities)

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MUSIC THERAPY - BM (5273)
This program is effective as of Fall 2020.
Revised 10.29.2021
UCC 04.13.2021

## Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | :---: |
| First Year |  |  |
| Fall |  |  |
| Major Applied (100 level) | 1 |  |
| Large Ensemble (100 level) - Arts Inquiry \#1 | 1 |  |
| MUSI 127 | Orientation to Music Therapy $^{\text {MUSI } 131}$ | Class Piano I $^{1}$ |


| MUSI 137 | Functional Guitar for Music Therapy I | 1 |
| :---: | :---: | :---: |
| MUSI 151 | Music Theory and Analysis I | 2 |
| MUSI 154 | Musicianship Skills I ${ }^{2}$ | 1 |
| Select one of the following: |  | 1-2 |
| MUSI 133 | Class Voice I (Instrumental majors) |  |
| MUSI 299 | Diction for Singers (Voice majors only) ${ }^{5}$ |  |
| ENGL 102 | Critical Writing | 3 |
| SUBJ 139 | University Seminar ${ }^{3}$ | 3 |
|  | Hours | 16-17 |
| Spring |  |  |
| Major Applied (200 level) |  | 1 |
| Large Ensemble (200 level) - Arts Inquiry \#2 |  | 1 |
| MUSI 132 | Class Piano II ${ }^{1}$ | 1 |
| MUSI 134 | Voice Methods (all majors) | 1 |
| MUSI 138 | Functional Guitar for Music Therapy II | 1 |
| MUSI 199 | Fundamental Skills in Music Therapy | 2 |
| MUSI 236 | Music Therapy Assessment, Measurement and Evaluation | 2 |
| MUSI 253 | Music Theory and Analysis II | 2 |
| MUSI 256 | Musicianship Skills II | 1 |
| PSYC 105 | Introduction to Psychology | 3 |
|  | Hours | 15 |


| Second Year |  |  |
| :--- | :--- | :--- |
| Fall |  |  |
| Major Applied (200 level) | 1 |  |
| Large Ensemble $(200$ level) $)$ | Arts Inquiry \#3 | 1 |
| MUSI 206 | Fundamentals of Conducting | 1 |
| MUSI 228 | Therapeutic Musical Strategies | 2 |
| MUSI 229 | Clinical Integration $^{1}$ |  |
| MUSI 234 | Class Piano III $^{1}$ | 1 |
| MUS 247 |  | 1 |

MUSI 247 Percussion Methods 1-2
MUSI 254 Music Theory and Analysis III 2
MUSI 257 Musicianship Skills III ${ }^{2} \quad 1$
ENGL 104 Critical Reading 3
SPED 121 Overview of Special Education 3

| or SPED 122 | or Low Incidence Disabilities |  |
| :--- | :--- | :--- |
|  | Hours | 17-18 |


| Spring |  |  |
| :--- | :--- | :--- |
| Major Applied (300 level) | 1 |  |
| Major Ensemble (300 level) | 1 |  |
| MUSI 230 | Clinical Integration | 1 |
| MUSI 235 | Class Piano IV ${ }^{1}$ | 1 |
| MUSI 255 | Music Theory and Analysis IV | 2 |
| MUSI 258 | Musicianship Skills IV ${ }^{2}$ | 1 |
| MUSI 361 | Instrumental Improvisation ${ }^{4}$ | 1 |
| PSYC 276 | Introduction to Abnormal Psychology | 3 |
| BIOL 216 | Anatomy and Physiology I with Lab | 3 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |


|  | Hours | 17 |
| :---: | :---: | :---: |
| Third Year |  |  |
| Fall |  |  |
| Major Applied (300 level) |  | 1 |
| Large Ensemble (300 level) |  | 1 |
| MUSI 329 | Clinical Integration | 1 |
| MUSI 350 | Computer Technology in Music | 2 |
| MUSI 359 | History of Music I | 3 |
| MUSI 360 | Keyboard Improvisation ${ }^{4}$ | 1 |
| MUSI 440 | Music Therapy for Adult Clients | 3 |
| $\begin{aligned} & \text { CDEV } 248 \\ & \text { or PSYC } 244 \end{aligned}$ | Human Development and Education or Developmental Psychology | 3 |
| BIOL 110 or BIOL 216 or BIOL 217 | The Human Body. Fundamentals of Structure and Physiology or Anatomy and Physiology I with Lab or Anatomy and Physiology II with Lab | 3 |

## Hours

18
## Spring

Major Applied (400 level) 1
Large Ensemble (400 level) 1
MUSI 312 Music Therapy for Children 3
MUSI $327 \quad$ Psychology of Music 3
MUSI 330 Clinical Integration 1
MUSI 351 Arranging \& Orchestration 2
MUSI 373 History of Music II 3
MUSI 433 Clinical Integration 1
MATH 117 Quantitative Reasoning 3
Music Therapy Exit Interview should be taken during Semester VI 7
Hours 18

## Fourth Year

Fall
Major Applied (400 level) 1

Large Ensemble (400 level) 1
MUSI 428 Music Therapy Advanced Topics 3
MUSI 432 Clinical Integration 1

MUSI 473 History of Music III 3
Humanities Inquiry (p. 1378) 3
Select one of the following: 3

| ENGL 327 | Healthcare Writing |
| :--- | :--- |
| PHIL 325 | Medical/Health Care Ethics |
| GNDR 415 | Feminist Perspectives in the Disciplines |
| HONR 492 | Innovation for Positive Change |
|  | Hours |

## Spring

MUSI $450 \quad$ Music Therapy Internship (1 of $2 \quad 6$
semesters)

## Hours

Summer

| MUSI 450 | Music Therapy Internship (2 of 2 <br> semesters) | $1-6$ |
| :--- | :--- | ---: |
| Hours | $1-6$ |  |
| Total Hours** | $123-130$ |  |

1 Piano Proficiency: Music Therapy students are expected to achieve piano proficiency by the end of Class Piano IV or after their fourth semester of lessons for applied piano majors. Students will not be permitted to start their internship until the proficiency is passed. See guidelines. Piano majors will select another instrument for their minor applied requirement.
Skills Proficiency: Music therapy students must pass all aspects of the Skills Proficiencies before they can take upper-level MT classwork Course offered in multiple subjects; cannot take course in first major subject
4 Music Therapy majors music take both Instrumental Improvisation and Keyboard Improvisation.
5 Voice majors must take Diction for Singers. Class is offered on a rotational basis. Even year program starts take this class during the freshman year. Odd year program starts take this class the sophomore year.
6
7
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 5273
Revised: 09.20.2021

## Music, Bachelor of Arts (BA)

The Bachelor of Arts in Music program at Slippery Rock University provides a general, highly customizable music education that will prepare students for a variety of careers within the music industry. For more information about the BA in Music, please contact Dr. Warren Davidson.

For information regarding auditions for the Music Department, please click here (https://www.sru.edu/academics/colleges-and-departments/ cla/departments/music/auditions/).

## Program Learning Outcomes

- The student will be able to identify and analyze the basic elements of music both visually and aurally including analyzing musical compositions focusing on theoretical and historical aspects.
- The student will be able to identify, explain and appreciate music of different historical periods, cultures, and composers.
- The student will be able to use critical thinking skills and communicate effectively in oral, written, and electronic mode.
- The student will be able to harmonize, transpose, compose, arrange, and orchestrate music utilizing concepts of the basic elements of music as well as instrumental and vocal characteristics.
- The student will be able to demonstrate basic conducting patterns, techniques, expressions, and rehearsal techniques with vocal and instrumental ensembles.
- The student will be able to understand and appreciate the creative process of the arts by exploring creative ways to express feelings, perform music, and select resources and procedures for instruction/ therapy with their students/clients.
- The student will be able to play scales, accompaniments, song repertoire, songs by ear, and transpose melodies with harmonization on the guitar.
- The student will be able to explain and identify jazz concepts and styles and perform clinical instrumental improvisation techniques.
- The student will be able to perform as a member of a musical ensemble demonstrating proper techniques of ensemble performance such as balance and blend, as well as musical and social interaction, and cooperation to achieve shared goals.
- The student will be able to play scales, repertoire, hymns, music therapy literature, accompaniments, songs by ear, and transposed melodies with harmonization on the piano.
- The student will be able to sing or play his/her primary instrument with appropriate techniques of posture, breathing, tone production, articulation/bowing, diction, intonation, expression, and style.
- The student will be able to demonstrate knowledge of instrumental/ vocal repertoire by performing music of different styles, periods, and composers.
- The student will perform in a student recital or performance class every semester.
- The student will be able to identify instrumental/vocal strengths and weaknesses.
- The student will be able to use technology in composition, performance, analysis, teaching and research.


## Related Links

Music, BA Program Page (https://www.sru.edu/academics/majors-andminors/music/)

Music Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/music/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher Overall GPA: 2.0 or higher

## Summary*

Code Title Hours
Rock Studies Requirements ..... 42
Modern Language Requirement ..... 0-9
Other Basic Requirements ..... 0-3
Computer Competency ..... 0-3
Major Requirements ..... 42

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: |  | 3 |


| COMM 200 | Civil Discourse: Theory \& Practice |
| :---: | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |
| Subtotal |  |

Integrated Inquiry
Creative and Aesthetic Inquiry
Select one of the following:

| MUSI 114-414 | Symphonic Wind Ensemble |
| :--- | :--- |
| MUSI 115-415 | Concert Choir |
| MUSI 116-416 | Women's Choir |
| MUSI 118-418 | Marching Pride |
| MUSI 119-419 | Concert Band |
| MUSI 121-421 | Orchestra |
| Humanities Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Social Science Inquiry |  |
| Select 3 Credits (p. 1378) |  |
| Natural Sciences Inquiry |  |
| SCI 101 | Science of Life |
| Physical Sciences Inquiry | 3 |
| SCI 102 | Understanding the Physical World |
| Subtotal | 3 |
| Thematic Thread |  |
| Select 12 Credits (p. 1378) ${ }^{2}$ | 12 |
| Total Hours | 12 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 from at least 3 Categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

| Code | Title |
| :--- | ---: |
| Complete 0-9 credits | Hours |
| Total Hours | $0-9$ |
| $\mathbf{0 - 9}$ |  |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal A |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |

Total Hours

## Major Requirements

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above
Code Title Hours


## Required Music Courses

| MUSI 151 | Music Theory and Analysis I 1,2 | 2 |
| :---: | :---: | :---: |
| MUSI 154 | Musicianship Skills I ${ }^{1,2}$ | 1 |
| MUSI 203 | Musician's Health (non-voice majors) ${ }^{1,2}$ | 1 |
| MUSI 206 | Fundamentals of Conducting ${ }^{1}$ | 1 |
| MUSI 253 | Music Theory and Analysis II 1,2 | 2 |
| MUSI 254 | Music Theory and Analysis III ${ }^{1,2}$ | 2 |
| MUSI 255 | Music Theory and Analysis IV ${ }^{1,2}$ | 2 |
| MUSI 256 | Musicianship Skills II ${ }^{1,2}$ | 1 |
| MUSI 257 | Musicianship Skills III ${ }^{1,2}$ | 1 |
| MUSI 258 | Musicianship Skills IV ${ }^{1,2}$ | 1 |

Select one of the following: 2

| MUSI 350 | Computer Technology in Music ${ }^{1}$ |  |
| :---: | :---: | :---: |
| MUSI 351 | Arranging \& Orchestration ${ }^{1}$ |  |
| MUSI 359 | History of Music ${ }^{1}$ | 3 |
| MUSI 373 | History of Music II ${ }^{1}$ | 3 |
| MUSI 473 | History of Music III ${ }^{1}$ | 3 |
| Subtotal |  | 25 |

Major Applied
Students must earn a "C" or better in each semester of applied major study. Four semesters must be at the $300+$ level. Students must earn a " $C$ " or better to move on to the next level.
Select two credits of the following:

| MUSI 182 | Applied Strings (Violin, Viola, Cello, Bass) ${ }^{1}$ |
| :---: | :---: |
| MUSI 183 | Applied Brass (Trumpet, Horn, Trombone, Tuba, Euphonium) ${ }^{1}$ |
| MUSI 184 | Applied Woodwinds (Oboe, Clarinet, Bassoon, Flute, Saxophone) ${ }^{1}$ |
| MUSI 185 | Applied Percussion ${ }^{1}$ |
| Select two credits of the following: |  |
| MUSI 279 | Applied Piano ${ }^{1}$ |
| MUSI 281 | Applied Voice ${ }^{1}$ |
| MUSI 282 | Applied Strings (Violin, Viola, Cello, Bass) ${ }^{1}$ |
| MUSI 283 | Applied Brass (Trumpet, Horn, Trombone, Tuba, Euphonium $)^{1}$ |
| MUSI 284 | Applied Woodwinds (Oboe, Clarinet, Bassoon, Flute, Saxophone) ${ }^{1}$ |
| MUSI 285 | Applied Percussion ${ }^{1}$ |
| Select two credits of the following: |  |
| MUSI 379 | Applied Piano ${ }^{1}$ |
| MUSI 381 | Applied Voice ${ }^{1}$ |
| MUSI 382 | Applied Strings (Violin, Viola, Cello, Bass) ${ }^{1}$ |
| MUSI 383 | Applied Brass (Trumpet, Horn, Trombone, Tuba, Euphonium) ${ }^{1}$ |
| MUSI 384 | Applied Woodwinds (Oboe, Clarinet, Bassoon, Flute, Saxophone) ${ }^{1}$ |
| MUSI 385 | Applied Percussion ${ }^{1}$ |
| Select two credits of the following: |  |
| MUSI 479 | Applied Piano ${ }^{1}$ |
| MUSI 481 | Applied Voice ${ }^{1}$ |
| MUSI 482 | Applied Strings (Violin, Viola, Cello, Bass) ${ }^{1}$ |
| MUSI 483 | Applied Brass (Trumpet, Horn, Trombone, Tuba, Euphonium $)^{1}$ |
| MUSI 484 | Applied Woodwinds (Oboe, Clarinet, Bassoon, Flute, Saxophone) ${ }^{1}$ |
| MUSI 485 | Applied Percussion ${ }^{1}$ |
| Subtotal |  |

Large Ensemble Courses
Four semesters must be at the 300+ level. The student must earn a " $C$ " or better in each semester to satisfy this requirement.

Select one of the following:

| MUSI 114 | Symphonic Wind Ensemble (BRXWP) |
| :--- | :--- |
| MUSI 115 | Concert Choir (VPG) |
| MUSI 118 | Marching Pride (BRXWGP) |
| MUSI 11,3 $^{1,3}$ | Concert Band (BRXWP) $^{1,3}$ |
| MUSI 120 | Jazz Ensemble (XGPBW) |
| MUSI 121 | Orchestra (BRPSW) |

Select one of the following:

| MUSI 214 | Symphonic Wind Ensemble (BRXWP) |
| :--- | :--- |
| MUSI 215 | Concert Choir (VPG) $^{1,3}$ |
| MUSI 218 | Marching Pride (BRXWGP) |
| MUSI 219 | Concert Band (BRXWP) ${ }^{1,3}$ |
| MUSI 220 | Jazz Ensemble (XGPBW) |
| MUSI 221 | Orchestra (BRPSW) |

Select one of the following:
MUSI 314 Symphonic Wind Ensemble (BRXWP) 1,3
MUSI 315 Concert Choir (VPG) ${ }^{1,3}$

| MUSI 318 | Marching Pride (BRXWGP) ${ }^{1,3}$ |
| :--- | :--- |
| MUSI 319 | Concert Band (BRXWP) |
| MUSI 320 | Jazz Ensemble (XGPBW) |
| MUSI 321 | Orchestra (BRPSW) |
| 1,3 |  |

Select one of the following: 2

| MUSI 414 | Symphonic Wind Ensemble (BRXWP) |
| :--- | :--- |
| MUSI 415 | Concert Choir (VPG) 1,3 |
| MUSI 418 | Marching Pride (BRXWGP) |
| MUSI 419 | Concert Band (BRXWP) ${ }^{1,3}$ |
| MUSI 420 | Jazz Ensemble (XGPBW) |
| MUSI 421 | Orchestra (BRPSW) |

Subtotal 5

Required Music Electives - Voice Majors Only
MUSI 299 Diction for Singers ${ }^{1}$ 2
MUSI 399 Diction for Singers II $^{1} 2$
Subtotal 4
Total Hours ..... 42

1 Course counts for $50 \%$ of Major requirements and Major GPA
2 Grade of "C" or better must be earned in this course.
3 Students must play in one large ensemble every semester up to 8 semesters.
$B=$ Brass majors
G = Guitar majors
R = Percussion majors
P = Piano majors
X = Saxophone majors
$S=$ Strings majors
$\mathrm{V}=$ Voice majors
W = Woodwind majors

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Recommended Electives

| Code | Title | Hours |
| :--- | :--- | ---: |
| MUSI 131 | Class Piano I $^{1}$ | 1 |
| MUSI 132 | Class Piano II $^{1}$ | 1 |
| MUSI 234 | Class Piano III $^{1}$ | 1 |
| MUSI 235 | Class Piano IV $^{1}$ | 1 |
| MUSI 179-479 | Applied Piano $^{1}$ | $1-4$ |
| MUSI 301 | Women and Music $^{\text {Keyboard Improvisation }}$ | 3 |
| MUSI 360 | Instrumental Improvisation $^{\text {or MUSI 361 }}$ | Applied Recital |
| MUSI 499 | Aditional Applied Minor | 1 |
| MUSI 300/400 level | 1-4 |  |

1 Grade of "C" or better must be earned in this course.

## Completed Requirement Checklist

## Requirement Description

- Musicianship Health Competency: Can be satisfied by passing the eight Musicianship Health Competency quizzes with scores of $70 \%$ or higher OR by earning a C or better in MUSI 203, Musician's Health.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership development
5. Career education and development
6. Internships
7. Field Experiences
8. Student Teaching
9. Volunteering (schools, health care facilities, churches, communities)

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MUSIC - BA (5 53)
This program is effective as of Fall 2019.
Revised 10.28.2021
UCC 3.26.2019

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| Major Applied - 100 level |  | 1 |
| Major Ensemble - 100 level (Arts Inquiry 1) |  | 1 |
| MUSI 151 | Music Theory and Analysis I (F) | 2 |
| MUSI 154 | Musicianship Skills I (F) | 1 |
| Select one of the following: |  | 1 |
| Music Elective |  |  |
| MUSI 29 | Diction for Singers (voice majors only) (F) ${ }^{1}$ |  |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar | 1 |
| Integrated Inquiry/Thread |  | 3 |
| SUBJ 139 | University Seminar ${ }^{2}$ | 3 |
|  | Hours | 16 |
| Spring |  |  |
| Major Applied - 100 level |  | 1 |
| Major Ensemble - 100 level (Arts Inquiry 2) |  | 1 |
| MUSI 203 | Musician's Health | 1 |
| MUSI 253 | Music Theory and Analysis II (S) | 2 |
| MUSI 256 | Musicianship Skills II (S) | 1 |


| Select one of the following: |  |  |
| :---: | :---: | :---: |
| Music Elective |  |  |
| MUSI 399 | Diction for Singers II (voice majors 1 |  |
| MATH 117 | Quantitative Reasoning | 3 |
| Integrated Inquiry/Thread |  |  |
| Free Elective |  |  |
|  | Hours | 16 |
| Second Year |  |  |
| Fall |  |  |
| Major Applied - 200 level |  | 1 |
| Major Ensemble - 200 level (Arts Inquiry 3) |  | 1 |
| MUSI 254 | Music Theory and Analysis III (F) | 2 |
| MUSI 257 | Musicianship Skills III (F) | 1 |
| Select one of the following: |  | 3 |
| COMM 200 Civil Discourse: Theory \& Practice | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Rock Studies |  | 3 |
| Foreign Language (101)/Free Elective ${ }^{3}$ |  | 3 |
| Declare a Thematic Thread |  |  |
| Hours |  | 14 |
| Spring |  |  |
| Major Applied - 200 level |  | 1 |
| Major Ensemble - 200 Level |  | 1 |
| MUSI 255 | Music Theory and Analysis IV (S) | 2 |
| MUSI 258 | Musicianship Skills IV (S) | 1 |
| ENGL 104 | Critical Reading | 3 |
| Foreign Language (102)/ Free Elective ${ }^{3}$ |  | 3 |
| Free Elective |  | 1 |
| Advanced Standing Review scheduled at the completion of 60 credits |  |  |
| Hours |  | 12 |
| Third Year |  |  |
| Fall |  |  |
| Major Applied - 300 level |  | 1 |
| Major Ensemble - 300 level |  | 1 |
| MUSI 359 | History of Music I | 3 |
| Select one of the following: |  | 0-2 |
| MUSI 350 | Computer Technology in Music (F) |  |
| MUSI 351 | Arranging \& Orchestration (S) |  |
| Rock Studies |  | 3 |
| Foreign Language (103)/Free Elective ${ }^{3}$ |  | 3 |
| Free Elective |  | 3 |
|  | Hours |  |
| Spring |  |  |
| Major Applied - 300 level |  | 1 |
| Major Ensemble - 300 level |  | 1 |
| MUSI 373 | History of Music II | 3 |
| Select one of the following: |  | 0-2 |
| MUSI 350 | Computer Technology in Music (F) |  |
| MUSI 351 | Arranging \& Orchestration (S) |  |


| Rock Studies | 3 |
| :---: | :---: |
| Integrated Inquiry/Thread | 3 |
| Free Elective | 3 |
| Hours | 14-16 |
| Fourth Year |  |
| Fall |  |
| Major Applied - 400 level | 1 |
| Large Ensemble - 400 level | 1 |
| MUSI 206 Fundamentals of Conducting | 1 |
| MUSI 431 Pedagogy | 1 |
| MUSI 473 History of Music III | 3 |
| Music Electives | 3 |
| Integrated Inquiry/Thread | 3 |
| Hours | 13 |
| Spring |  |
| Major Applied - 400 level | 1 |
| Major Ensemble - 400 level | 1 |
| Rock Studies | 3 |
| Free Electives | 6 |
| Integrated Inquiry/Thread | 3 |
| Hours | 14 |
| Total Hours** | 113-117 |

1 All voice majors must take Diction for Singers I (MUSI 299) and II (MUSI 399). These classes will be offered on a rotational basis. If you begin your program in an even year you will take these classes in your freshmen year. If you begin your program in an odd year you will take them in your sophomore year.
2
Course offered in multiple subjects; cannot take course in first major subject
3
All candidates for the Bachelor of Arts degree must demonstrate competency in a modern language at the 103 level through course work or placement tests.
4 Student will take either Computer Technology in Music or Arranging/ Orchestration.

* Students are encouraged to take INDS 101 as a Free Elective.

5 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/ ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UldNTi4u)to declare a thread.

Major Code: 553
Revised: 03.2020
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Music, Minor

25 Credit Hours

The Minor in Music is designed for the non-music major with a music background to explore a variety of music subjects including music theory, music skills, music history, ensembles, music and free electives, and applied music lessons. Students must pass an audition on their main instrument to be accepted into this program.

To access Minor Requirements, please view the Curriculum Guide tab.
For information regarding auditions for the Music Department, please click here (https://www.sru.edu/academics/colleges-and-departments/ cla/departments/music/auditions/).

## Related Links

Music, Minor Program Page (https://www.sru.edu/academics/majors-and-minors/music/)

Music Department Page (https://www.sru.edu/academics/colleges-anddepartments/cla/departments/music/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.00 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Music Theory Courses |  |  |
| MUSI 151 | Music Theory and Analysis I | 2 |
| MUSI 154 | Musicianship Skills I | 1 |
| MUSI 253 | Music Theory and Analysis II | 2 |
| MUSI 256 | Musicianship Skills II | 1 |
| Required Music History Courses |  |  |
| MUSI 359 | History of Music I | 3 |
| or MUSI 373 | History of Music II |  |

## Applied Lessons ( $1 / 2$ hour each week)

Any of the applied lessons approved during student's audition 4

## Ensemble

An ensemble is selected according to a student's Major applied
area.
Select three credits of the following: 3

| MUSI 114-414 | Symphonic Wind Ensemble |
| :--- | :--- |
| MUSI 115-415 | Concert, Choir |
| MUSI 117-417 | Chamber Singers |
| MUSI 118-418 | Marching Pride |
| MUSI 119-419 | Concert Band |
| MUSI 120-420 | Jazz Ensemble |
| MUSI 121-421 | Orchestra |
| MUSI 123-423 | Brass Ensemble |
| Electives |  |

Select any two MUSI courses 300 level or above

## Free Electives

| Select three credits of MUSI courses in Music Major series ${ }^{1}$ | 3 |
| :--- | ---: |
| Total Hours | 25 |

1 Except for MUSI 101, MUSI 102, MUSI 104, MUSI 105, MUSI 106, MUSI 107, MUSI 201

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN MUSIC (56A)
Revised 04.03.2020

## Nonprofit Management, Empowerment and Diversity Studies

\(\left.$$
\begin{array}{llc}\text { Chair } & \text { Secretary } & \text { Location }\end{array}
$$ \begin{array}{l}Department <br>

Phone\end{array}\right]\)| Ms. Alice Del | Jennifer Massella 200 Spotts World | $724-738-4192$ |
| :--- | :---: | :--- |
| Vecchio | Culture Building |  |

## Faculty

Jennifer Bindernagel
Instructor
Nonprofit Mgt, Empower\&Div Stu
M.S.W., University of Pittsburgh
B.S., Slippery Rock University

## Mustafa Casson

Assistant Professor
Nonprofit Mgt, Empower\&Div Stu
Ph.D., University of Washington
M.A., University of Washington
B.A., Grinell College

## Alice Del Vecchio

Assistant Professor
Nonprofit Mgt, Empower\&Div Stu
M.P.A., Sangamon State University
B.A., Lakeland College

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M.A., Cleveland State University
B.A., Butler University

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M.A., California State University (Chico)
B.A., California State University (Chico)

## Maria Montaro

Instructor
Nonprofit Mgt, Empower\&Div Stu

## Matthew Zarit

Instructor
Nonprofit Mgt, Empower\&Div Stu
Ph.D., University of Pittsburgh
M.A., University of Pittsburgh
M.S., Carnegie Mellon University
B.A., Syracuse University

## Programs

All first-year students who enter SRU in the Summer and Fall terms of 2019 and after will follow Rock Studies. Students who entered SRU before Spring 2019 will follow Liberal Studies. All new transfer students beginning Summer 2019 and after will follow Liberal Studies. We anticipate that transfer students will begin to enter under Rock Studies during the Summer/Fall term of 2021.

## Majors

- Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Anthropology (p. 982)
- Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Cognitive Science (p. 983)
- Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Cultural Area Studies (p. 985)
- Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Gender and Diversity Studies (p. 987)
- Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Leadership Studies (p. 989)
- Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Leadership Studies - Online Degree Completion Program (p. 991)
- Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Liberal Arts (p. 992)
- Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Liberal Arts - Online Degree Completion Program (p. 994)
- Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Philanthropy and Nonprofit Management (p. 996)
- Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Philanthropy and Nonprofit Management - Online Degree Completion Program (p. 997)
- Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Sociology (p. 999)


## Minors

- Anthropology, Minor (p. 978)
- Asian Studies, Minor (p. 979)
- Gender Studies, Minor (p. 980)
- Philanthropy and Nonprofit Management, Minor (p. 1001)
- Sociology, Minor (p. 1002)


## Certificates

- Diversity and Inclusion, Certificate (p. 980)
- Hispanic Serving Non-Profit Organizations, Certificate (p. 981)
- Managing LGBTQ+ Focused Nonprofit Organizations, Certificate (p. 1000)
- Philanthropy and Non-Profit Management, Certificate (p. 1001)
- Re-Entry Nonprofit Organization, Certificate (p. 1002)
- Writing for the Nonprofit Sector, Certificate (p. 1003)


## Courses <br> GNDR COURSES

## GNDR 115 - Introduction to Gender Studies

Introduction to Gender Studies is an interdisciplinary course that offers a foundation for an intersectional analyses of gender within the context of systems and structures of power and oppression.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Transfer Thread Completion Course

## GNDR 120 - Introduction to the Study of Masculinities

This course proposes to introduce and explore the topic of masculinity as a subject for critical study. In the course, students will read about and discuss how masculinities are constructed, presented and reproduced in media and popular culture. This course is meant for and open to everyone interested in taking a critical approach to the study of gender in societies, with specific focus on how (especially american) masculinities shape and are shaped by identity, culture, media, war, politics and economics.

Credits: 3
Term(s) Typically Offered: Offered Summer Terms
Thematic Thread(s): Gender and Diversity, Transfer Thread Completion Course

## GNDR 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## GNDR 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
GNDR 195 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## Credits: 1-6

Term(s) Typically Offered: Offered as Needed

## GNDR 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
GNDR 280 - Introduction to Disability Studies
An introduction to the field of Disability Studies, which rejects medical paradigms and instead analyzes disability as a social, cultural and ideological phenomenon, with an intersectional and interdisciplinary focus on gender, race and socioeconomic status.

## Credits: 3

## GNDR 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## GNDR 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## GNDR 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## GNDR 340 - Applied Queer Studies

An introduction to the field of queer studies with an applied focus (on gender, race, disability, age, ethnicity, transactional issues) in an intersectional and interdisciplinary context. The course analyzes the historical, cultural, political and discursive production of LGBTQAI+ identities, heteronormativity as a form of control, and LGBTQAl+ activism and advocacy.

Prerequisite: GNDR $115^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .

## Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.

## GNDR 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.
GNDR 395-Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GNDR 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GNDR 400-Gender Studies and Porn Culture

Integrating feminist, sociological, media, marketing, neurological, and philosophical perspectives, the course analyzes the social implications of porn consumption, porn production and methods of porn distribution, including technological developments (for example, 3D software development and the use of artificial intelligence in sex dolls). While gender organizes the analytic approaches of the course, it considers other embodied and intersectional identities as well.

Prerequisite: GNDR $115^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

## GNDR 415 - Feminist Perspectives in the Disciplines

This course will explore feminist approaches to pedagogy and research in the humanities, social sciences, and natural sciences, highlighting how such approaches reshape and redirect the ways knowledge is constructed as well as the attendant, transformed results.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Gender and Diversity, Transfer Thread Completion

## Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GNDR 450 - Gender Studies Internship

Professional experiences, such as working with the Girl Scouts or state National Organization for Women (NOW), or working in a women's center or abuse/sexual assault center, that will allow students to either apply or function within a feminist framework to understand the complexity of women's lives and contribute to women's opportunities.

Credits: 1-12
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GNDR 490 - Independent Study

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## GNDR 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GNDR 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP Courses

INDP 102- Introduction to Interdisciplinary Studies
Developing a critical lens to engage in cultural studies through interdisciplinary perspectives with a specific focus on cultural diversity.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms

## INDP 103 - Contemporary Social Problems

An analysis of major social problems confronting modern society.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Building a Healthy Society, Global Citizenship, Comparative Perspectives of Justice \& Society, Demystifying Crime \& Justice, Fighting Social Problems, The Future, Gender and Diversity, Revolutions, Transfer Thread Completion Course

## INDP 106 - Race and Ethnic Diversity in the USA

An introduction to racial and ethnic diversity in the U.S.A., with focus on trends in immigration, demographics, socio-cultural dynamics and issues, past and present.

Credits: 3
Term(s) Typically Offered: Offered Spring \& Summer Terms
Thematic Thread(s): African-American Studies, Being American
Comparative Perspectives of Justice \& Society, Civil Rights \& Social
Movements, Transfer Thread Completion Course, Who Do We Think We Are

INDP 139- University Seminar
University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute

## INDP 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## INDP 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## INDP 198-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## INDP 201 - Principles of Sociology

Basic concepts of social behavior, group structure and group processes.

Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): Transfer Thread Completion Course

## INDP 202 - Introduction to Anthropology

Human beings as cultural and biological entities. Emphasis is on primitive and peasant societies.

## INDP 211 - Biological Anthropology

This course provides an understanding of the place of the human species within the biological system. It stresses the concepts and processes of evolution and emphasizes the study of human and non-human primates as seen in the fossil record as well as through study of genetics and behavior.

Credits: 3
Thematic Thread(s): Body and Self, Transfer Thread Completion Course, Who Do We Think We Are

## INDP 212 - Archaeology/World Prehistory

A discussion of culture history around the world based on archaeological evidence. It begins with early signs of culture called the Paleolithic or Old Stone Age of Africa, Asia, Europe and America (where it is named Paleo Indian), and concludes with the rise of complex, stratified cultures based on agriculture in the Middle East, America, and East Asia.

Credits: 3
Thematic Thread(s): Transfer Thread Completion Course, Who Do We Think We Are

## INDP 226 - Population and Society

Sociological/anthropological analysis of selected population trends, problems and controversies in the contemporary world-both literate and non-literate.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Thematic Thread(s): Global Citizenship, Revolutions, Sustainable International Development, Transfer Thread Completion Course

## INDP 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
INDP 295 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## INDP 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
INDP 304 - Urban Sociology
Sociological aspects of urban life. Includes metropolitan areas and small cities.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

Credits: 3
Term(s) Typically Offered: Offered Every Term

## INDP 309 - Health and Society

An analysis of health services, public policy and institutional relations. Note: This course is taught from either a sociological or anthropological viewpoint. The student should check with the instructor to determine the approach being taken in the current offering.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Building a Healthy Society, Food, Wellness \&
Environment Across Cultures, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 310 - Cultural Area Studies

Anthropology course dealing with sociocultural phenomena of specific
cultural areas. Topics to be announced. Course may be repeated one time in a different area.

Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): Global Citizenship, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 312-Archaeology Techniques and Laboratory

A course designed to introduce students to basic techniques in the field and to provide laboratory experience in working with field materials.
Prerequisite: INDP $202{ }^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 317-Statistics for the Social Sciences

An enrichment course that introduces statistical concepts and techniques of data analysis with computer application to analyze contemporary social issues.

Credits: 3
Term(s) Typically Offered: Offered Every Term
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 318 - Research Methods in Interdisciplinary Studies

Major methods and procedures used in interedisciplinary studies, including anthropology, cultural area studies, gender and diversity studies, leadership studies, nonprofit management and sociology.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 319 - Anthropology Methods

Data gathering techniques and evaluation of anthropological phenomena from tribal, peasant and industrial societies.
Prerequisites: (SWCJ $202^{\mathrm{D}}$ or INDP $202^{\mathrm{D}}$ or PROF $202^{\mathrm{D}}$ ) and (SWCJ $317^{\mathrm{D}}$ or INDP $317^{\mathrm{D}}$ or SOWK $317^{\mathrm{D}}$ or CRIM $317^{\mathrm{D}}$ or PROF $317^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 321 - Minority Groups

An examination of the minority group concept with special emphasis on women, the poor, behavioral and physical minorities. Note: This course is taught from either a sociological or anthropological viewpoint. The student should check with the instructor to determine the approach being taken in the current offering.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Building a Healthy Society, Comparative
Perspectives of Justice \& Society, Civil Rights \& Social Movements,
Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 322 - Archaeology of the Americas

This course introduces the student to the unique intellectual and cultural achievements of the Native Civilizations of Central and South America prior to the arrival of the Spanish. Two thirds of the course concentrates on Mesoamerica, especially the Aztecs and the Maya. One third on South America, with an emphasis on the civilizations of Peru. The variety of cultural developments, including their great time depth, social, political, economic, and artistic achievements as revealed through archaeological exploration, are explored.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms Odd
Thematic Thread(s): Becoming America, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 323 - Deviant Behavior

The subject and nature of deviance with particular emphasis on its relativity and its relationship to social control and social change.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Thematic Thread(s): Comparative Perspectives of Justice \& Society, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 324 - The Family

Comparative perspectives of the family as a universal social institution. Note: This course is taught from either a sociological or anthropological viewpoint. The student should check with the instructor to determine the approach being taken in the current offering.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Transfer Thread Completion Course, Well-Being of Children and Youth
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 326 - Society, Culture and Self

An examination of the relationship between personal characteristics and social environment.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Thematic Thread(s): Being American, Body and Self, Creating Art, Transfer
Thread Completion Course, Who Do We Think We Are
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 327 - Religion and Society

Explores the relationship between religion and society and some of the key issues confronting religion today.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 330-Collective Behavior

An analysis of social movements, publics, crowds, mobs and similar social phenomena.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Thematic Thread(s): Civil Rights \& Social Movements, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 339 - Gender Roles and Society

An examination of gender roles, what they are, how they develop and how they are maintained. An examination of the effects of gender roles on education, occupation, the polity and other institutions as well as the effects of role restrictions of personal relationships. Note: This course is taught from either a sociological or anthropological viewpoint. The student should check with the instructor to determine the approach being taken in the current offering.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms Odd
Thematic Thread(s): Body and Self, Gender and Diversity, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 340 - Social Inequality

Examination of the theoretical and practical implications of economic disparity across diverse populations: class, race, ethnicity and gender.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even, Offered Summer Terms
Thematic Thread(s): African-American Studies, Comparative Perspectives of Justice \& Society, Civil Rights \& Social Movements, Demystifying Crime \& Justice, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 342-Sociology of Aging

Social changes, which accompany aging. Emphasis placed upon how social processes influence patterns of aging and social problems of older people.

Credits: 3
Term(s) Typically Offered: Offered Winter Terms
Thematic Thread(s): Body and Self, Transfer Thread Completion Course Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 348 - Sociology of Organizations

Approaches to the study of the structure and functions of large-scale social organizations.
Prerequisites: INDP $201^{\mathrm{D}}$ or INDP $202{ }^{\mathrm{D}}$ or SWCJ $201^{\mathrm{D}}$ or SWCJ $202^{\mathrm{D}}$ or PROF $201{ }^{\text {D }}$ or PROF $202{ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 360-Issues in Asia; Women in Asian Societies

Students will have an opportunity to gain an in depth understanding of the issues surrounding the roles and status of women in a rapidly changing Asia; from both a historic and a current context. These issues, which are political, religious, economic, health, social justice and legal, among others are vital for women in Asia, their societies as well as this ever globalizing world.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## INDP 401 - Applied Anthropology

Using anthropological concepts and methods, this course explores the role of archaeologists, and physical and cultural anthropologists in understanding and facilitating change in human biological and cultural issues.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 412-Basic Sociological Theory

Historical and modern development of basic concepts of sociology and cultural anthropology.

Prerequisites: (INDP $201^{\text {D }}$ or INDP $202{ }^{\text {D }}$ or SWCJ $201^{\text {D }}$ or SWCJ $202^{\mathrm{D}}$ or PROF $201^{\text {D }}$ or PROF $202^{\mathrm{D}}$ ) and (SWCJ $318^{\mathrm{D}}$ or SWCJ $320^{\mathrm{D}}$ or INDP $318^{\mathrm{D}}$ or INDP $319^{\mathrm{D}}$ or SOWK $318^{\mathrm{D}}$ or CRIM $318^{\mathrm{D}}$ or PROF $201^{\mathrm{D}}$ or PROF $202^{\mathrm{D}}$ or PROF $318^{D}$ or PROF $319^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 450 - Internship

Supervised placement in selected professional agencies.
Credits: 1-12
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 490 - Independent Study

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 499 - Capstone: Applied Interdisciplinary Studies

This seminar is designed to assist students in developing awareness and skills for entry into the career or graduate studies. Students enrolled will participate in career development activities, reflection on the application of their knowledge for a future career and submit a final portfolio project.

Prerequisites: INDP $102^{\text {C }}$ and INDP $318^{\text {D }}$
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.
Enrollment limited to students with department of Nonprofit Mgt, Empower\&Div Stu or Interdisciplinary Programs.

## NLPA Courses

NLPA 120 - Civic Engagement and Community Decision-Making
An introduction to civic engagement in a democratic society with a focus on the complex nature of public policy making and the role each citizen plays in the formation and modification of socially just public policies. Students will gain introductory skills in civil voice, civil discourse, public policy analysis and community mobilizing for social good.

## Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, \& Summer
Thematic Thread(s): Transfer Thread Completion Course

## NLPA 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## NLPA 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## NLPA 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## NLPA 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## NLPA 200 - Empowered to Serve

Planning a career where you will help others? The interdisciplinary approach of this course introduces students to the historical, cultural and ethical context of service; investigates the increase in the number of helping professionals; takes students on a journey of personal empowerment; and offers theories and best practices that prepare them to empower the persons they will serve in their professions. Assigned readings, case studies, service-learning experiences, structured reflection and discussions empower students to understand and develop individual purpose, become lifelong learners, and combine knowledge, skills, values and motivation to make a difference in the lives of those they serve. This course would be especially useful for students seeking careers in helping professions such as animal care and protection, community and public service, counseling, education, health and wellness, human rights, legal and protective services, the military or social services.

Credits: 3
Term(s) Typically Offered: Offered Fall, Spring, \& Summer Thematic Thread(s): 21 st Century Healthcare, Innovation, Entrepreneurship, and Positive Change, Transfer Thread Completion Course, Well-Being of Children and Youth

## NLPA 220 - Introduction to Nonprofit Management

An introduction to the nonprofit sector; emphasis on leadership and decision-making in rapidly growing areas of health and human service, cultural, environmental, educational, charitable, and religious organizations.

Credits: 3
Term(s) Typically Offered: Offered Spring \& Summer Terms Thematic Thread(s): Fighting Social Problems, Innovation, Entrepreneurship, and Positive Change, Leadership Development, Transfer Thread Completion Course, Well-Being of Children and Youth

## NLPA 230 - Introduction to Public Administration

This interdisciplinary and global approach to public administration will explore the theories and best practices employed by public servants to promote the public good through ethical, culturally competent, and efficient and effective service provision. Through case studies and service-learning projects, students will be encouraged to consider a cross sector approach for implementing and evaluating policies and procedures that impact quality of life both domestically and globally. Students will develop a greater understanding of the role public servants have in their lives, develop skills employed by these professionals and explore public service career opportunities.

Credits: 3
Term(s) Typically Offered: Offerings Vary

## NLPA 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## NLPA 295-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## NLPA 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## NLPA 305 - Financial Best Practices for Decision Makers

Emphasizes practical use of accounting information to support decision making by those in fields such as business, sports, resort management, government, education, and not-for-profit. Overview of financial and managerial accounting from a user's perspective, including use and analysis of financial statements, internal control, budget preparation, and cost and revenues behavior patterns. (For non-business majors)

Credits: 3
Term(s) Typically Offered: Offered Fall Terms Odd
Thematic Thread(s): Building a Healthy Society, Innovation, Entrepreneurship, and Positive Change, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## NLPA 320-Community Change and Development

This course surveys the field of community development within the context of community collaboration and civic leadership. Topics include social capital, asset-based community development, sustainable community programs, economic development programs, private/public partnerships, and the shared role of the private, public, nonprofit sectors and everyday citizens in community development.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even
Thematic Thread(s): Building a Healthy Society, Environmental Problems Toolkit, Fighting Social Problems, Innovation, Entrepreneurship, and Positive Change, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
NLPA 325 - Social and Ethical Issues in Philanthropy and Fundraising Resource development, including grant writing and social entrepreneurs, is increasingly important to the future of nonprofit and educational organizations. This course addresses methods for integrating resource development and income generation into an organization's life. Three themes are found in this course: resource development as a management function, resource development as a management process, and issues in resource development.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Building a Healthy Society, Innovation,
Entrepreneurship, and Positive Change, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

NLPA 328 - Program Design and Evaluation in Nonprofit and Governmental Organizations
Effective and efficient programs change lives! This course offers students the strategies and best practices for designing high quality programs, the tools and ethical framework to monitor program delivery, the qualitative and quantitative research skills essential for relevant evaluation and the necessary processes for program elimination, modification and scaling. Through case studies, service-learning projects and other hands-on assignments, students will be challenged to apply concepts to practice including the preparation of SMART objectives, logic models, project timelines, evaluation plans, program reports and recommendations for future programming.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Innovation, Entrepreneurship, and Positive Change,
Transfer Thread Completion Course, Well-Being of Children and Youth
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## NLPA 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## NLPA 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## Credits: 1-6

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## NLPA 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## NLPA 450 - Internship

Supervised placement in selected professional agencies.
Credits: 1-12
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## NLPA 490 - Independent Study

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## NLPA 495-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## NLPA 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Anthropology, Minor ANTHROPOLOGY AT SRU

Through the anthropology curriculum, students will gain skills and experiences in the classroom with real-world application, regardless of career path. Anthropology majors and minors begin the program by taking Introduction to Anthropology, which explores the fundamentals of human evolution, the culture concept and cultural diversity. Each student then designs a complete anthropological curriculum around a specific area of focus (e.g., sociocultural, archaeological, evolutionary, applied) over a period of individualized advisement by taking courses across a range of disciplines. This interdisciplinary degree is designed to enrich students' lives and prepare them for successful careers after graduation.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Anthropology, Minor Program Page (https://www.sru.edu/academics/ majors-and-minors/anthropology/)

Anthropology Department Page (https://www.sru.edu/academics/ majors-and-minors/anthropology/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirements

Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  |  |
| INDP 202 | Introduction to Anthropology | 3 |
| INDP 211 | Biological Anthropology | 3 |
| INDP 212 | Archaeology/World Prehistory | 3 |
| INDP 319 | Anthropology Methods | 3 |
| INDP 401 | Applied Anthropology | 3 |
| Select one of the following: | 3 |  |
| INDP 310 | Cultural Area Studies |  |
| GES 303 | Asia |  |
| GES 308 | Europe |  |
| GES 309 | Africa | $\mathbf{1 8}$ |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN ANTHROPOLOGY (80A)
This program is effective as of Fall 2003
Revised 8-2019

## Asian Studies, Minor

Students from any major can take courses in Asian Studies to fulfill the Diversity/Liberal Studies/Rock Studies Requirement Block such as Asian Literature, which is one of the Core courses required to complete the Asian Studies Minor.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Asian Studies, Minor Program Page (https://www.sru.edu/academics/ majors-and-minors/asian-studies-minor/)

Modern Language and Cultures Department Page (https://www.sru.edu/ academics/colleges-and-departments/cla/departments/modern-languages-and-cultures/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU.
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above).
- A minor shall be no fewer than 18 credits.

| Code <br> Required Course | Title | Hours |
| :--- | :--- | ---: |
| MODL 105 | Introduction to Asian Civilizations |  |
| Core Courses <br> Select three of the following: | 3 |  |
| ENGL 248 | Asian Literature | 9 |
| ENGL 316 | Asian Film |  |
| HIST 376 | Modern Japan |  |
| HIST 381 | East Asian Military Traditions |  |
| HIST 382 | Modern Asian Pacific Rim |  |
| HIST 386 | Modern China |  |
| GES 303 | Asia |  |
| PHIL 343 | Asian Philosophy |  |
| INDP 310 | Cultural Area Studies (Asian Topics Only) |  |
| INDP 360 | Issues in Asia; Women in Asian Societies |  |

Required Third Semester Proficiency
Select three courses from Chinese, Korean, or Japanese of the 9
following:

| CHIN 101 | Chinese Language and Culture I $^{1}$ |
| :--- | :--- |
| CHIN 102 | Chinese Language and Culture II $^{1}$ |
| CHIN 103 | Chinese Language and Culture III $^{1}$ |
| CHIN 202 | Intermediate Chinese I $^{1}$ |
| JAPN 101 | Japanese Language and Culture I $^{1}$ |
| JAPN 102 | Japanese Language and Culture II $^{1}$ |
| JAPN 103 | Japanese Language and Culture III $^{1}$ |
| JAPN 202 | Intermediate Japanese I $^{1}$ |
| KORN 101 | Korean Language and Culture I $^{1}$ |
| KORN 102 | Korean Language and Culture II $^{1}$ |
| KORN 103 | Korean Language and Culture III $^{1}$ |
| KORN 202 | Intermediate Korean I |
| Total Hours |  |

1 A grade of " C " or better is required.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-
earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

Minor in Asian Studies (54C)
This program is effective as of Spring 2019
Revised 8-2019

## Diversity and Inclusion, Certificate

The world that we live in is increasingly characterized by diversity. This certificate is designed to foster an understanding of the historical, political, sociological and legal contexts within the United States and how these contexts impact issues of diversity. In this certificate each of these domains of diversity, and the intersections between them, will be interrogated and deconstructed for their individual effects and examine interrelatedness. This understanding of diversity will foster communication of complex ideas related to equity, teach strategies to negotiate issues of power, and position oneself to embrace inclusion and act as an ally/advocate for people in systematically marginalized groups.

The required credit hours are 15 . Students need to complete the following courses:

- INDP 106 Racial and Ethnic Diversity in the US
- INDP 321 Minority Groups

AND 3 of the following

- GNDR 115 Intro to Gender Studies OR INDP 339 Gender Roles
- GNDR 280 Disability Studies
- GNDR 340Applied Queer Studies
- POLS 375 Women and Politics
- POLS 351 Politics of Race
- POLS 356 Gay \& Lesbian Politics
- PHIL 140 World Religions
- MODL 215: ARAB 215, FREN 215, JAPN 215 or SPAN 215


## Related Links

Diversity and Inclusion, Certificate Page

Interdisciplinary Department Page (https://www.sru.edu/academics/ colleges-and-departments/cla/departments/interdisciplinary-programs/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## CURRICULUM GUIDE

## GPA REQUIREMENT

Certificate GPA: 2.0 or higher

## CERTIFICATE REQUIREMENTS

Code Title Hours

## Course Requirements

INDP 106 Race and Ethnic Diversity in the USA
Hours

| INDP 321 | Minority Groups | 3 |
| :--- | :--- | :--- |
| Select 3 of the following: | 9 |  |
| GNDR 115 | Introduction to Gender Studies |  |
| GNDR 280 | Introduction to Disability Studies |  |
| GNDR 340 | Applied Queer Studies |  |
| INDP 339 | Gender Roles and Society |  |
| POLS 356 | Gay and Lesbian Politics |  |
| POLS 351 | Politics of Race |  |
| POLS 375 | Women and Politics |  |
| PHIL 140 | World Religions |  |
| ARAB 215 | Topics in Arabic Culture |  |
| or FREN 215 | Topics in French and Francophone Culture |  |
| or JAPN 215 | Topics in Japanese Culture |  |
| or SPAN 215 | Topics in Hispanic Culture |  |

Total Hours

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course


## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

CERTIFICATE in Diversity and Inclusion (5DIN)
This program is effective as of Summer 2021.
Revised 07.15.2021
UCC 03.30.2021

## Gender Studies, Minor

To access Minor Requirements, please view the Curriculum Guide tab.
The Gender Studies Program takes an interdisciplinary approach to teaching and learning, with courses in numerous departments: English, EGEO, Psychology, History, and Political Science, among others. Relevant to all majors, a minor in Gender Studies prepares students both to interact in a diverse and increasingly global professional world and to understand how our embodied experiences, while personal and individual, are also culturally shaped. In Gender Studies courses, students analyze power structures, gender identities, and culture to promote social change.

## Related Links

Gender Studies, Minor Program Page (https://www.sru.edu/academics/ majors-and-minors/gender-studies-minor/)

Gender Studies Department Page (https://www.sru.edu/academics/ colleges-and-departments/cla/departments/gender-studies/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

| Code <br> Required Course <br> GNDR 115 | Title | Hours |
| :--- | :--- | ---: |
| Electives |  |  |
| Select five of the following; Six credits must be taken at 300 or |  |  |
| 400 level: |  |  |
| EGEO 368 | Introduction to Gender Studies |  |
| ENGL 243 | Literature of the Women's Movement |  |
| GERO 425 | Women and Aging |  |
| GES 105 | World Regional Geography |  |
| GES 361 | Gender and the Environment |  |
| GNDR 120 | Introduction to the Study of Masculinities |  |
| GNDR 280 | Introduction to Disability Studies |  |
| GNDR 340 | Applied Queer Studies |  |
| GNDR 400 | Gender Studies and Porn Culture |  |
| GNDR 415 | Feminist Perspectives in the Disciplines |  |
| GNDR 450 | Gender Studies Internship |  |
| GNDR 490 | Independent Study |  |
| HIST 313 | U.S. Manhood and Masculinities |  |
| HIST 318 | Gender and Sexuality in European Society |  |
| HIST 319 | History of Women to 1750 |  |
| HLTH 211 | Women's Health Issues |  |
| INDP 339 | Gender Roles and Society |  |
| INDP 360 | Issues in Asia; Women in Asian Societies |  |
| MUSI 301 | Women and Music |  |
| POLS 349 | Utopian Experiments: Issues of Gender and  <br> POLS 356 Power <br> POLS 375 Gay and Lesbian Politics <br> PSYC 300 Psychology of Women, Gender and Culture <br> PSYC 315 Psychology of Sexual and Gender Diversity <br> SPAN 335 Women in Hispanic Literature |  |

## Total Hours

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled

SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN GENDER STUDIES (98E)
This program is effective as of Fall 2020
Revised 8.21.20
UCC 03.24.20

## Hispanic Serving Non-Profit Organizations, Certificate

To access Certificate Requirements, please view the Curriculum Guide tab.

## Related Links

Non-Profit Management Program Page (https://www.sru.edu/academics/ certificates/nonprofit-management-certificate/)

Modern Language and Cultures Department Page (https://www.sru.edu/ academics/colleges-and-departments/cla/departments/modern-languages-and-cultures/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Certificate GPA: 2.0 or higher

## Certificate Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Course Requirements |  |  |
| SPAN 103 | Spanish Language \& Culture III | 3 |
| SPAN 215 | Topics in Hispanic Culture | 3 |
| NLPA 120 | Civic Engagement and Community <br> Decision-Making | 3 |
| NLPA 220 | Introduction to Nonprofit Management | 3 |
| NLPA 320 | Community Change and Development | $\mathbf{3}$ |
| Total Hours |  | $\mathbf{1 5}$ |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

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on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
CERTIFICATE in Hispanic Serving Nonprofit Organizations (5HSN)
This program is effective as of Spring 2019.
Revised 1/15/2019

## Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Anthropology <br> WHAT CAN I DO WITH AN ANTHROPOLOGY DEGREE?

Learn about the world and yourself. Anthropology is a broad field that seeks to understand what it means to be human in all possible ways, from understanding our evolutionary origins to examining our cultural variability. Students can follow their curiosity and study human behavior in the past or present and gain skills in linguistics, cultural studies, critical thinking, writing and analysis that are applicable to careers in academia; the corporate and business world; government; education; historic preservation and archaeology; museums; advocacy; design; market research; international development; and health care.

## Related Links

Interdisciplinary Programs - Anthropology, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/anthropology/)

Interdisciplinary Program Department Page (https://www.sru.edu/ academics/colleges-and-departments/cla/departments/interdisciplinaryprograms/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirments | $0-3$ |
| Computer Competency | $0-3$ |
| Major/Concentration Requirements | 42 |
| Electives | 36 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

Code Title Hours
The Rock
SUBJ 139
University Seminar ${ }^{1}$ 3


## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra | $\mathbf{0 - 3}$ |
| Total Hours |  |  |

## Computer Competency

| Code | Title | Hours |
| :--- | :--- | ---: |
| Demonstrate "computer competency" by one of the following: | $0-3$ |  | | Pass Computer Competency Exam OR |
| :--- | :--- |$\quad$| Select one of the following at SRU or another post-secondary |  |
| :--- | :--- |
| institution: |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |
| CPSC 110 | Computer Concepts |
| CPSC 130 | Introduction to Computing and <br> Programming |

Total Hours

## Major Requirements

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above (Adviser approved courses)
- Courses used in this major may not be used to satisfy ROCK Studies, a minor, or another major's requirements.
- AP, Credit by Exam, CLEP, and institutional credit by exam may count towards the degree to a maximum of 45 credits. Pass/Fail and noncredit courses will not be counted in the major.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Core Courses |  |  |
| Oral and Written Communication |  |  |
| INDP 102 | Introduction to Interdisciplinary Studies | 3 |
| INDP 202 | Introduction to Anthropology ${ }^{1}$ | 3 |
| Interpersonal Skills and Civic Responsibility |  |  |
| Select at least six credits from the following: |  | 6 |
| INDP 106 | Race and Ethnic Diversity in the USA ${ }^{1}$ |  |
| INDP 211 | Biological Anthropology ${ }^{1}$ |  |
| INDP 212 | Archaeology/World Prehistory ${ }^{1}$ |  |
| INDP 310 | Cultural Area Studies ${ }^{1}$ |  |
| Analytical, Quantitative \& Critical Thinking Skills |  |  |
| INDP 317 | Statistics for the Social Sciences ${ }^{1}$ | 3 |
| INDP 318 | Research Methods in Interdisciplinary Studies ${ }^{1}$ | 3 |
| INDP 499 | Capstone: Applied Interdisciplinary Studies | 3 |
| Subtotal |  | 21 |
| Emphasis Area |  |  |
| Select 21 credits that relate to or support the outcomes of one of the following areas: |  | 21 |
| Cultural Anthropology |  |  |
| Archaeology and Biological Anthropology |  |  |
| Applied Anthropology |  |  |
| Subtotal |  | 21 |
| Experiential Learning Activities |  |  |
| Complete 40 hours of experiential learning activities which are approved by the Academic Adviser. Please consult with your Adviser for details of the options available. |  |  |

## Total Hours

1 Course counts for 50\% of Major requirements and Major GPA.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Internships
5. Experiential Learning (Practice experience outside the classroom)

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
INTERDISCIPLINARY PROGRAMS - BS (5198)
Concentration in Anthropology (ANTH)
This program is effective as of Fall 2020
Revised 10.15.20
UCC 03.03.20

## Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Cognitive Science <br> Related Links

Interdisciplinary Programs - Cognitive Science, BS Program Page (https://www.sru.edu/academics/majors-and-minors/cognitive-science-interdisciplinary-programs/)

Interdisciplinary Program Department Page (https://www.sru.edu/ academics/colleges-and-departments/cla/departments/interdisciplinaryprograms/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

Code Title Hours

Rock Studies Requirements 42
Other Basic Requirments 0-3
Computer Competency 0-3
Major/Concentration Requirements 42
Electives 36

* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies Requirements

| Code <br> The Rock | Title | Hours |
| :--- | :--- | ---: |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: | 3 |  |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |

## Integrated Inquiry

Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378)
Humanities Inquiry
Select 3 Credits (p. 1378) 3
Social Science Inquiry
Select 3 Credits (p. 1378) 3
Natural Science Inquiry
SCI $101 \quad$ Science of Life
Physical Science Inquiry
SCI $102 \quad 3$
Subtotal 15

## Thematic Thread

Select 12 Credits $\left(\right.$ p. 1378) ${ }^{2} \quad 12$
Subtotal 12

## Total Hours

1 Course offered in multiple subjects; cannot take course in first major subject.
2 from at least 3 Categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.


| CPSC 130 | Introduction to Computing and <br> Programming |
| :--- | :--- |
| PE 202 | Technology for Wellness |

## Code Title Hours

## Core Courses

Select 18 credits, at least three credits in each of the following 18 areas:
Oral and Written Communication
CSLD 144 Introduction to Cognitive Studies
CSLD 215 Introduction to Consciousness
Interpersonal Skills and Civic Responsibility
CSLD 344 Left and Right Brain: From Neuron to Culture
CSLD $244 \quad$ Artificial Intelligence in Cognitive Studies and Film

CSLD 315 Mindfulness and Brain
Analytical, Quantitative \& Critical Thinking Skills
CSLD 456 Research in Cognitive Science
INDP 317 Statistics for the Social Sciences
INDP 318 Research Methods in Interdisciplinary Studies
Subtotal
Emphasis Area
Select 24 credits from any of the following catagories, must take 24 at least one course from each area:
Mind and Brain

| BIOL 102 | Human Biology |
| :---: | :---: |
| CSLD 344 | Left and Right Brain: From Neuron to Culture |
| PHIL 351 | Philosophy of Natural Science |
| INDP 202 | Introduction to Anthropology |
| INDP 211 | Biological Anthropology |
| CSLD 315 | Mindfulness and Brain |
| Intelligence, Perception and Technology |  |
| CPSC 130 | Introduction to Computing and Programming |
| CSLD 244 | Artificial Intelligence in Cognitive Studies and Film |
| CPSC 146 | Programming Principles |
| ENGL 230 | Introduction to Linguistics and Grammar |
| PHIL 113 | Formal Logic |
| CPSC 300 | Challenges of Computer Technology |

Consciousness, Self and Other

| COMM 217 | Intercultural Communication |
| :--- | :--- |
| CSLD 350 | Multicultural Leadership |
| INDP 326 | Society, Culture and Self |
| CSLD 352 | Self Leadership |
| COMM 314 | Interpersonal Communication |
| PHIL 123 | Ethics |
| INDP 327 | Religion and Society |
| PHIL 343 | Asian Philosophy |
| CSLD 215 | Introduction to Consciousness |

Subtotal

## Experiential Learning Activities

Must complete 40 hours of experiential learning activities which are approved by the Academic Adviser. Please consult with your Adviser for details of the options available.

## Total Hours

1 Course counts for $50 \%$ of Major requirements and Major GPA.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Internships
5. Experiential Learning (Practice experience outside the classroom)

## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions
INTERDISCIPLINARY PROGRAMS - BS (5198)
Concentration in Cognitive Science (COSC)
This program is effective as of Fall 2020.
Revised 10.15.20
UCC 10.15.19

## Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Cultural Area Studies CULTURAL AREA STUDIES AT SRU

The curriculum in this program will provide students the opportunity to connect with other cultures, understand global issues, and correlate what they learn in the classroom to global and local settings. Among the fields studied: history, politics, languages, anthropology, philosophy, the arts and literature. Students will have diverse experiences, and through internships, take part in international travel and study to apply what they've learned to real-world situations. Students can choose to study American studies, Asian studies, European studies, Latin-American studies and Middle East studies. This program is designed to take a multi-disciplinary and integrative approach to learning. Students will learn how societies and cultures develop, grow, change and interact within and between other societies. Cultural sensitivity and literacy, including language skills, are important areas that will be developed through an interdisciplinary curriculum that emphasizes theoretical classroom knowledge that is applied through student faculty research, internships, and practicums, and international travel and study. An integrative research project is a capstone experience required of all students. This project will build upon experiences inside and outside the classroom and integrate classroom theory and application.

## WHAT CAN I DO WITH A CULTURAL AREA STUDIES DEGREE?

With a degree in cultural area studies, students will be well-positioned to embark on a wide variety of careers, including international nongovernmental organizations and international nonprofit agencies, airline and travel, teacher/professor, international law, environmental agencies, business, health and education, diplomatic positions and more.

## Related Links

Interdisciplinary Programs - Cultural Area Studies, BS Program Page (https://www.sru.edu/academics/majors-and-minors/cultural-areastudies/)

Interdisciplinary Program Department Page (https://www.sru.edu/ academics/colleges-and-departments/cla/departments/interdisciplinaryprograms/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirments | $0-3$ |
| Computer Competency | $0-3$ |


| Major/Concentration Requirements | 42 |
| :--- | :--- |
| Flectives | 36 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :---: | :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |

Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378)
Humanities Inquiry
Select 3 Credits (p. 1378) 3
Social Science Inquiry
Select 3 Credits (p. 1378)
Natural Science Inquiry
SCI $101 \quad$ Science of Life
Physical Science Inquiry
SCI $102 \quad$ Understanding the Physical World 3

## Thematic Thread

| Select 12 Credits $(\mathrm{p} .1378)^{2}$ | 12 |
| :--- | :--- |
| Subtotal | 12 |
| Total Hours | $\mathbf{4 2}$ |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 from at least 3 Categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required | minimum SAT or ACT math score OR |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | $\mathbf{0 - 3}$ |

## Computer Competency

| CodeTitle <br> Demonstrate "computer competency" by one of the following: |
| :--- |
| Pass Computer Competency Exam OR |
| Select one of the following at SRU or another post-secondary <br> institution: |
| CPSC 100 |$\quad$| Introduction to Computing for Liberal Arts |
| :--- |


| Code Title | Hours |  |
| :--- | ---: | ---: |
| Core Courses |  |  |
| Oral and Written Communication |  |  |
| INDP 499 | Capstone: Applied Interdisciplinary Studies | 3 |
| Select one the following: | 3 |  |


| COMM 217 | Intercultural Communication ${ }^{1}$ |
| :--- | :--- |
| GES 105 | World Regional Geography $^{1}$ |
| HIST 153 | Contemporary World History $^{1}$ |
| POLS 103 | International Relations ${ }^{1}$ |

Subtotal ..... 6
Select one of the following: ${ }^{3}$ ..... 3
Modern Language Course
Hist \& Dev Eng Lang (Amer. St. only)Select one of the following: ${ }^{4}$3
Modern Language Course
By advisement (American Studies only)
Subtotal6
Analytical, Quantitative \& Critical Thinking Skills
Select one of the following courses approved for your cultural ..... 3
area:

| HIST 151 | Ancient and Medieval World $^{1}$ |  |
| :--- | :--- | :--- |
| HIST 152 | Rise of the Modern World $^{1}$ |  |
| INDP 106 | Race and Ethnic Diversity in the USA $^{1}$ |  |
| INDP 310 | Cultural Area Studies $^{1}$ |  |
| INDP 322 | Archaeology of the Americas $^{1}$ |  |
| MODL 105 | Introduction to Asian Civilizations $^{1}$ |  |
| Subtotal |  | 3 |
| Required |  |  |
| INDP 102 | Introduction to Interdisciplinary Studies | 3 |


| INDP 318 Research Methods in Interdisciplinary <br> Studies ${ }^{1}$ | 3 |
| :---: | :---: |
| Subtotal | 6 |
| Emphasis Area |  |
| Courses selected by advisement |  |
| Cultural Area - America, Asia, Europe, Latin America or Middle East |  |
| Select 21 credits from the following categories: Foundations, Culture and Society, History, Current Issues | 21 |
| Subtotal | 21 |
| Experiential Learning Activities |  |
| Must complete 40 hours of experiential learning activities which are approved by the Academic Adviser. Please consult with your Adviser for details of the options available. |  |

## Total Hours

1 Course counts for $50 \%$ of Major requirements and Major GPA.
2 Take Modern Language courses at the 102 and 103, approved for your cultural area. American studies students must take ENGL 331 and another course by advisement.
3 ARAB, CHIN, FREN, JAPN, KORN, SPAN 102 or ENGL 331.
4 ARAB, CHIN, FREN, JAPN, KORN, SPAN 103 or Approved course.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

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1. International study programs (short-term, semester)
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PASSHE - Pennsylvania State System of Higher Education Institutions
INTERDISCIPLINARY PROGRAMS - BS (5198)
Concentration in Cultural Area Studies (CULT)
This program is effective as of Fall 2020
Revised 10.15.20
UCC 03.05.20
${ }^{3}$ Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Gender and Diversity Studies
Gender is political. It's cultural. It's complex. Whether we recognize it or not, we experience, reinforce and disrupt social expectations about masculinity, femininity, sex, sexuality, and sexual identities every day. A host of other identity categories (age, race, ability and disability, size, ethnicity, and class, among others) also contribute to how we experience "gender."

SRU offers a concentration in Gender and Diversity Studies in the department of Nonprofit Management, Empowerment and Diversity Studies and a minor in Gender Studies that explores these intersections and analyzes the messy but also fascinating concepts of gender and diversity within a social justice context. Both the major and minor are interdisciplinary, pulling from courses and departments from across the university, and thus both complement and enrich every major and minor. One question we're often asked is whether or not men can or should adopt the major or the minor. Absolutely!

The major and minor enhance every field, from Psychology to Education to Management and Marketing to Biology. Knowing more about how to navigate and better understand diversity in a respectful way not only contributes to future professional and graduate study success but helps make our world a kinder, more inclusive and equitable place.

## Related Links

Interdisciplinary Programs - Gender and Diversity Studies, BS Program Page (https://www.sru.edu/academics/majors-and-minors/gender-and-diversity-studies-interdisciplinary-programs/)

Interdisciplinary Program Department Page (https://www.sru.edu/ academics/colleges-and-departments/cla/departments/interdisciplinaryprograms/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

Code Title Hours
Rock Studies Requirements 42
Other Basic Requirments 0-3
Computer Competency 1-3
Major/Concentration Requirements 42
Electives 36

* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  | 3 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: |  |  |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |

Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378) 3

## Humanities Inquiry

Select 3 Credits (p. 1378) 3
Social Science Inquiry
Select 3 Credits (p. 1378) 3

| Natural Science Inquiry |
| :--- | :--- |
| SCI $101 \quad$ Science of Life |

Physical Science Inquiry
SCI $102 \quad$ Understanding the Physical World 3
Subtotal 15

## Thematic Thread

| Select 12 Credits $(\mathrm{p} .1378)^{2}$ | 12 |
| :--- | :--- |
| Subtotal | 12 |
| Total Hours | $\mathbf{4 2}$ |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 from at least 3 Categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

\(\left.$$
\begin{array}{ll}\text { CPSC } 130 & \begin{array}{l}\text { Introduction to Computing and } \\
\text { Programming }\end{array}
$$ <br>

\hline PE 202 \& Technology for Wellness\end{array}\right]\)| $\mathbf{0 - 3}$ |
| :--- |
| Total Hours |
| Major Requirements |
| - 21 major credits must be taken at SRU or PASSHE |
| - 21 major credits must be taken at the 300 level or above (Adviser |
| approved courses) |
| - Courses used in this major may not be used to satisfy ROCK Studies, |
| a minor, or another major's requirements. |
| - AP, Credit by Exam, CLEP, and institutional credit by exam may count |
| towards the degree to a maximum of 45 credits. Pass/Fail and non- |
| credit courses will not be counted in the major. |

## Code Title Hours

Core Courses
Oral and Written Communication
GNDR 115 Introduction to Gender Studies ${ }^{1} 3$
INDP $499 \quad$ Capstone: Applied Interdisciplinary Studies 3
Interpersonal Skills and Civic Responsibility
Select six credits from the following and by advisement: 6
ENGL 242 African-American Literature ${ }^{1}$
ENGL 244 Native American Literature ${ }^{1}$
ENGL 248 Asian Literature ${ }^{1}$
GNDR 120 Introduction to the Study of Masculinities ${ }^{1}$
HLTH 211 Women's Health Issues ${ }^{1}$
INDP $339 \quad$ Gender Roles and Society
PHIL 140 World Religions ${ }^{1}$
POLS 356 Gay and Lesbian Politics ${ }^{1}$
PSYC 240 Human Sexual Behavior ${ }^{1}$
Approved Course
Analytical, Quantitative \& Critical Thinking Skills
Select nine credits from the following and by advisement:

| GNDR 415 | Feminist Perspectives in the Disciplines ${ }^{1}$ |
| :--- | :--- |
| INDP 102 | Introduction to Interdisciplinary Studies |
| INDP 318 | Research Methods in Interdisciplinary <br> Studies |
| DEPT XXX | Departmental Approved Course |

Subtotal 21

## Emphasis Area

Primary Emphasis - Gender or Diversity
Select 21 credits in the following categories (by advisement): 21
Foundations
Culture and Society
History
Current Issues

## Experiential Learning Activities

Must complete 40 hours of experiential learning activities which are approved by the Academic Adviser. Please consult with your Adviser for details of the options available.

Total Hours
42

1 Course counts for 50\% of Major requirements and Major GPA.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Internships
5. Experiential Learning (Practice experience outside the classroom)

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
INTERDISCIPLINARY PROGRAMS - BS (5198)
Concentration in Gender and Diversity Studies (GNDR)
This program is effective as of Fall 2020
Revised 10.15.20
UCC 03.03.20

## Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Leadership Studies <br> Related Links

Interdisciplinary Programs - Leadership Studies, BS Program Page (https://www.sru.edu/academics/majors-and-minors/leadershipstudies/)

Interdisciplinary Program Department Page (https://www.sru.edu/ academics/colleges-and-departments/cla/departments/interdisciplinary programs/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Title | Hours |
| :--- | ---: |
| Code | 42 |
| Rock Studies Requirements | $0-3$ |
| Other Basic Requirments | $0-3$ |
| Computer Competency | 42 |
| Major/Concentration Requirements | 36 |
| Electives |  |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Science Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Science Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |
| Thematic Thread |  |  |
| Select 12 Credits (p.1378) ${ }^{2}$ |  | 12 |
| Subtotal |  | 12 |
| Total Hours |  | 42 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 from at least 3 Categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code Title | Hours |
| :--- | ---: |
| Complete one of the following: | $0-3$ |
| Meet required minimum SAT or ACT math score OR |  |


| ESAP 110 | Beginning Algebra |  |
| :---: | :---: | :---: |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major Requirements

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above (Adviser approved courses)
- Courses used in this major may not be used to satisfy ROCK Studies, a minor, or another major's requirements.
- AP, Credit by Exam, CLEP, and institutional credit by exam may count towards the degree to a maximum of 45 credits. Pass/Fail and noncredit courses will not be counted in the major.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Core Courses |  |  |
| Oral and Written Communication |  |  |
| Select two of the following: |  | 6 |
| CSLD 251 | Leadership Theory ${ }^{1}$ |  |
| CSLD 354 | Strategic Planning and Decision Making for Leaders |  |
| MS 102 | Principles of Leadership |  |
| MS 301 | Fundamentals of Tactical Operations |  |
| Interpersonal Skills and Civic Responsibility |  |  |
| Select two of the following: |  | 6 |
| CSLD 350 | Multicultural Leadership |  |
| CSLD 352 | Self Leadership |  |
| CSLD 353 | Teambuilding for Leaders |  |
| Analytical, Quantitative \& Critical Thinking Skills |  |  |
| Select two of the following: |  | 6 |
| CSLD 252 | Leadership Practicum ${ }^{1}$ |  |
| INDP 317 | Statistics for the Social Sciences |  |
| INDP 318 | Research Methods in Interdisciplinary Studies |  |
| Subtotal |  | 18 |
| Emphasis Area |  |  |
| Select at least one course in each of the following areas for a total of 24 credits: |  | 24 |
| Area A-Self Leadership |  |  |
| COMM 314 | Interpersonal Communication |  |
| CSS 354 | Risk Assessment and Fraud Prevention |  |


| NLPA 305 | Financial Best Practices for Decision <br> Makers |
| :--- | :--- |
| CSLD 215 | Introduction to Consciousness |
| INDP 326 | Society, Culture and Self |
| CSLD 352 | Self Leadership |
| PHIL 123 | Ethics |
| MS 201 | Basic Military Skills |
| MS 202 | Intermediate Military Skills |
| Area B - Group Leadership |  |
| COMM 215 | Small Group Communication |
| INDP 310 | Cultural Area Studies |
| INDP 321 | Minority Groups |
| INDP 339 | Gender Roles and Society |
| CSLD 344 | Left and Right Brain: From Neuron to |
| CSLD 350 | Culture |
| CSLD 353 | Teambuilticultural Leadership for Leaders |
| MGMT 351 | Organizational Behavior |
| MS 301 | Fundamentals of Tactical Operations |
| MS 302 | Advanced Military Skills |
| PCRM 342 | Group Facilitation and Leadership |

Area C-Organizational Leadership

| COMM 217 | Intercultural Communication |
| :--- | :--- |
| COMM 315 | Organizational Communication |
| CSS 352 | Law \& Ethics in the Workplace |
| NLPA 120 | Civic Engagement and Community <br> Decision-Making |
| INDP 348 | Sociology of Organizations |
| CSLD 144 | Introduction to Cognitive Studies |
| CSLD 354 | Strategic Planning and Decision Making for <br> Leaders |
| MGMT 341 | Organizational Leadership |
| MS 401 | Leadership Dimensions and Concepts |
| MS 402 | Officership and the Profession of Arms |
| Area D-Leadership Experience |  |
| CSLD 252 | Leadership Practicum |
| CSLD 355 | Leadership Development Course |
| CSLD 450 | Internship |
| MS 250 | ROTC Basic Leadership Practicum |
| MS 350 | ROTC Advanced Leadership Practicum |

Subtotal 24

Experiential Learning Activities
Students must complete 40 hours of experiential learning activities which are fulfilled by section D above or an approved substitution by the Academic Adviser. Please consult with your Adviser for details of the options available.

## Total Hours

1 Course counts for $50 \%$ of Major requirements and Major GPA.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Internships
5. Experiential Learning (Practice experience outside the classroom)

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
INTERDISCIPLINARY PROGRAMS - BS (5198)
Concentration in Leadership Studies (LDRS)
This program is effective as of Fall 2020.
Revised 07.28.21
UCC 03.14.21

## Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Leadership Studies - Online Degree Completion Program

This academic online degree completion program is designed for experienced college students, who have completed some coursework and proven their ability to succeed at the college level. Specifically, the Leadership Studies program provides a strong foundation for work in any employment sector. The curriculum includes coursework to help students make decisions and problem-solve, analyze data, work in a team environment, professionally communicate and manage time and proficiently organize the work environment.

Admission requirements for this program are as follows:

- Applicants must hold an associate degree from an SRU-recognized accredited program, which must include the equivalent of the following SRU courses:
- English Writing Proficiency: Students must transfer the equivalency of SRU's ENGL 102,
- Math Proficiency: Students must transfer the equivalency of SRU's ESAP 110, or a higher level Math,
- Computer Competency: Students must transfer the equivalency of SRU's CPSC 110,
- Applicants must have earned a cumulative GPA of 2.0 or higher from all post-secondary institutions attended.
- Applicants must be in good academic standing at most recent institution attended.

Applicants, who do not hold a recognized associate degree but have earned 60 or more college credits including sufficient Liberal Studies coursework, may be considered for the program. Recognition of the program and eligibility for program admission is determined by the Transfer Admissions office.

## Related Links

Online Degree Completion Undergraduate Programs Page (https:// www.sru.edu/academics/online-learning/online-degree-completion-ugprograms/)

Interdisciplinary Program Department Page (https://www.sru.edu/ academics/colleges-and-departments/cla/departments/interdisciplinaryprograms/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

Code Title Hours
Rock Studies Requirements 42
Other Basic Requirments 0-3
Computer Competency 0-3
Major/Concentration Requirements 42
Electives 36

* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies Requirements

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete 42 SRU Rock Studies-based credits | 42 |  |
| Total Hours | $\mathbf{4 2}$ |  |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code Title | Hours |
| :---: | :---: |
| Complete one of the following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |
| ESAP $110 \quad$ Beginning Algebra |  |
| Total Hours | 0-3 |
| Computer Competency |  |
| Code Title | Hours |
| Demonstrate "computer competency" by one of the following: | 0-3 |

Pass Computer Competency Exam OR

Select one of the following at SRU or another post-secondary institution:
CPSC 100 Introduction to Computing for Liberal Arts
CPSC 110 Computer Concepts
CPSC 130 Introduction to Computing and
Programming
PE 202 Technology for Wellness
Total Hours

## Major Requirements

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above (Adviser approved courses)

| Code | Title | Hours |
| :---: | :---: | :---: |
| Core Courses |  |  |
| Oral and Written Communication |  |  |
| Select at least six credits from the following: |  | 6 |
| CSLD 251 | Leadership Theory |  |
| CSLD 354 | Strategic Planning and Decision Making Leaders |  |
| Interpersonal Skills and Civic Responsibility |  |  |
| Select at least six credits from the following: |  | 6 |
| CSLD 350 | Multicultural Leadership |  |
| CSLD 352 | Self Leadership |  |
| CSLD 353 | Teambuilding for Leaders |  |
| Analytical, Quantitative \& Critical Thinking Skills |  |  |
| Select at least six credits from the following: |  | 6 |
| INDP 317 | Statistics for the Social Sciences |  |
| CSLD 253 | Online Practical Research |  |
| Subtotal |  | 18 |
| Emphasis Area |  |  |
| Select at least one course in each of the following areas for a total of 24 credits: |  | 24 |
| Area A - Leading Self |  |  |
| CSS 354 | Risk Assessment and Fraud Prevention |  |
| NLPA 305 | Financial Best Practices for Decision Makers |  |
| CSLD 352 | Self Leadership |  |
| Area B-Leading Others |  |  |
| INDP 310 | Cultural Area Studies |  |
| INDP 321 | Minority Groups |  |
| CSLD 350 | Multicultural Leadership |  |
| CSLD 353 | Teambuilding for Leaders |  |
| MGMT 351 | Organizational Behavior |  |
| Area C-Leading Organizations |  |  |
| COMM 217 | Intercultural Communication |  |
| CSS 352 | Law \& Ethics in the Workplace |  |
| NLPA 120 | Civic Engagement and Community Decision-Making |  |
| INDP 348 | Sociology of Organizations |  |
| CSLD 144 | Introduction to Cognitive Studies |  |
| CSLD 354 | Strategic Planning and Decision Making Leaders |  |

MGMT $341 \quad$ Organizational Leadership

| Area $D$-Leadership Experience |  |
| :---: | :--- |
| CSLD 253 | Online Practical Research |
| CSLD 450 | Internship |

Subtotal

## Experiential Learning Activities

Must complete 40 hours of experiential learning activities which are fulfilled by section $D$ above or an approved substitution by the Academic Adviser. Please consult with your Adviser for available options.

Total Hours

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Internships
5. Experiential Learning (Practice experience outside the classroom)

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
INTERDISCIPLINARY PROGRAMS - BS (5198)
Concentration in Leadership Studies (Online) (LSOO)
This program is effective as of Fall 2020.
Revised 07.29.21
UCC 04.13.21

## Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Liberal Arts

The BS in Interdisciplinary Programs is an outcome based degree, drawing from the richness of a liberal arts based education, which provides opportunities for students to develop an interdisciplinary educational program of study in consultation with their adviser. Students select courses that demonstrate competency in the following three areas:

- Oral and Written Communications
- Interpersonal Skills and Civic Responsibility
- Quantitative, Analytical, and Critical Thinking Skills

Students will also demonstrate, through courses or non-credit experiences, that they have had experiential learning experiences related to their course of study. The specific courses used to meet these degree requirements vary with each student. The courses selected to meet the above listed outcomes are based upon the academic emphasis identified by the student for their program of study and are approved by their academic adviser.

What can students study with this degree? The degree provides three types of academic opportunities. The first, degree completion, provides opportunities for students to graduate with a program of study that builds upon their prior educational experiences when they find they are unable to complete their current degree program. The second allows students, with their adviser, to develop a self-designed program of study in the following areas:

- Sociology
- Anthropology
- Asian Studies
- Non-Profit Leadership
- Fraud
- Pre-Law and other Pre-Professional Programs

The department also offers a number of minors in the following areas: Sociology, Anthropology, Non-Profit Leadership, and Leadership.

All students must have a 2.00 GPA and have earned 30 credits before they can be accepted into the degree program. Minors do not carry these requirements. New students to the university can select this degree, but will start their program of study in the Exploratory Program while having faculty from the Department of Interdisciplinary Programs serve as their advisers. Once the degree entry requirements are met the students formally move into the degree program.

The BS in Interdisciplinary Programs affords students opportunities to be flexible and creative in designing their program of study. Students who want to integrate more than one area of study in ways not found in Slippery Rock's traditional majors may consider this degree. Students with a specific career or professional interest, an interest in graduate school or a graduate level professional program that has certain competencies, but does not require a specific undergraduate major, may find this degree appropriate for them. This degree is also valuable as a second major for students who want more than a minor to their program of study.

## Related Links

Interdisciplinary Programs- Liberal Arts, BS Program Page (https:// www.sru.edu/academics/colleges-and-departments/cla/departments/ interdisciplinary-programs/programs/)

Interdisciplinary Program Department Page (https://www.sru.edu/ academics/colleges-and-departments/cla/departments/interdisciplinaryprograms/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide <br> GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

Code Title Hours
Rock Studies Requirements 42
Other Basic Requirments 0-3
Computer Competency 0-3
Major/Concentration Requirements 42
Electives 36

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements



1 Course offered in multiple subjects; cannot take course in first major subject.
2 from at least 3 Categories; no more than 6 credits from one department; 6 credits must be $300-\mathrm{level}$ or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal A |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major Requirements

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above (Adviser approved courses)
- Courses used in this major may not be used to satisfy ROCK Studies, a minor, or another major's requirements.
- AP, Credit by Exam, CLEP, and institutional credit by exam may count towards the degree to a maximum of 45 credits. Pass/Fail and noncredit courses will not be counted in the major.

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Core Courses |  |
| Oral and Written Communication | 6 |
| Select at least six credits | 6 |
| Interpersonal Skills and Civic Responsibility |  |
| Select at least six credits | 6 |
| Analytical, Quantitative \& Critical Thinking Skills | 18 |
| Select at least six credits | 24 |
| Subtotal | 24 |
| Emphasis Area |  |
| Select 24 credits related to or that support the outcomes of the |  |
| Subtotal |  |
| Experiential Learning Activities |  |
| Must complete 40 hours of experiential learning activities which |  |
| are approved by the Academic Adviser. Please consult with your |  |
| Adviser for details of the options available. |  |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Internships
5. Experiential Learning (Practice experience outside the classroom)

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
INTERDISCIPLINARY PROGRAMS - BS (5198)
Concentration in Liberal Arts (LART)
This program is effective as of Fall 2019.
Revised 10.15.2020
UCC RISP 2019

## Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Liberal Arts - Online Degree Completion Program

This academic online degree completion program is designed for experienced college students, who have completed some coursework and proven their ability to succeed at the college level. Specifically, the program allows a student the opportunity to work with a faculty adviser to create an individualized program that makes best use of already earned credits, while striving to facilitate unique interests and goals.

To be considered for admission to this program, students must hold an associate degree from an SRU-recognized accredited program or have earned approximately 60 college credits, which must include the following:

- Approximately 27-30 credits must be considered to be SRU Rock Studies Requirement courses,
- English Writing Proficiency: Students must already earned the equivalency of SRU's ENGL 102,
- Math Proficiency: Students must have already earned the equivalent of SRU's ESAP 110,
- Computer Competency: Students must have earned the equivalency of SRU's CPSC 110,
- GPA Requirement: Students must have earned a cumulative GPA of 2.0 or higher from all post-secondary institutions attended.

Student must be in good academic standing at most recent institution attended.

Applicants, who do not hold a recognized associate degree but have earned 60 or more college credits including sufficient Liberal Studies coursework (27-30 credits,) may be considered for the program. Recognition of the program and eligibility for program admission is determined by the Transfer Admissions office.

## Related Links

Online Degree Completion Undergraduate Programs Page (https:// www.sru.edu/academics/online-learning/online-degree-completion-ugprograms/)

Interdisciplinary Program Department Page (https://www.sru.edu/ academics/colleges-and-departments/cla/departments/interdisciplinaryprograms/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Code Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirments | $0-3$ |
| Computer Competency | $0-3$ |
| Major/Concentration Requirements | 42 |
| Electives | 36 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete 42 SRU Rock Studies-based credits | 42 |  |
| Total Hours | $\mathbf{4 2}$ |  |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |

Total Hours

## Computer Competency

| Code | Title | Hours |
| :---: | :---: | :---: |
| Demonstrate "computer competency" by one of the following: |  | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one institution | ollowing at SRU or another post-secondary |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major Requirements

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Core Courses |  |
| Oral and Written Communication | 6 |
| Select six credits approved through faculty advisement |  |
| Interpersonal Skills and Civic Responsibility | 6 |
| Select six credits approved through faculty advisement | 6 |
| Analytical, Quantitative \& Critical Thinking Skills | 18 |
| Select six credits approved through faculty advisement |  |
| Subtotal | 24 |
| Emphasis Area | 24 |
| Select 24 credits approved through faculty advisement |  |
| Subtotal |  |
| Experiential Learning Activities |  |
| Must complete 40 hours of experiential learning activities, which |  |
| are explained and approved through faculty advisement. |  |

Total Hours
42

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Graduation Requirements

Students must meet all Graduation Requirements as delineated in the University catalog, including the following requirement that should be considered as students are transferring credits and choosing SRU coursework. Students must complete 48 credits of upper-level coursework. Thirty-nine of the 48 credits must be at the 300 level or higher; the additional 9 credits may include courses requiring a 3 credit prerequisite. At least 24 of the 48 credits must be completed at SRU.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Internships
5. Experiential Learning (Practice experience outside the classroom)

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
INTERDISCIPLINARY PROGRAMS - BS (5198)
Concentration in Liberal Arts (LARO)
This program is effective as of Fall 2019.
Revised 7-2019
UCC RISP 2019

## Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Philanthropy and Nonprofit Management <br> Related Links

Interdisciplinary Programs - Philanthropy and Nonprofit Management, BS Program Page (https://www.sru.edu/academics/majors-and-minors/ philanthropy-and-nonprofit-management/)

Interdisciplinary Program Department Page (https://www.sru.edu/ academics/colleges-and-departments/cla/departments/interdisciplinaryprograms/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirments | $0-3$ |
| Computer Competency | $0-3$ |
| Major/Concentration Requirements | 42 |
| Electives | 36 |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Science Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Science Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |
| Thematic Thread |  |  |
| Select 12 Credits (p. 1378) ${ }^{2}$ |  | 12 |
| Subtotal |  | 12 |
| Total Hours |  | 42 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 from at least 3 Categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete on | following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP $110 \quad$ Beginning Algebra |  |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Ar |  |
| CPSC 110 | Computer Concepts |  |


| CPSC 130 | Introduction to Computing and <br> Programming |
| :--- | :--- |
| PE 202 | Technology for Wellness |

PE 202
Technology for Wellness
Total Hours

## Major Requirements

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above (Adviser approved courses)
- Courses used in this major may not be used to satisfy ROCK Studies, a minor, or another major's requirements.
- AP, Credit by Exam, CLEP, and institutional credit by exam may count towards the degree to a maximum of 45 credits. Pass/Fail and noncredit courses will not be counted in the major.


## Code

Title
Hours

## Core Courses

Oral and Written Communication
Select at least six credits from the following:

| NLPA 220 | Introduction to Nonprofit Management ${ }^{1}$ |  |
| :---: | :---: | :---: |
| ENGL 205 | Introduction to Professional Writing ${ }^{1}$ |  |
| COMM 231 | Introduction to Public Relations and IMC ${ }^{1}$ |  |
| Interpersonal Skills and Civic Responsibility |  |  |
| NLPA 120 | Civic Engagement and Community Decision-Making ${ }^{1}$ | 3 |
| NLPA 320 | Community Change and Development ${ }^{1}$ | 3 |
| Analytical, Quantitative \& Critical Thinking Skills |  |  |
| NLPA 305 | Financial Best Practices for Decision Makers ${ }^{1}$ | 3 |
| NLPA 325 | Social and Ethical Issues in Philanthropy and Fundraising ${ }^{1}$ | 3 |

## Subtotal

## Emphasis Area

Select 24 credits from the following and selected through advisement:

## NLPA $450 \quad$ Internship ${ }^{1}$

Internship Placement and Nonprofit Specialty area
Subtotal

## Experiential Learning Activities

Must complete 40 hours of experiential learning activities, which are approved by the Academic Adviser. Please consult with your Adviser for details of the options available.

## Total Hours

1 Course counts for $50 \%$ of Major requirements and Major GPA.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Student leadership development through the Student Nonprofit Alliance
5. Co-curricular opportunities to plan, manage and evaluate nonprofit professionals
6. Service-learning experiences with nonprofit and other community organizations
7. Networking opportunities with SRU students, alums and other nonprofit professionals
8. Opportunities to attend regional and national workshops and conferences
9. Affiliation with nonprofit professional associations
10. Internships
11. Career education and development

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
INTERDISCIPLINARY PROGRAMS - BS (5198)
Concentration in Philanthropy and Nonprofit Management (PNPM) This program is effective as of Fall 2020.
Revised 10.15.20
UCC 10.15.19

## Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Philanthropy and Nonprofit Management - Online Degree Completion Program

This academic online degree completion program is designed for experienced college students, who have completed some coursework and proven their ability to succeed at the college level. Specifically, this program provides a strong foundation for those who plan to work in the nonprofit sector and need to develop expertise in how to develop and manage programs, measure organizational effectiveness, generate funds through grants and special events, prepare budgets and maintain financial records, develop marketing tools and public relations materials, recruit and supervise volunteers, advocate for the needs of clients, and conduct human resources functions like hiring and evaluating staff.

Admission requirements for this program are as follows:

- To be considered for admission to this program, applicants must hold an associate degree from an SRU-recognized accredited program, which must include the equivalent of the following SRU courses:
- English Writing Proficiency: Students must transfer the equivalency of SRU's ENGL 102,
- Math Proficiency: Students must transfer the equivalency of SRU's ESAP 110,
- Computer Competency: Applicants must transfer the equivalency of SRU's CPSC 110,
- GPA Requirement: Applicants must have earned a cumulative GPA of 2.0 or higher from all post-secondary institutions attended.
- Applicants must be in good academic standing at most recent institution attended.

Applicants, who do not hold a recognized associate degree but have earned 60 or more college credits including sufficient Liberal Studies coursework (27-30 credits,) may be considered for the program. Recognition of the program and eligibility for program admission is determined by the Transfer Admissions office.

## Related Links

Online Degree Completion Undergraduate Programs Page (https:// www.sru.edu/academics/online-learning/online-degree-completion-ugprograms/)

Interdisciplinary Program Department Page (https://www.sru.edu/ academics/colleges-and-departments/cla/departments/interdisciplinaryprograms/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 42 |
| Electives | 36 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

Online program students must complete a sum total of 42 SRU Rock Studies-based credits; there are no specific requirements

| Code | Title |
| :--- | ---: |
| Complete 45 SRU Rock Studies-based credits | Hours |
| Total Hours | 45 |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major Requirements

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above (Adviser approved courses)

| Code | Title | Hours |
| :---: | :---: | :---: |
| Core Courses |  |  |
| Oral and Written Communication |  |  |
| NLPA 220 | Introduction to Nonprofit Management ${ }^{1}$ | 3 |
| ENGL 365 | Writing for the World Wide Web ${ }^{1}$ | 3 |
| Interpersonal Skills and Civic Responsibility |  |  |
| NLPA 120 | Civic Engagement and Community Decision-Making ${ }^{1}$ | 3 |
| NLPA 320 | Community Change and Development ${ }^{1}$ | 3 |
| Analytical, Quantitative \& Critical Thinking Skills |  |  |
| NLPA 305 | Financial Best Practices for Decision Makers ${ }^{1}$ | 3 |
| NLPA 325 | Social and Ethical Issues in Philanthropy and Fundraising ${ }^{1}$ | 3 |
| Subtotal |  | 18 |
| Emphasis Area |  |  |
| Select 24 credits from the following: |  | 24 |
| NLPA 45 | Internship ${ }^{1}$ |  |
| Emphasis course by Advisement |  |  |
| Emphasis course by Advisement |  |  |
| Emphasis course by Advisement |  |  |
| Emphasis course by Advisement |  |  |
| Emphasis course by Advisement |  |  |
| Emphasis course by Advisement |  |  |
| Emphasis course by Advisement |  |  |
| Subtotal |  | 24 |

[^25]Complete 40 hours of experiential learning activities, which are approved by the Academic Adviser. Please consult with your Adviser for details of the options available.

## Total Hours

${ }^{1}$ Course counts for $50 \%$ of Major requirements and Major GPA.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Graduation Requirements

Students must meet all Graduation Requirements as delineated in the University catalog, including the following requirement that should be considered as students are transferring credits and choosing SRU coursework.

- Students must complete 48 credits of upper-level coursework. Thirtynine of the 48 credits must be at the 300 level or higher; the additional 9 credits may include courses requiring a 3 credit prerequisite. At least 24 of the 48 credits must be completed at SRU.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Internships
5. Experiential Learning (Practice experience outside the classroom)

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
INTERDISCIPLINARY PROGRAMS - BS (5198)
Concentration in Philanthropy and Nonprofit Management (PNPM)
This program is effective as of Fall 2020.
Revised 10.15.20
UCC 10.15.19

## Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Sociology

## Related Links

Interdisciplinary Programs - Sociology, BS Program Page (https:// www.sru.edu/academics/majors-and-minors/sociology/)

> Interdisciplinary Program Department Page (https://www.sru.edu/ academics/colleges-and-departments/cla/departments/interdisciplinaryprograms/)

> Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Other Basic Requirments | $0-3$ |
| Computer Competency | $0-3$ |
| Major/Concentration Requirements | 42 |
| Electives | 36 |

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |

Subtotal ..... 15
Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378) ..... 3
Humanities Inquiry
Select 3 Credits (p. 1378) ..... 3
Social Science Inquiry
Select 3 Credits (p. 1378) ..... 3
Natural Science Inquiry
SCI 101 Science of Life ..... 3
Physical Science Inquiry
SCI 102 Understanding the Physical World ..... 3
Subtotal ..... 15
Thematic Thread
Select 12 Credits (p. 1378) ${ }^{2}$ ..... 12
Subtotal ..... 12
Total Hours ..... 42

1 Course offered in multiple subjects; cannot take course in first major subject.

2 from at least 3 Categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Ar |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |

Total Hours

## Major Requirements

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above (Adviser approved courses)
- Courses used in this major may not be used to satisfy ROCK Studies, a minor, or another major's requirements.
- AP, Credit by Exam, CLEP, and institutional credit by exam may count towards the degree to a maximum of 45 credits. Pass/Fail and noncredit courses will not be counted in the major.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Core Courses |  |  |
| Oral and Written Communication |  |  |
| INDP 102 | Introduction to Interdisciplinary Studies | 3 |
| INDP 201 | Principles of Sociology | 3 |
| Interpersonal Skills and Civic Responsibility |  |  |
| Select six credits from the following: |  | 6 |
| INDP 103 | Contemporary Social Problems ${ }^{1}$ |  |
| INDP 106 | Race and Ethnic Diversity in the USA ${ }^{1}$ |  |
| INDP 304 | Urban Sociology |  |
| INDP 326 | Society, Culture and Self ${ }^{1}$ |  |
| INDP 330 | Collective Behavior ${ }^{1}$ |  |
| Analytical, Quantitative \& Critical Thinking Skills |  |  |
| INDP 317 | Statistics for the Social Sciences ${ }^{1}$ | 3 |
| INDP 318 | Research Methods in Interdisciplinary Studies ${ }^{1}$ | 3 |
| INDP 499 | Capstone: Applied Interdisciplinary Studies | 3 |
| Subtotal |  | 21 |

## Emphasis Area

Select 21 credits from the following by advisement:
General Sociology Concentration
Applied Sociology interest areas for Medical Sociology and Public Sociology
Subtotal

## Experiential Learning Activities

Must complete 40 hours of experiential learning activities which are approved by the Academic Adviser. Please consult with your Adviser for details of the options available.

## Total Hours

1 Course counts for $50 \%$ of Major requirements and Major GPA.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Internships
5. Experiential Learning (Practice experience outside the classroom)

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

INTERDISCIPLINARY PROGRAMS - BS (5198)
Concentration in Sociology (SOCI)
This program is effective as of Fall 2020
Revised 10.15.20
UCC 03.05.20

## Managing LGBTQ+ Focused Nonprofit Organizations, Certificate

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Managing LGBTQ+ Focused Nonprofit Organizations, (https:// catalog.sru.edu/undergraduate/liberal-arts/nonprofit-management-empowerment-diversity-studies/managing-Igbtq-focused-nonprofit-organizations/Managing LGBTQ+ Focused Nonprofit

Organizations/)Minor Program Page (https://www.sru.edu/academics/ majors-and-minors/accounting/)

Nonprofit Management, Empowerment, and Diversity Studies Department Page (https://catalog.sru.edu/undergraduate/liberal-arts/ nonprofit-management-empowerment-diversity-studies/managing-Igbtq-focused-nonprofit-organizations/Related Links Accounting, Minor Program Page Accounting, Economics and Finance Department Page Other Content Professional Licensure/Certification Page/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Philanthropy and Non-Profit Management, Certificate

To access Certificate Requirements, please view the Curriculum Guide tab.

## Related Links

Philanthropy and Nonprofit Management, Certificate Program Page (https://www.sru.edu/academics/certificates/nonprofit-managementcertificate/)

Management: General Management Department Page (https:// www.sru.edu/academics/colleges-and-departments/cob/school-of-business/management-and-marketing/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Certificate GPA: 2.0 or higher

## Certificate Requirements

 Code Title Hours
## Course Requirements

| NLPA 120 | Civic Engagement and Community <br> Decision-Making | 3 |
| :--- | :--- | ---: |
| NLPA 220 | Introduction to Nonprofit Management | 3 |
| NLPA 305 | Financial Best Practices for Decision <br> Makers | 3 |
| NLPA 320 | Community Change and Development | 3 |
| NLPA 325 | Social and Ethical Issues in Philanthropy <br> and Fundraising | 3 |

Total Hours 15

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to
ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
CERTIFICATE Philanthropy and Nonprofit Management (5PNM)
This program is effective as of Spring 2019
Revised 10-2019

## Philanthropy and Nonprofit Management, Minor

To access Minor Requirements, please view the Curriculum Guide tab.
The minor in philanthropy and nonprofit management is intended to be useful to those students who may choose to either follow a career path or a personal goal of working within a nonprofit, nongovernmental organizational context. These courses prepare students to meet professional demands of the nonprofit sector.

## Related Links

Philanthropy and Nonprofit Management, Minor Program Page (https:// www.sru.edu/academics/majors-and-minors/philanthropy-and-nonprofitmanagement/)

Management: General Management Department Page (https:// www.sru.edu/academics/colleges-and-departments/cob/school-of-business/management-and-marketing/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| NLPA 220 | Introduction to Nonprofit Management | 3 |
| NLPA 305 | Financial Best Practices for Decision Makers | 3 |
| NLPA 320 | Community Change and Development | 3 |
| NLPA 325 | Social and Ethical Issues in Philanthropy and Fundraising | 3 |
| INDP 450 | Internship | 3 |
| Select one of the following: |  | 3 |
| INDP 106 | Race and Ethnic Diversity in the USA |  |
| CDEV 248 | Human Development and Education |  |


| NLPA 120 | Civic Engagement and Community <br> Decision-Making |
| :--- | :--- |

Total Hours

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN PHILANTHROPY AND NONPROFIT MANAGEMENT (73B)
This program is effective as of Fall 2015
Revised 8-2019

## Re-Entry Nonprofit Organization, Certificate

To access Certificate Requirements, please view the Curriculum Guide tab.

Students who complete this certificate of academic achievement will:

- Gain professional proficiency in the field of criminal justice (with additional emphasis on re-entry) and nonprofit leadership.
- Develop skills in critical thinking and synthesis and analysis of information pertaining to criminal justice, community policy making, nonprofit sector, resource development, and income generation.
- Understand the role of ethics and morality in criminal justice and the nonprofit sector.

Students can receive a document of academic achievement upon completion.

## Related Links

Non-Profit Management Certificate Program Page (https://www.sru.edu/ academics/certificates/nonprofit-management-certificate/)

Interdisciplinary Department Page (https://www.sru.edu/academics/ colleges-and-departments/cla/departments/interdisciplinary-programs/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Certificate GPA: 2.0 or higher

## Certificate Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  | 3 |
| CRIM 110 | Introduction to Criminology \& Criminal <br> Justice Systems | 3 |
| CRIM 416 | Community Corrections | 3 |
| NLPA 120 | Civic Engagement and Community <br> Decision-Making | 3 |
| NLPA 320 | Community Change and Development <br> NLPA 325 | Social and Ethical Issues in Philanthropy <br> and Fundraising |

Total Hours

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
CERTIFICATE Academic Achievement in Re-Entry Nonprofit Organizations (5RNO)
This program is effective as of Spring 2019
Revised 10-2019

## Sociology, Minor

To access Minor Requirements, please view the Curriculum Guide tab.
The minor in sociology gives students the ability to understand the complexities of today's society by examining human behavior and social actions. In examining how social structures (such as work, the family, religion, etc) help shape social rules, processes, and agency, students gain a better understanding of the complexity of today's world-from poverty, to gender, to race, to organizational behavior, to politics and more. In studying social issues, students learn to use analytical and critical reasoning and apply sociological theories to explain a wide range of social phenomena.

## Related Links

Sociology Program Page (https://www.sru.edu/academics/majors-andminors/sociology/)

Interdisciplinary Department Page (https://www.sru.edu/academics/ colleges-and-departments/cla/departments/interdisciplinary-programs/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Core Courses |  |  |
| INDP 106 | Race and Ethnic Diversity in the USA | 3 |
| INDP 201 | Principles of Sociology | 3 |
| INDP 304 | Urban Sociology | 3 |
| INDP 317 | Statistics for the Social Sciences | 3 |
| Elective Courses |  | 6 |
| Select two of the following: |  |  |
| INDP 226 | Population and Society |  |
| INDP 309 | Health and Society |  |
| INDP 321 | Minority Groups |  |
| INDP 324 | The Family |  |
| INDP 327 | Religion and Society |  |
| INDP 339 | Gender Roles and Society |  |

## Total Hours

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## MINOR IN SOCIOLOGY(80C)

This program is effective as of Fall 2009
Revised 8-2019

## Writing for the Nonprofit Sector, Certificate

To access Certificate Requirements, please view the Curriculum Guide tab.

## Related Links

Writing for the Nonprofit Sector, Certificate Program Page (https:// www.sru.edu/academics/certificates/writing-for-the-nonprofit-sectorcertificate/)

Interdisciplinary Program Department Page (https://www.sru.edu/ academics/colleges-and-departments/cla/departments/interdisciplinaryprograms/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Certificate GPA: 2.0 or higher
Certificate Requirements
Code Title Hours

Required Courses

| ENGL 205 | Introduction to Professional Writing | 3 |
| :--- | :--- | :--- |
| NLPA 220 | Introduction to Nonprofit Management | 3 |
| NLPA 325 | Social and Ethical Issues in Philanthropy <br> and Fundraising | 3 |

Select two of the following: 6

| ENGL 365 | Writing for the World Wide Web |
| :--- | :--- |
| ENGL 429 | Grant and Proposal Writing |
| NLPA 120 | Civic Engagement and Community <br> Decision-Making |

Total Hours

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions
CERTIFICATE in Writing for Nonprofit Sector (5WNS)
This program is effective as of Spring 2019
Revised 08.03.2021

## Philosophy

| Chair | Secretary | Location | Department <br> Phone |
| :--- | :--- | :--- | :--- |
| Dr. Lisa | Diane Robbins | 302 Spotts World <br> Culture Building |  |

Department Web Site URL (https://www.sru.edu/academics/colleges-and-departments/cla/departments/philosophy/)
Department Fact Sheet URL (https://www.sru.edu/documents/programs/ factsheets/undergraduate/philosophy-fs.pdf)

## Faculty

## Michael Ardoline

Instructor
Philosophy
Ph.D., University of Memphis
M.A., Kingston University/ Paris 8 Saint-Denis
M.A., West Chester University
B.S., Lebanon Valley College

## Andrew Colvin

Associate Professor
Philosophy
Ph.D., University of Hawaii
M.A., Ohio State University
B.A., Ohio State University

## Katherine Cooklin

Professor
Philosophy
Ph.D., University of Texas at Austin
M.S., Lewis and Clark College
B.A., University of Southern Maine

## Lisa Schoenberg

Associate Professor
Philosophy
Ph.D., Temple University
M.A., Temple University
B.A., Oberlin College

Thomas Sparrow
Associate Professor
Philosophy
Ph.D., Duquesne University
M.A., West Chester University
B.A., East Stroudsburg University

## Programs

All first-year students who enter SRU in the Summer and Fall terms of 2019 and after will follow Rock Studies. Students who entered SRU before Spring 2019 will follow Liberal Studies. All new transfer students beginning Summer 2019 and after will follow Liberal Studies. We anticipate that transfer students will begin to enter under Rock Studies during the Summer/Fall term of 2021.

## Certificates

- Humanities and Health, Certificate (p. 1009)


## Courses

## PHIL 101 - Philosophical Inquiry

A first encounter with the nature and methods of philosophical thinking in which a person's view of his/her own nature and of the world becomes challenged, explored and deepened. Students read a diverse range of primary texts, both classical and contemporary, western and non-western. They may also view films and other media that present philosophical arguments. This course introduces students to the many forms of inquiry and analysis conducted in the humanities, with a focus on the perennial questions that philosophy addresses.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Transfer Thread Completion Course
PHIL 110 - Ethics and Civil Discourse
An introduction to the practice of civil discourse through a philosophical study of ethics from theoretical and applied perspectives.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## PHIL 113 - Formal Logic

An introduction to the standards and methods of inference utilized in formal systems of logic including traditional syllogistic logic and modern propositional logic. Phil 113 is designed to improve students' ability to recognize fallacies in reasoning, to identify and make valid inferences, and to construct sound arguments.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Transfer Thread Completion Course
PHIL 123 - Ethics
An introduction to the study of questions concerning right action, moral obligation, and an examination of various theories of moral judgment. This course introduces students to the many forms of inquiry and analysis conducted in the humanities, especially philosophy, and the perennial questions that philosophy addresses. Students engage a diverse range of primary texts in ethics and ethical theory, both classical and contemporary, western and non-western. They also view and analyze films and other media that present ethical arguments.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Transfer Thread Completion Course

## Majors

- Philosophy, Bachelor of Arts (BA) (p. 1009)
- Philosophy, Bachelor of Arts (BA) - Concentration in Career-Related (p. 1012)


## Minors

- Ethics, Minor (p. 1008)
- Philosophy, Minor (p. 1014)


## PHIL 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## PHIL 140 - World Religions

This course is designed to be a survey of religious traditions from across the globe and an exploration of their philosophies and world views. This course introduces students to the many forms of inquiry and analysis conducted in the humanities, especially religious studies and comparative religion. Students engage a range of primary and secondary texts to gain a comparative understanding of the world's religions.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Transfer Thread Completion Course

## PHIL 163 - Philosophy in Literature

An examination of the philosophical content of poetry, prose, and film of exceptional literary and philosophical merit. This course introduces students to the many forms of inquiry and analysis conducted in the humanities, especially philosophy, and the perennial questions that philosophy addresses. Students engage a diverse range of literary texts, both classical and contemporary, western and non-western. They also view and analyze films and other media that present philosophical arguments.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
PHIL 170-American Philosophy
An investigation of the historical genesis of American culture through a reading of the prominent philosophical literature the culture has produced.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Becoming America, Being American, Transfer Thread Completion Course

## PHIL 171 - Philosophy of Human Existence

An investigation into and discussion of the central themes of existential philosophy. Philosophers such as Kierkegaard and Nietzsche will be studied in terms of their retrieval of the meaning of human existence.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Thematic Thread(s): Art \& Society, Transfer Thread Completion Course, Violence, Who Do We Think We Are

## PHIL 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## PHIL 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## PHIL 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## PHIL 261 - Philosophy of Art

Exploration of basic issues and philosophical views of the experience of the arts. This course aims at the understanding and enhancement of the experience of the arts, and at a thoughtful appraisal of the role of art in life.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Creating Art, Political Arts, Transfer Thread Completion Course

## PHIL 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## PHIL 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## PHIL 298-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## PHIL 313-Symbolic Logic

An advanced investigation of logical thought through the use of special techniques of symbolization, the logic of unquantified and quantified propositions, the nature and limits of logical systems and the foundation of mathematics are some of the important topics considered.

Prerequisites: PHIL $113^{\text {D }}$ or MATH $120^{\text {D }}$ or MATH $199^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHIL 324 - Environmental Ethics

An analysis of environmental issues using a philosophical understanding of nature, with a consideration of the ethical responsibilities in the use of the earth's resources, behavior toward non-human species, and obligations toward future generations.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Building a Healthy Society, Food, Wellness \&
Environment Across Cultures, Sustainability, Transfer Thread Completion Course, Transnational Culture
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHIL 325 - Medical/Health Care Ethics

A course in applied ethics about conceptual, ethical, and legal dilemmas in the institutional rights of patients, in the responsibilities of practitioners, in technological challenges to values in the modern age in caring for the seriously ill and the dying, and in rationing health care in a large society.

Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): 21 st Century Healthcare, Fighting Social Problems, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHIL 326-Business Ethics

A study of applied ethics about the conceptual and ethical dilemmas in the business professions. An examination of cultural challenges of social and moral responsibility in a technically sophisticated economic climate.

## Credits: 3

Thematic Thread(s): Innovation, Entrepreneurship, and Positive Change, Leadership Development, Transfer Thread Completion Course Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHIL 331 - Social and Political Philosophy

An in-depth study of central concepts and issues in social and political thought from multiple, diverse perspectives. Issues may include just and fair societies, theories of political obligation, and theories of citizenship and civic engagement with regard to diverse, heterogeneous communities.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Thematic Thread(s): African-American Studies, Global Citizenship, Civil Rights \& Social Movements, Political Arts, Transfer Thread Completion Course, Well-Being of Children and Youth
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHIL 335 - Philosophy of Law and Justice

A study of multiple theories of law and the nature of law's relation to justice with special emphasis on a notion of justice for institutions.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Thematic Thread(s): African-American Studies, Civil Rights \& Social Movements, Demystifying Crime \& Justice, Gender and Diversity, Transfer Thread Completion Course, Well-Being of Children and Youth
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHIL 336 - Philosophy of Gender and Sex

This course will examine concepts, values and assumptions relevant to gender and sex in our diverse society. topics to be explored may include the ontological status of gender and sex; the cultural representations of masculinity, femininity and sexuality; or the relationship between gender, society and power, and its epistemological and ethical consequences.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): African-American Studies, Body and Self, Gender and Diversity, Transfer Thread Completion Course, Well-Being of Children and Youth, Who Do We Think We Are
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHIL 338 - Ethics, Technology, and the Future

This course considers ethical, sociopolitical, epistemological, and metaphysical issues arising from the design and use of emerging technologies, including information technologies, robots and autonomous machines, neurological and implantable technologies, genetic engineering, and artificial intelligence, as well as the more speculative technologies of science fiction.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even
Thematic Thread(s): Global Citizenship, The Future, Leadership Development, Mind \& Brain, Revolutions, Transfer Thread Completion Course

## PHIL 341 - Philosophy of Religion

A critical inquiry into the nature and validity of religious belief and experience, its relation to other human interests, its diversity, and its contemporary significance.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## PHIL 343-Asian Philosophy

An investigation of the central religions and philosophical ideas of Oriental cultures, focusing primarily on the cultures of India, China, Japan and Southeast Asia.

Credits: 3
Thematic Thread(s): Mind \& Brain, Transfer Thread Completion Course, Transnational Culture, Who Do We Think We Are
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHIL 351 - Philosophy of Natural Science

An in-depth examination of the nature of natural science, including its aims, methods, central concepts, and limits and a thoughtful appraisal of its significance for the modern age.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHIL 362 - Philosophy of Mind

This course considers philosophical perspectives on the nature of mind and its relation to the world. Topics covered include the mind-body problem, the nature of consciousness, personal identity and the nature of the self, free will and moral responsibility, and the implications of technology for the future of human consciousness.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Thematic Thread(s): Mind \& Brain, Transfer Thread Completion Course, Who Do We Think We Are
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHIL 371 - Ancient Western Philosophy

A study of the major philosophers and schools of philosophy in the ancient Western world and their influence on the medieval period. The course examines basic questions and concepts in theory of knowledge, logic, ethics, politics, aesthetics, and metaphysics as found in the works of thinkers like Plato, Aristotle, the Presocratics, the Stoics, and the Epicureans. Students will consider how ancient philosophy continues to provide insight and inspiration in the contemporary world.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd
Thematic Thread(s): Food, Wellness \& Environment Across Cultures, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHIL 372 - Modern Western Philosophy

A study of Western philosophy from the Renaissance through the Age of Enlightenment and into the early nineteenth century, this course traces the basic concepts and problems of the period, especially problems of knowledge, ethics, and metaphysics. Students will consider the contribution of modern philosophers to the Scientific Revolution and to the development of the scientific method, as well as how modern philosophy continues to provide insight and inspiration in the contemporary world.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Thematic Thread(s): Mind \& Brain, Revolutions, Transfer Thread
Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHIL 373 - Modern Authors and Issues

Variable content within the modern contemporary period of philosophical thinking. Repeatable to 6 credits.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHIL 375 - Existentialism and Phenomenology

A study of important twentieth century philosophers in terms of their attempt to establish a new approach to philosophy and their reaction and attempt to overcome Western metaphysics.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Thematic Thread(s): Body and Self, Mind \& Brain, Transfer Thread
Completion Course, Who Do We Think We Are
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHIL 376 - Analytic Philosophy

An examination of the development and influence of Anglo-American analytic philosophy in the twentieth century. The focus will be on how analytic philosophers have used logic, the analysis of language, and scientific methodology in approaching traditional philosophical questions.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHIL 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## PHIL 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHIL 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHIL 490 - Independent Study

A special course designed primarily for students seeking knowledge in philosophy beyond course offerings. The student's interests, in consultation with department members, determines the topics covered. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHIL 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHIL 498-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Ethics, Minor

Philosophy encourages you to critically examine what passes as "common knowledge," formulate well-reasoned positions on important issues, and express your ideas clearly and carefully. The Philosophy program at SRU fosters excellence in reading, writing, critical thinking, and ethical deliberation. SRU philosophy students have won more top awards at the annual statewide Association for Philosophy and Religious Studies (IAPRS) than any other university within the PA State System of Higher Education.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Ethics, Minor Program Page (https://www.sru.edu/academics/majors-and-minors/ethics-minor/)

Philosophy Department Page (https://www.sru.edu/academics/colleges-and-departments/cla/departments/philosophy/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| PHIL 113 | Formal Logic | 3 |
| PHIL 123 | Ethics | 3 |
| Select two of the following: |  | 6 |
| PHIL 324 | Environmental Ethics |  |
| PHIL 325 | Medical/Health Care Ethics |  |
| PHIL 326 | Business Ethics |  |
| PHIL 338 | Ethics, Technology, and the Future |  |
| Select one of the following: |  | 3 |
| PHIL 140 | World Religions |  |
| PHIL 163 | Philosophy in Literature |  |
| PHIL 170 | American Philosophy |  |
| PHIL 171 | Philosophy of Human Existence |  |
| Select one of the following courses (course cannot be reused from above): |  | 3 |
| PHIL 324 | Environmental Ethics |  |
| PHIL 325 | Medical/Health Care Ethics |  |
| PHIL 326 | Business Ethics |  |
| PHIL 331 | Social and Political Philosophy |  |
| PHIL 335 | Philosophy of Law and Justice |  |
| PHIL 336 | Philosophy of Gender and Sex |  |
| PHIL 338 | Ethics, Technology, and the Future |  |
| PHIL 343 | Asian Philosophy |  |
| Total Hours |  | 18 |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


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PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN ETHICS (60B)
This program is effective as of Fall 2020.
Revised 12-2019
UCC 12.3.19

## Humanities and Health, Certificate

The Certificate in Health and Humanities is a 12-credit program that allows students in health-related programs an opportunity to integrate your health-related courses with humanities and better understand the ethical and cultural context of healthcare

To access Certificate Requirements, please view the Curriculum Guide tab.

## Related Links

Humanities and Health, Certificate Program Page (https://www.sru.edu/ academics/certificates/health-and-humanities-certificate/)

Philosophy Department Page (https://www.sru.edu/academics/colleges-and-departments/cla/departments/philosophy/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

Curriculum Guide
GPA Requirement
Certificate GPA: 2.0 or higher

| Certificate Requirements |  |  |
| :--- | :--- | ---: |
| Code | Title | Hours |
| Required Courses |  |  |
| Select four of the following: | 12 |  |
| INDP 309 | Health and Society |  |
| PHIL 325 | Medical/Health Care Ethics |  |
| HCAM 230 | US Healthcare Systems |  |
| HLTH 311 | International Health |  |
| HLTH 316 | Human Sexuality | $\mathbf{1 2}$ |
| Total Hours |  |  |

Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

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on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
CERTIFICATE IN HUMANITIES \& HEALTH (5HAH)
Revised 10-2019

## Philosophy, Bachelor of Arts (BA) Program Learning Outcomes

- Communication: Students will express philosophical ideas in either oral or written format.
- Degree Program Writing Competency: Students will express philosophical ideas clearly and logically in written format
- Ethical Analysis: Identify major ethical paradigms and analyze ethical issues with regard to them.
- Problem Solving and Critical Thinking: Break down complex ideas into their elements; perform reasoning tasks efficiently and correctly; clearly identify problems and solutions


## Related Links

Philosophy, Major Program Page (https://www.sru.edu/academics/ majors-and-minors/philosophy/)

Philosophy Department Page (https://www.sru.edu/academics/colleges-and-departments/cla/departments/philosophy/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

Code Title Hours
Rock Studies Requirements 42
Modern Language Requirement 0-9
Other Basic Requirements 0-3
Computer Competency 0-3
Major Requirements 33
Electives 45

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: | 3 |  |

COMM 200 Civil Discourse: Theory \& Practice


1 Course offered in multiple subjects; cannot take course in first major subject.
2
From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete $0-9$ credits | $0-9$ |  |
| Total Hours | $\mathbf{0 - 9}$ |  |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one | following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Ar |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |

PE 202
Technology for Wellness

## Total Hours

## Major Requirements

- 17 major credits must be taken at SRU or PASSHE
- 17 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :---: | :---: | :---: |
| Core Requirements |  |  |
| Select one of the following: 3 |  |  |
| PHIL 113 | Formal Logic ${ }^{1}$ |  |
| PHIL 313 | Symbolic Logic ${ }^{1}$ |  |
| PHIL 123 | Ethics ${ }^{1}$ | 3 |

Select one of the following: 3
PHIL 331 Social and Political Philosophy ${ }^{1}$
PHIL $335 \quad$ Philosophy of Law and Justice ${ }^{1}$
Select one of the following: 3

| PHIL 341 | Philosophy of Religion ${ }^{1}$ |  |
| :---: | :--- | :--- |
| PHIL 343 | Asian Philosophy ${ }^{1}$ |  |
| PHIL 371 | Ancient Western Philosophy ${ }^{1}$ | 3 |
| PHIL 372 | Modern Western Philosophy ${ }^{1}$ | 3 |
| Select one of the following: | 3 |  |


| PHIL 375 | Existentialism and Phenomenology ${ }^{1}$ |
| :--- | :--- |
| PHIL 362 | Philosophy of Mind $^{1}$ |

Subtotal

## Philosophy Electives

Select four of the following courses, at least three credits at 30012
level or above

| PHIL 101 | Philosophical Inquiry ${ }^{1}$ |
| :---: | :---: |
| PHIL 140 | World Religions ${ }^{1}$ |
| PHIL 163 | Philosophy in Literature ${ }^{1}$ |
| PHIL 170 | American Philosophy ${ }^{1}$ |
| PHIL 171 | Philosophy of Human Existence ${ }^{1}$ |
| PHIL 261 | Philosophy of Art ${ }^{1}$ |
| PHIL 324 | Environmental Ethics ${ }^{1}$ |
| PHIL 325 | Medical/Health Care Ethics ${ }^{1}$ |
| PHIL 326 | Business Ethics ${ }^{1}$ |
| PHIL 331 | Social and Political Philosophy ${ }^{1}$ |
| PHIL 335 | Philosophy of Law and Justice ${ }^{1}$ |
| PHIL 336 | Philosophy of Gender and Sex ${ }^{1}$ |
| PHIL 338 | Ethics, Technology, and the Future ${ }^{1}$ |
| PHIL 341 | Philosophy of Religion ${ }^{1}$ |
| PHIL 343 | Asian Philosophy ${ }^{1}$ |
| PHIL 351 | Philosophy of Natural Science ${ }^{1}$ |
| PHIL 362 | Philosophy of Mind ${ }^{1}$ |
| PHIL 373 | Modern Authors and Issues ${ }^{1}$ |
| PHIL 375 | Existentialism and Phenomenology ${ }^{1}$ |
| PHIL 490 | Independent Study ${ }^{1}$ |
| PHIL 498 | Selected Topics (repeatable to six credits) ${ }^{1}$ |
| Subtotal |  |
| Total Hours |  |

1 Course counts for 50\% of Major requirements and Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Presenting papers at conferences
5. Involvement in Ethics Bowl

PHILOSOPHY - BA (5 64)
This program is effective as of Fall 2020.
Revised 08.25.2020
UCC 03.24.2020

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| PHIL 101 | Philosophical Inquiry | 3 |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar | 1 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
| Social Science Inquiry (p. 1378) |  | 3 |
|  | Hours | 16 |
| Spring |  |  |
| PHIL 113 | Formal Logic | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| SCI 101 | Science of Life | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
|  | Hours | 15 |

## Second Year

Fall

| PHIL 123 Ethics | 3 |
| :--- | :--- |
| Select one of the following: | 3 |


| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :--- | :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy | 3 |
| MODL 101 | Modern Language Requirement | 3 |
| SCI 102 | Understanding the Physical World | 3 |
| Free Elective |  |  |
| Declare a Thematic Thread |  |  |



| Spring |  |  |
| :--- | :--- | ---: |
| PHIL 372 | Modern Western Philosophy | 3 |
| PHIL 331 | Social and Political Philosophy | 3 |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| Free Elective |  | 3 |
| Free Elective |  | 3 |
|  | Hours | $\mathbf{1 5}$ |

## Fourth Year

Fall

| PHIL 375 | Existentialism and Phenomenology | 3 |
| :--- | :--- | ---: |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| Philosophy Elective |  | 3 |
| Free Elective |  | 3 |
| Free Elective |  | 3 |
|  | Hours | $\mathbf{1 5}$ |
| Spring |  | 3 |
| PHIL 362 | Philosophy of Mind | 3 |
| PHIL 490 | Independent Study | 3 |
| Free Elective |  | 3 |
| Free Elective |  | 3 |
| Free Elective |  | $\mathbf{3}$ |
|  | Hours | $\mathbf{1 2 1}$ |
|  | Total Hours** |  |

1 Course offered in multiple subjects; cannot take course in first major subject.

2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/ ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UIdNTi4u)to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.

Major Code: 564
Revised: 11.13.2020
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Philosophy, Bachelor of Arts (BA) Concentration in Career-Related

This is a second major only
A 30 credit second major which allows students to design a program of philosophy courses to complement the student's preparations for a specific career.

## Program Learning Outcomes

- Communication: Students will express philosophical ideas in either oral or written format.
- Degree Program Writing Competency: Students will express philosophical ideas clearly and logically in written format.
- Ethical Analysis: Identify major ethical paradigms and analyze ethical issues with regard to them.
- Problem Solving and Critical Thinking: Break down complex ideas into their elements; perform reasoning tasks efficiently and correctly; clearly identify problems and solutions


## Related Links

Philosophy - Career Related, Major Program Page (https://www.sru.edu/ academics/majors-and-minors/philosophy-career-related/)

Philosophy Department Page (https://www.sru.edu/academics/colleges-and-departments/cla/departments/philosophy/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.0 or higher
Overall GPA: 2.0 or higher

## Summary*

Code Title Hours
Rock Studies Requirements 42
$\begin{array}{ll}\text { Modern Language Requirement } & \text { 0-9 }\end{array}$
Other Basic Requirements 0-3
$\begin{array}{ll}\text { Computer Competency } & 0-3\end{array}$
Major/Concentration Requirements ..... 30
Electives ..... 48

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements



1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be $300-$ level or above.

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete 0-9 credits | $0-9$ |  |
| Total Hours | $\mathbf{0 - 9}$ |  |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code Title | Hours |
| :--- | ---: |
| Complete one of the following: | $0-3$ |
| Meet required minimum SAT or ACT math score OR |  |


| ESAP 110 | Beginning Algebra |  |
| :---: | :---: | :---: |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | uter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Arts |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |
| Major/Concentration Requirements |  |  |
| Code | Title | Hours |
| Core Requirements |  |  |
| Select one of the following: |  | 3 |
| PHIL 113 | Formal Logic ${ }^{1}$ |  |
| PHIL 313 | Symbolic Logic ${ }^{1}$ |  |
| PHIL 123 | Ethics ${ }^{1}$ | 3 |
| Concentration Tracks |  |  |
| Select one of the following tracks: |  | 6 |
| Business/Economics/Accounting Management/Marketing Tracks |  |  |
| PHIL 326 Business Ethics ${ }^{1}$ |  |  |
| PHIL 335 | Philosophy of Law and Justice ${ }^{1}$ |  |
| Communication Track |  |  |
| PHIL 170 American Philosophy ${ }^{1}$ |  |  |
| Select one of the following: |  |  |
| PHIL 163 | Philosophy in Literature ${ }^{1}$ |  |
| PHIL 261 | Philosophy of Art ${ }^{1}$ |  |
| Counseling Track |  |  |
| PHIL 325 | Medical/Health Care Ethics ${ }^{1}$ |  |
| Select one of the following: |  |  |
| PHIL 336 | Philosophy of Gender and Sex ${ }^{1}$ |  |
| PHIL 375 | Existentialism and Phenomenology ${ }^{1}$ |  |
| Education Track |  |  |
| PHIL 170 | American Philosophy ${ }^{1}$ |  |
| PHIL 171 | Philosophy of Human Existence ${ }^{1}$ |  |
| Environmental Studies Track |  |  |
| PHIL 324 | Environmental Ethics ${ }^{1}$ |  |
| PHIL 351 | Philosophy of Natural Science ${ }^{1}$ |  |
| Fine and Performing Arts Track |  |  |
| PHIL 163 | Philosophy in Literature ${ }^{1}$ |  |
| PHIL 261 | Philosophy of Art ${ }^{1}$ |  |
| Journalism Track |  |  |
| PHIL 170 | American Philosophy ${ }^{1}$ |  |
| PHIL 331 | Social and Political Philosophy ${ }^{1}$ |  |
| Law Track |  |  |
| PHIL 335 | Philosophy of Law and Justice ${ }^{1}$ |  |
| Select one of the following: |  |  |


| PHIL 331 | Social and Political Philosophy ${ }^{1}$ |  |
| :---: | :---: | :---: |
| PHIL 170 | American Philosophy ${ }^{1}$ |  |
| Life Sciences Track |  |  |
| PHIL 324 | Environmental Ethics ${ }^{1}$ |  |
| PHIL 351 | Philosophy of Natural Science ${ }^{1}$ |  |
| Literature Track |  |  |
| PHIL 163 | Philosophy in Literature ${ }^{1}$ |  |
| PHIL 375 | Existentialism and Phenomenology ${ }^{1}$ |  |
| Medical and Health Care Track |  |  |
| PHIL 325 | Medical/Health Care Ethics ${ }^{1}$ |  |
| PHIL 351 | Philosophy of Natural Science ${ }^{1}$ |  |
| Ministry Track |  |  |
| PHIL 341 | Philosophy of Religion ${ }^{1}$ |  |
| Select one of the following: |  |  |
| PHIL 140 | World Religions ${ }^{1}$ |  |
| PHIL 343 | Asian Philosophy ${ }^{1}$ |  |
| Politics, Sociology/Anthropology Track |  |  |
| PHIL 331 | Social and Political Philosophy ${ }^{1}$ |  |
| Select one of the following: |  |  |
| PHIL 335 | Philosophy of Law and Justice ${ }^{1}$ |  |
| PHIL 336 | Philosophy of Gender and Sex ${ }^{1}$ |  |
| Psychology Track |  |  |
| PHIL 362 | Philosophy of Mind ${ }^{1}$ |  |
| PHIL 375 | Existentialism and Phenomenology ${ }^{1}$ |  |
| Recreation Track |  |  |
| PHIL 324 | Environmental Ethics ${ }^{1}$ |  |
| PHIL 331 | Social and Political Philosophy ${ }^{1}$ |  |
| Social Welfare Track |  |  |
| PHIL 331 | Social and Political Philosophy ${ }^{1}$ |  |
| PHIL 375 | Existentialism and Phenomenology ${ }^{1}$ |  |
| Technology Track |  |  |
| PHIL 338 | Ethics, Technology, and the Future ${ }^{1}$ |  |
| PHIL 375 | Existentialism and Phenomenology ${ }^{1}$ |  |
| Subtotal |  | 12 |
| Required Electives |  |  |
| Select at least 12 credits from any other philosophy courses |  | 12 |
| Select 6 credits from either philosophy courses or courses in an area related in the field of specialization |  | 6 |
| Subtotal |  | 18 |
| Total Hours |  | 30 |

1 Course counts for $50 \%$ of Major requirements and Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Presenting papers at conferences
5. Involvement in Ethics Bowl

PHILOSOPHY - BA (5 64)
Concentration in Career Related (CREL)
This program is effective as of Fall 2020.
Revised 12-2019
UCC 12.3.2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## Philosophy, Minor

Philosophy encourages you to critically examine what passes as "common knowledge," formulate well-reasoned positions on important issues, and express your ideas clearly and carefully. The Philosophy program at SRU fosters excellence in reading, writing, critical thinking, and ethical deliberation. SRU philosophy students have won more top awards at the annual statewide Association for Philosophy and Religious Studies (IAPRS) than any other university within the PA State System of Higher Education.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Philosophy, Minor Program Page (https://www.sru.edu/academics/ majors-and-minors/philosophy/)

Philosophy Department Page (https://www.sru.edu/academics/colleges-and-departments/cla/departments/philosophy/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.


## Code Title

Hours
Required Courses
Select six of the following:

| PHIL 101 | Philosophical Inquiry |
| :--- | :--- |
| PHIL 113 | Formal Logic |
| PHIL 123 | Ethics |
| PHIL 140 | World Religions |
| PHIL 163 | Philosophy in Literature |
| PHIL 170 | American Philosophy |
| PHIL 171 | Philosophy of Human Existence |
| PHIL 261 | Philosophy of Art |
| PHIL 313 | Symbolic Logic |
| PHIL 324 | Environmental Ethics |
| PHIL 325 | Medical/Health Care Ethics |
| PHIL 326 | Business Ethics |
| PHIL 331 | Social and Political Philosophy |
| PHIL 335 | Philosophy of Law and Justice |
| PHIL 336 | Philosophy of Gender and Sex |
| PHIL 338 | Ethics, Technology, and the Future |
| PHIL 341 | Philosophy of Religion |
| PHIL 343 | Asian Philosophy |
| PHIL 351 | Philosophy of Natural Science |
| PHIL 362 | Philosophy of Mind |
| PHIL 371 | Ancient Western Philosophy |
| PHIL 372 | Modern Western Philosophy <br> PHIL 373Modern Authors and Issues <br> PHIL 375Existentialism and Phenomenology  <br> PHIL 376 Analytic Philosophy <br> PHIL 490 Independent Study (one or more supervised <br> PHIL XXX Phers on an important philosophical |

Total Hours
1 Students may select from Experimental courses PHIL 190, PHIL 290, PHIL 390; Workshops PHIL 195, PHIL 295, PHIL 395, PHIL 495; Selected topics PHIL 198, PHIL 298, PHIL 398, PHIL 498.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN PHILOSOPHY (60A)
This program is effective as of Fall 2020.
Revised 07.10.20
UCC 03.24.20

## Political Science

\(\left.$$
\begin{array}{lll}\text { Chair } & \text { Secretary } & \text { Location }\end{array}
$$ \begin{array}{l}Department <br>

Phone\end{array}\right]\)| Dr. Heather Rice | Renee Hazlet | 203 Spotts World <br> Culture Building |
| :--- | :--- | :--- |

Department Web Site URL (https://www.sru.edu/academics/colleges-and-departments/cla/departments/political-science/)
Department Fact Sheet URL (https://www.sru.edu/documents/programs/ factsheets/undergraduate/polisci-fs.pdf)

## Faculty

Heather Frederick
Professor
Political Science
Ph.D., West Virginia University
M.A., West Virginia University
B.A., Hollins College

## Cheryl Kerchis

Assistant Professor
Political Science
M.P.A., University of Pittsburgh
B.S., Georgetown University

## David Kershaw

Associate Professor
Political Science
Ph.D., University of North Carolina
M.A., Illinois State University
B.S., West Virginia University
B.A., West Virginia University

## Heather Rice

Associate Professor
Political Science
Ph.D., University of Pittsburgh
M.A., University of Pittsburgh
B.S., Clemson University

Nicholas Spina
Assistant Professor
Political Science
Ph.D., University of Missouri
B.A., Michigan State University

## Programs

All first-year students who enter SRU in the Summer and Fall terms of 2019 and after will follow Rock Studies. Students who entered SRU before Spring 2019 will follow Liberal Studies. All new transfer students beginning Summer 2019 and after will follow Liberal Studies. We anticipate that transfer students will begin to enter under Rock Studies during the Summer/Fall term of 2021.

## Majors

- Political Science, Bachelor of Arts (BA) - Concentration in General Political Science (p. 1023)
- Political Science, Bachelor of Arts (BA) - Concentration in International Politics (p. 1025)
- Political Science, Bachelor of Arts (BA) - Concentration in Law and Politics (p. 1028)
- Political Science, Bachelor of Arts (BA) - Concentration in Professional Politics (p. 1030)
- Political Science, Bachelor of Arts (BA) - Concentration in Public Policy (p. 1032)


## Minors

- American Politics, Minor (p. 1020)
- Comparative Politics/International Relations, Minor (p. 1021)
- International Affairs, Minor (p. 1022)
- Political Science, Minor (p. 1035)


## Courses

## POLS 101 - American National Government

A survey of American national politics, emphasis on the constitution, parties, interest groups, elections, organization and structure of government.

## Credits: 3

Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): Transfer Thread Completion Course

## POLS 103-International Relations

An overview of the politics of various governments; the nature of relations among nations; a study of problems such as terrorism and multinationals as political participants.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Transfer Thread Completion Course
POLS 110 - Foundations of Political Science
This course introduces students to contemporary political problems and how political scientists think about those problems. Students will learn the language of political science including the big themes, concepts, and models that span centuries of political science literature and provide insight into global and domestic political conflict. Students will use the lens of political science to explore concepts such as liberty, equality, justice, rights, individual autonomy, democracy and representation, identity and tolerance, the appropriate role and limits of government, and sovereignty of states in the international system. Although nondemocratic forms of governance will be examined, this course will focus on democratic governance - why we chose it, what political practices and reforms can improve it, and how citizens through engagement and dialogue can help to strengthen it. This course will emphasize the relevance of the core concepts of political science in relation to important contested political issues in the US and the global community today.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Thematic Thread(s): Global Citizenship, Comparative Perspectives of Justice \& Society, Fighting Social Problems, Transfer Thread Completion Course

## POLS 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES STUDENT attribute

## POLS 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## POLS 195 - Workshop

Special topics of interest to undergraduates and selected members of the community. A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## POLS 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## POLS 200-State and Local Government

Examines state levels of government. Emphasis is on constitutions, parties and interest groups, elections, organization and structure of government

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even

## POLS 215 - Introduction to Political Theory

An introduction to classical and modern theories of politics, governments and ideologies.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Thematic Thread(s): Transfer Thread Completion Course

## POLS 220 - Foreign Policy

The study of selected instruments of foreign policy, how it is formulated and implemented; the focus is on the U.S.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Thematic Thread(s): Global Citizenship, International Business, Sustainable International Development, Transfer Thread Completion Course

POLS 223 - Law and Courts
An introductory examination of the structure of the judicial branch of government; what we mean when we talk about the "law"; how our understanding of what is law has developed and changed throughout our history; how our state and federal courts are administered and structured; the nature of legal education; the work of the Supreme Court, judges, and lawyers; how the criminal justice system chooses juries, tries defendants, negotiates justice through plea bargaining, and depends on its judiciary; and the role of the legal system in resolving private disputes.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd
Thematic Thread(s): Becoming America, Transfer Thread Completion Course

## POLS 235-Civil Discourse and Democracy

This course is an introduction to civil discourse, or the practice of constructive dialogues and deliberation, based in mutual respect, which ultimately seeks to advance the public interest. Students will use the lens of political science to explore contemporary political problems and how to approach, discuss, and analyze them.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## POLS 255 - Introduction to Public Policy

This course introduces students to the idea that private actions create problems for communities that citizens and community leaders must work together to solve. Students learn a universal framework for overcoming community problems as well as the skills needed to recognize the moral and democratic dilemmas inherent in these problems. Students hone their knowledge by gathering evidence, researching, and addressing real community issues.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): 21 st Century Healthcare, African-American Studies, Building a Healthy Society, Being American, Comparative Perspectives of Justice \& Society, Civil Rights \& Social Movements, Demystifying Crime \& Justice, Environmental Problems Toolkit, Fighting Social Problems Revolutions, Transfer Thread Completion Course

## POLS 263 - Introduction to Comparative Politics

The stress is on descriptions and conceptions of the state and political institutions in the non-Western and Western worlds; with attention on policy-making, national issues, and systems.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even
Thematic Thread(s): Comparative Perspectives of Justice \& Society, Revolutions, Sustainable International Development, Transfer Thread Completion Course

## POLS 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## POLS 295 - Workshop

Special topics of interest to undergraduates and selected members of the community. A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## POLS 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## POLS 301 - Organized Political Action

Political parties and interest groups provide crucial linkages between citizens and their government. This course will investigate the nature and origins of organized political groups in American politics, seeking to understand what it takes for political parties and interest groups, which are informal players of American politics, to survive, thrive, and develop a powerful voice in the national political dialogue. While the course focuses on American parties and interest groups, they will be explored in the global and comparative context.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Thematic Thread(s): African-American Studies, Civil Rights \& Social Movements, Environmental Problems Toolkit, Political Arts, Revolutions, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 303-Seminar in Democracy

In response to waning public trust in American public institutions and democracy, it is imperative to understand how political systems fail. In this course, students will define democracy, discuss what happens when democracies break down, identify the causes of the breakdown, and find solutions to these problems. Students will also identify those characteristics and behaviors democracy requires of citizens for the system to work well.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms Odd
Thematic Thread(s): African-American Studies, Civil Rights \& Social Movements, Sustainable International Development, Transfer Thread Completion Course

## POLS 306 - Campaigns \& Elections

Elections are the cornerstone of democracy. Without free, fair and frequent elections, there is no popular governance. The United States holds more elections for more public offices and governments than any other nation in the world. The purpose of this course is to examine the key issues, questions, and controversies surrounding campaigns and elections in the United States and compare to campaigns and elections held in other democracies around the world.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Thematic Thread(s): Being American, Transfer Thread Completion Course Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 310 - Research Methods

An examination of the foundations of systematic research, techniques of data collection and methods of data analysis.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 321 - The Presidency

The study and evaluation of executive leadership in modern governments; the roles, functions and types of presidential leaders.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 322 - The United Nations and International Law

An examination of the development, structure, and operations of the United Nations system and the fundamentals of public international law.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Environmental Problems Toolkit, Transfer Thread Completion Course, Violence
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 325 - The Congress

The study of legislative structures, functions and organizations; focus on legislative elections, committees, and decision-making.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Thematic Thread(s): Becoming America, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 327 - Public Opinion and Political Attitudes

An examination of the nature, origins, and structures of political attitudes.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Thematic Thread(s): Leadership Development, Transfer Thread
Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## POLS 328 - Assessing Public Opinion

Many careers rely on individuals who have the capacity to create and implement public opinion surveys, and analyze the results of public opinion polls. Urban planning, public administration, and public policy professionals use surveys for program evaluation and democratic accountability, while lobbyists, nonprofit, campaign, and corporate government relations professionals use surveys for assessing public problems and the political environment. Students will gain experience building and fielding surveys that accurately assess public opinion, often while helping community stakeholders with real-world needs.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enrol

## POLS 329 - Political Learning

The course examines the process by which the transmission of political values, attitudes, perceptions and behaviors are undertaken in different political systems.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enrol

## POLS 333 - The Political Film

The Political Film will be presented as an expression of social concerns in our society. Individual films will be evaluated as vehicles, which can influence people by disseminating ideas, convey points of view and comment on matters of political controversy.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Political Arts, Transfer Thread Completion Course Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 349 - Utopian Experiments: Issues of Gender and Power

This course will examine the various alternative plans for the intentional restructuring of society as exhibited in the works of utopian theorists.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 350 - Transnational Terrorism

An examination of politics and practice of transnational terrorism, as well as alternative policy responses to transnational terrorism. topics will include an overview of the history and theory of terrorism as a political tactic, the issues motivating its use by contemporary terrorist organizations, the structure and tactics of terrorist networks, and the connections between states, terrorist networks, and transnational organized crime.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Thematic Thread(s): Transfer Thread Completion Course, Violence
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 351 - Politics of Race

This course is an exploration of the politics and policy issues that disproportionately affect racial and ethnic minorities in the United States A key objective of this course is to help students understand how the past racial history of the US shapes political and policy outcomes in the US today across a range of issues including income and wealth, employment, education, health, housing, and criminal justice. Students in this course will think and write critically about how the US got to this point and how we can get out of this pattern of persistent racial disparities. Students will be challenged throughout the course to apply concepts of racial justice.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): African-American Studies, Becoming America, Being American, Comparative Perspectives of Justice \& Society, Civil Rights \& Social Movements, Demystifying Crime \& Justice, Environmental Problems Toolkit, Fighting Social Problems, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 354 - Seminar in Religion and Politics

This course is intended to help students understand the variety of religious voices in American politics and to acquaint students with the significance and variability of religious influence on contemporary American political life, i.e. public policy and individual political choices. The term "religion" is defined broadly to include formal theological creeds as well as the social beliefs, organizations, and subcultures associated with various religious communities. The central goal of this course is to understand how religion affects politics (and vice versa). Specifically, the course will explore the effects of the diverse religious traditions in America on American political history, voting, lobbying, political mobilization, political culture, and international engagement. A sampling of questions to be addressed follows: What has been the relative impact of various religions on American politics? How do religious actors translate their values into action? In what ways is the impact of religion direct? Indirect? How does the nature of the environment (domestic and international) affect the ability of religious actors to wield influence?

Credits: 3
Term(s) Typically Offered: Offered Fall Terms Odd
Thematic Thread(s): Civil Rights \& Social Movements, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 356 - Gay and Lesbian Politics

This course will seek to understand how and why the battle over gay rights has come to occupy such a prominent place in our society and what this battle tells us about politics more generally. Although the course is centered on the politics of gay rights in the American context, we will also compare the American experience to those of other nations.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Thematic Thread(s): Civil Rights \& Social Movements, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 357-Civil Liberties and Civil Rights

A survey of current controversies regarding the rights and freedoms guaranteed to American citizens by the U.S. Constitution.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd
Thematic Thread(s): African-American Studies, Building a Healthy Society,
Being American, Civil Rights \& Social Movements, Transfer Thread
Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 359 - Policy Analysis and Evaluation

An examination of the ethical, theoretical and practical issues associated with the application of analytic and evaluative techniques to selected public policy problems and programs.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Thematic Thread(s): Building a Healthy Society, Environmental Problems Toolkit, Fighting Social Problems, Transfer Thread Completion Course Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 364 - Using Evidence to Solve Public Problems

Public decision makers increasingly call for evidence-based solutions to public problems. In this course, students will learn to assess and use data and evidence to help solve community problems. These skills provide the foundation of government relations, public service, nonprofit, and other careers relying on data-driven decision-making.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even
Thematic Thread(s): Comparative Perspectives of Justice \& Society,
Civil Rights \& Social Movements, Demystifying Crime \& Justice, Fighting
Social Problems, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 365 - International Political Economy

The in-depth analysis of the political relationships among nation-states.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Thematic Thread(s): International Business, Sustainable International Development, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
POLS 367 - National and International Security: Problems and Issues National security problems combine aspects of American government, international relations, game theory, and logistical problems derived from research development priorities, economics. The course introduces the major issues of our time such as arms control, disarmament, the nature of war, the reality of decision-making and various case studies.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 369-Politics of Developing Areas

A developmental approach to the comparative study of the primary functions, structures and capabilities of various industrializing political systems such as India, China, Mexico, Brazil, Tanzania.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms Odd
Thematic Thread(s): Sustainable International Development, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 370 - Latin American Politics and Development

This is an interdisciplinary course designed to give students a broad understanding of the historical, contemporary social (including gender, race, ethnicity, religion, etc.), economic, and in particular, political forces that shape Latin America. A number of different perspectives will be utilized to understand and explain the current state of Latin American political and economic development.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 372 - Campaign Management \& Strategy

This course will provide a very practical, hands-on blueprint for students who wish to run effectively and successfully for public office, or for students who hope to be effective and successful campaign managers or staffers. This course will consider campaigning from the perspective of both the candidate and the campaign manager, with a focus on developing and implementing a comprehensive campaign strategy.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 375 - Women and Politics

The course will examine the effect of socialization and the impact of culture on women, gender differences in patterns of political participation; legal, political and social rights of women; and the effects of the political system upon the lives of women and their families.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Thematic Thread(s): Civil Rights \& Social Movements, Gender and Diversity, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 395 - workshop

Special topics of interest to undergraduates and selected members of the community. A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 403 - Constitutional Law

The case study and analysis of the development and growth of constitutions through judicial interpretation

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 444 - Capstone: Political Analysis

An examination of the theoretical and practical issues associated with the application of analytic and evaluative techniques to selected political institutions, behaviors, or policies. Students will be assessed on their accomplishment of outcomes expected of Political Science graduates.

Prerequisite: POLS $310^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

POLS 450 - Internship
Varies

Credits: 1-12
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 451 - Harrisburg Internship

Assignment as an intern with a governmental agency in the state capital in Harrisburg, Pa. Open to all students at Slippery Rock University.

Credits: 1-9
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 452 - Harrisburg Internship Project

A research project developed by the intern and approved by the Harrisburg internship coordinator on some aspect of government activities or public policy

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 454 - Harrisburg Internship Seminar

Weekly seminar composed of all interns in the program and taught by the Harrisburg internship coordinator. Speakers from state government will address the seminar and the seminar will participate in several exercises designed to increase skills in governmental processes

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 490 - Independent Study

In-depth reading and research in an area of particular interest to the student, with the guidance of a faculty member. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 495 - Workshop

Special topics of interest to undergraduates and selected members of the community. A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## American Politics, Minor

To access Minor Requirements, please view the Curriculum Guide tab

## Related Links

American Politics, Minor Program Page (https://www.sru.edu/ academics/majors-and-minors/american-politics-minor/)

Political Science Department Page (https://www.sru.edu/academics/ colleges-and-departments/cla/departments/political-science/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits

| Code <br> Required Courses | Title | Hours |
| :--- | :--- | ---: |
| Select six courses from the following - three courses must be |  |  |
| 300 level or higher. |  |  |$\quad 18$


| Total Hours | 18 |
| :--- | :--- |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Minor in American Politics (68A)
This program is effective as of Fall 2019
Revised 10-2019
UCC 9.10.2019

## Comparative Politics/International Relations, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Comparative Politics and International Relations, Minor Program Page (https://www.sru.edu/academics/majors-and-minors/comparative-politics-and-international-relations-minor/)

Political Science Department Page (https://www.sru.edu/academics/ colleges-and-departments/cla/departments/political-science/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Comparative Politics Courses |  |  |
| POLS 263 | Introduction to Comparative Politics | 3 |
| POLS 369 | Politics of Developing Areas | 3 |
| Additional cour | be determined by the department. | 3 |
| International Relations and Politics Courses |  |  |
| Select three o | lowing: | 9 |
| POLS 103 | International Relations |  |
| POLS 220 | Foreign Policy |  |
| POLS 322 | The United Nations and International Law |  |
| POLS 365 | International Political Economy |  |
| POLS 367 | National and International Security: Problems and Issues |  |

Total Hours

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Minor in Comparative Politics and International Relations (68B)
This program is effective as of Fall 2018
Revised 6-2019

## International Affairs, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

International Affairs, Minor Program Page (https://www.sru.edu/ academics/majors-and-minors/international-affairs-minor/)

Political Science Department Page (https://www.sru.edu/academics/ colleges-and-departments/cla/departments/political-science/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits

| Code <br> Required Courses | Title | Hours |
| :--- | :--- | ---: |
| Select two of the following courses: |  |  |
| ECON 105 | Economics of Social Issues |  |
| GES 105 | World Regional Geography |  |
| HIST 153 | Contemporary World History |  |
| POLS 103 | International Relations |  |
| Select three of the following courses with six credits at 300 level |  |  |
| or higher: |  |  |
| COMM 217 | Intercultural Communication |  |
| ECON 326 | International Economics |  |
| ENGL 402 | World Literature |  |
| ENVS 440 | Science, Technology and the Environment |  |
| FIN 427 | International Financial Management |  |
| FIN 430 | International Banking |  |
| GES 242 | Geography of Religion |  |
| GES 205 | Cultural Geography |  |
| GES 315 | Cartography I |  |
| GES 331 | Economic Geography |  |
| GES 415 | Cartography II |  |
| HLTH 311 | International Health |  |
| POLS 220 | Foreign Policy |  |
| POLS 263 | Introduction to Comparative Politics |  |
| POLS 322 | The United Nations and International Law |  |
| POLS 365 | International Political Economy |  |
| POLS 367 | National and International Security: |  |

Study of the Culture, History or Politics of a Foreign Country or World Region
Select at least one course:

| CHIN 306 | Survey of Chinese Civilization and Culture |
| :--- | :--- |
| ENGL 316 | Asian Film |
| FREN 306 | France and Francophone Identities Today |
| GERM 305 | German Civilization |
| GERM 306 | Modern German Civilization |
| GES 303 | Asia |
| GES 308 | Europe |
| GES 309 | Africa |
| HIST 306 | Russia Since 1855 |
| HIST 332 | Britain Since 1689 |
| HIST 352 | Latin America Since 1830 |
| HIST 362 | Africa North of the Zambezi |
| HIST 363 | Southern Africa |
| HIST 381 | East Asian Military Traditions |
| HIST 382 | Modern Asian Pacific Rim |
| HIST 386 | Modern China |
| HIST 427 | Nineteenth Century Europe |
| HIST 462 | The Contemporary Middle East |
| KORN 306 | Modern Korean Civilization  <br> RUSS 306 The Challenge of Russian Legacy <br> SPAN 305 Spain Today  <br> SPAN 335 Women in Hispanic Literature <br> SPAN 431 Exploring Spanish Culture through Media <br> SPAN 432 Exploring Latin American Cultures through |

Total Hours

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Demonstration of Modern Language Competency at the 103 level

- Chinese
- French
- German
- Korean
- Spanish
- Russian
- Japanese
- Italian


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Minor in International Affairs (68E)
3 This program is effective as of Fall 2018

## Political Science, Bachelor of Arts (BA) - Concentration in General Political Science

## PROGRAM LEARNING OUTCOMES

- Substantive Knowledge: Political Science students will demonstrate substantive knowledge of institutions, processes and values that shape politics within and among states, and the major theories, concepts, foundations, and methodologies used in the study of politics.
- Critical Thinking: Political Science students will develop the capacity to think critically about local, state, national, and global politics.
- Effective Communication: Political Science students will be able to present and defend their ideas, the information that they have acquired, and the analyses developed while utilizing scholarly approaches in political science.
- Research Skills: Political Science students will demonstrate competency with basic tools underlying modern social and political science research, including proficiency in both quantitative and qualitative analysis, which will allow students to ask and answer basic political questions.
- Engagement in Politics: Political Science students will be prepared for active citizenship and demonstrate an ongoing interest in local, state, national and global politics.


## RELATED LINKS

Political Science, BA Program Page (https://www.sru.edu/academics/ majors-and-minors/political-science/)

Political Science Department Page (https://www.sru.edu/academics/ colleges-and-departments/cla/departments/political-science/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## CURRICULUM GUIDE

## GPA REQUIREMENT

Major GPA: 2.00 or higher
Overall GPA: 2.00 or higher

| SUMMARY* |  |
| :--- | ---: |
| Code $\quad$ Title | Hours |
| Rock Studies Requirements | 42 |
| Modern Language Requirement | $0-9$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 42 |
| Electives | Hours |
| ROCK STUDIES REQUIREMENTS | 36 |
| Code |  |
| The Rock | Title |
| SUBJ 139 | University Seminar |


| ENGL 104 | Critical Reading | 3 |
| :---: | :---: | :---: |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: 3 |  |  |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  |  |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  |  |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  |  |
| Natural Sciences Inquiry |  |  |
| SCI 101 <br> Science of Life |  |  |
| Physical Sciences Inquiry |  |  |
| SCI 102 Understanding the Physical World |  |  |
| Subtotal |  |  |
| Thematic Thread |  |  |
| Select 12 Credits (p.1378) ${ }^{2} \quad 12$ |  |  |
| Total Hours |  |  |
| 1 Course offered in multiple subjects; cannot take course in first major subject. |  |  |
| 2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above. |  |  |
| BA Modern Language Requirement |  |  |
| BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible. |  |  |
| Code <br> Title <br> Hours |  |  |
| Complete 0-9 credits |  |  |
| Total Hours |  |  |
| Basic Math Requirement |  |  |
| Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree. |  |  |
| Code | Title | Hours |
| Complete one of the following: 0-3 |  |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP $110 \quad$ Beginning Algebra |  |  |
| $\begin{array}{ll}\text { Total Hours } & 0-3\end{array}$ |  |  |
| Computer Competency |  |  |
| Code Title Hours |  |  |
| Demonstrate "computer competency" by one of the following: 0-3 |  |  |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liber |  |
| CPSC 110 | Computer Concepts |  |


| CPSC 130 | Introduction to Computing and <br> Programming |
| :--- | :--- |
| PE 202 | Technology for Wellness |

## Total Hours

## MAJOR REQUIREMENTS

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above

| Code Title | Hou |
| :--- | :--- | :--- |
| Major Requirements |  |

Politic Science Core Coursework

| POLS 101 | American National Government ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| POLS 103 | International Relations ${ }^{1}$ | 3 |
| POLS 110 | Foundations of Political Science ${ }^{1}$ | 3 |
| POLS 255 | Introduction to Public Policy ${ }^{1}$ | 3 |
| POLS 263 | Introduction to Comparative Politics ${ }^{1}$ | 3 |
| POLS 310 | Research Methods ${ }^{1}$ | 3 |
| POLS 444 | Capstone: Political Analysis ${ }^{1}$ | 3 |
| General Concentration Required Coursework |  |  |
| Required Course |  | 3 |



Total Hours

1 Course counts for $50 \%$ of Major requirements and Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Political Science BA (568) with General Concentration (GEPS)
This program is effective as of Fall 2021.
Revised 06.01.2021
UCC 02.02.2021

## RECOMMENDED FOUR-YEAR PLAN

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| POLS 101 | American National Government | 3 |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar * | 1 |
| MODL 1XX | Language and Culture I, II, or III | 3 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
|  | Hours | 16 |
| Spring |  |  |
| POLS 103 | International Relations | 3 |
| POLS 110 | Foundations of Political Science | 3 |
| MODL 1XX | Language and Culture I, II, or III | 3 |
| ENGL 104 | Critical Reading | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
|  | Hours | 15 |
| Second Year |  |  |
| Fall |  |  |
| POLS 255 | Introduction to Public Policy | 3 |
| POLS 263 | Introduction to Comparative Politics | 3 |
| MODL 1XX | Language and Culture I, II, or III | 3 |
| Social Science Inquiry (p. 1378) |  | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 15 |
| Spring |  |  |
| POLS 310 | Research Methods | 3 |


| POLS 2XX | Concentration Requirement | 3 |
| :---: | :---: | :---: |
| MATH 117 | Quantitative Reasoning | 3 |
| Thematic Thread Requirement (p. 1378) 3 |  |  |
| Elective/Minor/Certificate/Second Major |  |  |
|  | Hours | 5 |
| Third Year |  |  |
| Fall |  |  |
| POLS 3XX/4XX | Concentration Requirement | 6 |
| SCI 101 | Science of Life | 3 |
| Elective/Minor/Certificate/Second Major 3 |  |  |
| Thematic Thread Requirement (p. 1378) 3 |  |  |
|  | Hours | 15 |
| Spring |  |  |
| POLS 3XX/4XX | Concentration Requirement | 6 |
| Thematic Thread Requirement (p. 1378) |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Elective/Minor/Certificate/Second Major |  |  |
|  | Hours | 5 |
| Fourth Year |  |  |
| Fall |  |  |
| POLS 444 | Capstone: Political Analysis | 3 |
| POLS 3XX/4XX | Concentration Requirement | 3 |
| Thematic Thread Requirement (p. 1378) 3 |  |  |
| Free/Minor/Certificate/Second Major |  |  |
|  | Hours | 15 |
| Spring |  |  |
| Free/Minor/Certificate/Second Major 12 |  |  |
| POLS | Concentration Elective | 3 |
|  | Hours | 15 |
|  | Total Hours** | 121 |
| 1 Course offered in multiple subjects; cannot take course in first major subject. |  |  |
| 2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/ ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UIdNTi4u)to declare a thread. |  |  |
|  |  |  |
| ** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year. |  |  |

## Major Code: 568

Concentration Code: GEPS
Revised: 10.18.2021

## Political Science, Bachelor of Arts (BA) - Concentration in International Politics

## PROGRAM LEARNING OUTCOMES

- Substantive Knowledge: Political Science students will demonstrate substantive knowledge of institutions, processes and values that shape politics within and among states, and the major theories, concepts, foundations, and methodologies used in the study of politics.
- Critical Thinking: Political Science students will develop the capacity to think critically about local, state, national, and global politics.
- Effective Communication: Political Science students will be able to present and defend their ideas, the information that they have acquired, and the analyses developed while utilizing scholarly approaches in political science.
- Research Skills: Political Science students will demonstrate competency with basic tools underlying modern social and political science research, including proficiency in both quantitative and qualitative analysis, which will allow students to ask and answer basic political questions.
- Engagement in Politics: Political Science students will be prepared for active citizenship and demonstrate an ongoing interest in local, state, national and global politics.


## RELATED LINKS

Political Science, BA Program Page (https://www.sru.edu/academics/ majors-and-minors/political-science/)

Political Science Department Page (https://www.sru.edu/academics/ colleges-and-departments/cla/departments/political-science/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## CURRICULUM GUIDE

## GPA REQUIREMENT

Major GPA: 2.00 or higher
Overall GPA: 2.00 or higher

## SUMMARY*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Modern Language Requirement | $0-9$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 42 |
| Electives | 36 |

## ROCK STUDIES REQUIREMENTS

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |


| MATH 117 Quantitative Reasoning | 3 |
| :---: | :---: |
| Select one of the following: | 3 |
| COMM 200 Civil Discourse: Theory \& Practice |  |
| PHIL 110 Ethics and Civil Discourse |  |
| POLS 235 Civil Discourse and Democracy |  |
| Subtotal | 15 |
| Integrated Inquiry |  |
| Creative and Aesthetic Inquiry |  |
| Select 3 Credits (p.1378) | 3 |
| Humanities Inquiry |  |
| Select 3 Credits (p.1378) | 3 |
| Social Science Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Natural Sciences Inquiry |  |
| SCI 101 Science of Life | 3 |
| Physical Sciences Inquiry |  |
| SCI 102 Understanding the Physical World | 3 |
| Subtotal | 15 |
| Thematic Thread |  |
| Select 12 Credits (p.1378) ${ }^{2}$ | 12 |
| Total Hours | 42 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete $0-9$ credits | $0-9$ |  |
| Total Hours | $\mathbf{0 - 9}$ |  |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP $110 \quad$ Beginning Algebra |  |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Ar |  |
| CPSC 110 | Computer Concepts |  |


| CPSC 130 | Introduction to Computing and <br> Programming |  |
| :--- | :--- | :--- |
| PE 202 | Technology for Wellness | $\mathbf{0 - 3}$ |
| Total Hours |  |  |
| MAJOR REQUIREMENTS |  |  |
| - 21 major credits must be taken at SRU or PASSHE |  |  |
| - 21 major credits must be taken at the 300 level or above |  |  |


| Code | Title | Hours |
| :---: | :---: | :---: |
| Major Requirements |  |  |
| Political Science Core Coursework |  |  |
| POLS 101 | American National Government ${ }^{1}$ | 3 |
| POLS 103 | International Relations ${ }^{1}$ | 3 |
| POLS 110 | Foundations of Political Science ${ }^{1}$ | 3 |
| POLS 255 | Introduction to Public Policy ${ }^{1}$ | 3 |
| POLS 263 | Introduction to Comparative Politics ${ }^{1}$ | 3 |
| POLS 310 | Research Methods ${ }^{1}$ | 3 |
| POLS 444 | Capstone: Political Analysis ${ }^{1}$ | 3 |
| International Politics Concentration Required Coursework |  | 21 |
| Select 15 c Politics | ternational Relations and/or Comparative | 15 |


| POLS 220 | Foreign Policy ${ }^{1}$ |
| :---: | :---: |
| POLS 322 | The United Nations and International Law ${ }^{1}$ |
| POLS 350 | Transnational Terrorism ${ }^{1}$ |
| POLS 365 | International Political Economy ${ }^{1}$ |
| POLS 367 | National and International Security: Problems and Issues ${ }^{1}$ |
| POLS 369 | Politics of Developing Areas ${ }^{1}$ |
| POLS 370 | Latin American Politics and Development ${ }^{1}$ |
| Select 6 credits in International Politics-Related Electives |  |
| POLS 215 | Introduction to Political Theory |
| POLS 303 | Seminar in Democracy ${ }^{1}$ |
| POLS 450 | Internship ${ }^{1}$ |
| COMM 217 | Intercultural Communication ${ }^{1}$ |
| COMM 405 | Global Media ${ }^{1}$ |
| CRIM 328 | Transnational Crime \& Justice ${ }^{1}$ |
| GES 303 | Asia ${ }^{1}$ |
| GES 307 | Australia ${ }^{1}$ |
| GES 331 | Economic Geography ${ }^{1}$ |
| GES 344 | Environmental Justice ${ }^{1}$ |
| GES 361 | Gender and the Environment ${ }^{1}$ |
| GES 444 | World Environmental Cultures ${ }^{1}$ |
| HIST 406 | Mass Killing and Genocide in the Modern World ${ }^{1}$ |
| HIST 462 | The Contemporary Middle East ${ }^{1}$ |
| HIST 463 | Israel-History, State and Society ${ }^{1}$ |
| MRKT 303 | Issues in Global Business ${ }^{1}$ |
| Total Hours |  |

1 Course counts for $50 \%$ of Major requirements and Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Political Science BA (568) with Concentration in International Politics (INPL)
This program is effective as of Fall 2021.
Revised 06.01.2021
UCC 02.02.2021

## RECOMMENDED FOUR-YEAR PLAN

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| POLS 101 | American National Government | 3 |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar * | 1 |
| MODL 1XX | Language and Culture I, II, or III | 3 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
|  | Hours | 16 |
| Spring |  |  |
| POLS 103 | International Relations | 3 |
| POLS 110 | Foundations of Political Science | 3 |
| MODL 1XX | Language and Culture I, II, or III | 3 |
| ENGL 104 | Critical Reading | 3 |
| Select one of the following: |  | 3 |


| COMM 200 | Civil Discourse: Theory \& Practice |  |
| :--- | :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
|  | Hours |  |

Second Year
Fall

| POLS 255 | Introduction to Public Policy | 3 |
| :--- | :--- | ---: |
| POLS 263 | Introduction to Comparative Politics | 3 |
| MODL 1XX | Language and Culture I, II, or III | 3 |
| Social Science Inquiry (p. 1378) | 3 |  |
| Creative \& Aesthetic Inquiry (p. 1378) <br> Declare a Thematic Thread $^{2}$ 3 <br>  Hours $^{3}$ <br> Spring  <br> POLS 310 Research Methods |  |  |
|  |  | $\mathbf{1 5}$ |
|  |  | 3 |


| POLS 2XX | Concentration Requirement | 3 |
| :---: | :---: | :---: |
| MATH 117 | Quantitative Reasoning | 3 |
| Thematic Thread Requirement (p. 1378) |  |  |
| Elective/Minor/Certificate/Second Major |  |  |
|  | Hours | 5 |
| Third Year |  |  |
| Fall |  |  |
| POLS 3XX/4XX | Concentration Requirement | 6 |
| SCI 101 | Science of Life | 3 |
| Elective/Minor/Certificate/Second Major |  |  |
| Thematic Thread Requirement (p. 1378) |  |  |
|  | Hours | 15 |
| Spring |  |  |
| POLS 3XX/4XX | Concentration Requirement | 6 |
| Thematic Thread Requirement (p. 1378) |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Elective/Minor/Certificate/Second Major |  |  |
|  | Hours | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| POLS 444 | Capstone: Political Analysis | 3 |
| POLS 3XX/4XX | Concentration Requirement | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Free/Minor/Certificate/Second Major |  | 6 |
|  | Hours | 5 |
| Spring |  |  |
| Free/Minor/Certificate/Second Major |  | 12 |
| POLS | Concentration Elective | 3 |
|  | Hours | 15 |
|  | Total Hours** | 121 |
| Course offered in multiple subjects; cannot take course in first major subject. |  |  |
| Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/ ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UIdNTi4 declare a thread. |  |  |
| * Students are encouraged to take INDS 101 as a Free Elective. |  |  |
| ** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year. |  |  |
| Major Code: 568 <br> Concentration Code: INPL <br> Revised: 10.18.2021 |  |  |
|  |  |  |
|  |  |  |

## Political Science, Bachelor of Arts (BA) - Concentration in Law and Politics

## PROGRAM LEARNING OUTCOMES

- Substantive Knowledge: Political Science students will demonstrate substantive knowledge of institutions, processes and values that shape politics within and among states, and the major theories, concepts, foundations, and methodologies used in the study of politics.
- Critical Thinking: Political Science students will develop the capacity to think critically about local, state, national, and global politics.
- Effective Communication: Political Science students will be able to present and defend their ideas, the information that they have acquired, and the analyses developed while utilizing scholarly approaches in political science.
- Research Skills: Political Science students will demonstrate competency with basic tools underlying modern social and political science research, including proficiency in both quantitative and qualitative analysis, which will allow students to ask and answer basic political questions.
- Engagement in Politics: Political Science students will be prepared for active citizenship and demonstrate an ongoing interest in local, state, national and global politics.


## RELATED LINKS

Political Science, BA Program Page (https://www.sru.edu/academics/ majors-and-minors/political-science/)

Political Science Department Page (https://www.sru.edu/academics/ colleges-and-departments/cla/departments/political-science/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## CURRICULUM GUIDE

## GPA REQUIREMENT

Major GPA: 2.00 or higher
Overall GPA: 2.00 or higher

| SUMMARY* |  |
| :--- | ---: |
| Code $\quad$ Title | Hours |
| Rock Studies Requirements | 42 |
| Modern Language Requirement | $0-9$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 42 |
| Electives | 36 |

## ROCK STUDIES REQUIREMENTS

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |



| CPSC 130 | Introduction to Computing and <br> Programming |
| :--- | :--- |
| PE 202 | Technology for Wellness |

## Total Hours

## MAJOR REQUIREMENTS

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :---: | :---: | :---: |
| Major Requirements |  |  |
| Political Science Core Coursework |  |  |
| POLS 101 | American National Government ${ }^{1}$ | 3 |
| POLS 103 | International Relations ${ }^{1}$ | 3 |
| POLS 110 | Foundations of Political Science ${ }^{1}$ | 3 |
| POLS 255 | Introduction to Public Policy ${ }^{1}$ | 3 |
| POLS 263 | Introduction to Comparative Politics ${ }^{1}$ | 3 |
| POLS 310 | Research Methods ${ }^{1}$ | 3 |
| POLS 444 | Capstone: Political Analysis ${ }^{1}$ | 3 |

Law and Politics Concentration Required Coursework

| POLS 215 | Introduction to Political Theory |
| :---: | :---: |
| POLS 223 | Law and Courts ${ }^{1}$ |
| POLS 357 | Civil Liberties and Civil Rights |
| POLS 403 | Constitutional Law |
| Select 6 credits in Politic Science Electives |  |
| POLS 200 | State and Local Government ${ }^{1}$ |
| POLS 303 | Seminar in Democracy ${ }^{1}$ |
| POLS 321 | The Presidency ${ }^{1}$ |
| POLS 325 | The Congress ${ }^{1}$ |
| POLS 351 | Politics of Race ${ }^{1}$ |
| POLS 359 | Policy Analysis and Evaluation ${ }^{1}$ |
| POLS 450 | Internship |

Select 3 credits in Electives 3

| COMM 410 | Communication Law ${ }^{1}$ |
| :---: | :---: |
| CRIM 110 | Introduction to Criminology \& Criminal Justice Systems ${ }^{1}$ |
| CRIM 263 | Introduction to Criminal Procedure ${ }^{1}$ |
| CRIM 422 | The Death Penalty ${ }^{1}$ |
| CSS 352 | Law \& Ethics in the Workplace ${ }^{1}$ |
| ENGL 312 | Introduction to Shakespeare ${ }^{1}$ |
| GES 324 | Environmental Law and Policy ${ }^{1}$ |
| HIST 326 | The Long Civil Rights Movement ${ }^{1}$ |
| HIST 423 | Ancient Rome ${ }^{1}$ |
| HIST 453 | American Constitutional History and Law ${ }^{1}$ |
| HSS 441 | Terrorism, Law and National Security ${ }^{1}$ |
| PHIL 113 | Formal Logic ${ }^{1}$ |
| PHIL 123 | Ethics ${ }^{1}$ |
| PHIL 331 | Social and Political Philosophy ${ }^{1}$ |
| PHIL 335 | Philosophy of Law and Justice ${ }^{1}$ |
| SPMT 486 | Sport Law and Facilities ${ }^{1}$ |

Total Hours

1 Course counts for $50 \%$ of Major requirements and Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Political Science BA (568) with Concentration in Law and Politics (LAPL)
This program is effective as of Fall 2021.
Revised 06.01.2021
UCC 02.02.2021

## RECOMMENDED FOUR-YEAR PLAN

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| POLS 101 | American National Government | 3 |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar * | 1 |
| MODL 1XX | Language and Culture I, II, or III | 3 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
|  | Hours | 16 |
| Spring |  |  |
| POLS 103 | International Relations | 3 |
| POLS 110 | Foundations of Political Science | 3 |
| MODL 1XX | Language and Culture I, II, or III | 3 |
| ENGL 104 | Critical Reading | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
|  | Hours | 15 |

## Second Year

Fall
POLS 255 Introduction to Public Policy 3
POLS 263 Introduction to Comparative Politics 3
MODL 1XX Language and Culture I, II, or III 3
Social Science Inquiry (p. 1378) 3
Creative \& Aesthetic Inquiry (p. 1378) 3

Declare a Thematic Thread ${ }^{2}$

|  | Hours | $\mathbf{1 5}$ |
| :--- | :--- | :---: |
| Spring |  |  |
| POLS 310 | Research Methods | 3 |


| POLS 2XX | Concentration Requirement | 3 |
| :---: | :---: | :---: |
| MATH 117 | Quantitative Reasoning | 3 |
| Thematic Thread Requirement (p. 1378) |  |  |
| Elective/Minor/Certificate/Second Major |  |  |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| POLS 3XX/4XX | Concentration Requirement | 6 |
| SCI 101 | Science of Life | 3 |
| Elective/Minor/Certificate/Second Major 3 |  |  |
| Thematic Thread Requirement (p. 1378) 3 |  |  |
|  | Hours | 15 |
| Spring |  |  |
| POLS 3XX/4XX | Concentration Requirement | 6 |
| Thematic Thread Requirement (p. 1378) |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Elective/Minor/Certificate/Second Major |  |  |
|  | Hours | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| POLS 444 | Capstone: Political Analysis | 3 |
| POLS 3XX/4XX | Concentration Requirement | 3 |
| Thematic Thread Requirement (p. 1378) |  |  |
| Free/Minor/Certificate/Second Major |  |  |
|  | Hours | 15 |
| Spring |  |  |
| Free/Minor/Certificate/Second Major 12 |  |  |
| POLS | Concentration Elective | 3 |
|  | Hours | 15 |
|  | Total Hours** | 121 |
| Course offered in multiple subjects; cannot take course in first major subject. |  |  |
| Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/ ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UIdNTi4u) declare a thread. |  |  |
| * Students are encouraged to take INDS 101 as a Free Elective. |  |  |
| ** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year. |  |  |

## Major Code: 568

Concentration Code: LAPL
Revised: 10.18.2021

## Political Science, Bachelor of Arts (BA) - Concentration in Professional Politics

## PROGRAM LEARNING OUTCOMES

- Substantive Knowledge: Political Science students will demonstrate substantive knowledge of institutions, processes and values that shape politics within and among states, and the major theories, concepts, foundations, and methodologies used in the study of politics.
- Critical Thinking: Political Science students will develop the capacity to think critically about local, state, national, and global politics.
- Effective Communication: Political Science students will be able to present and defend their ideas, the information that they have acquired, and the analyses developed while utilizing scholarly approaches in political science.
- Research Skills: Political Science students will demonstrate competency with basic tools underlying modern social and political science research, including proficiency in both quantitative and qualitative analysis, which will allow students to ask and answer basic political questions.
- Engagement in Politics: Political Science students will be prepared for active citizenship and demonstrate an ongoing interest in local, state, national and global politics.


## RELATED LINKS

Political Science, BA Program Page (https://www.sru.edu/academics/ majors-and-minors/political-science/)

Political Science Department Page (https://www.sru.edu/academics/ colleges-and-departments/cla/departments/political-science/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## CURRICULUM GUIDE

## GPA REQUIREMENT

Major GPA: 2.00 or higher
Overall GPA: 2.00 or higher

## SUMMARY*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Modern Language Requirement | $0-9$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 42 |
| Electives | 36 |

## ROCK STUDIES REQUIREMENTS

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |



| CPSC 130 | Introduction to Computing and <br> Programming |  |
| :--- | :--- | :--- |
| PE 202 | Technology for Wellness | $\mathbf{0 - 3}$ |
| Total Hours |  |  |
| MAJOR REQUIREMENTS |  |  |
| - 21 major credits must be taken at SRU or PASSHE |  |  |
| - 21 major credits must be taken at the 300 level or above |  |  |


| Code | Title | Hours |
| :---: | :---: | :---: |
| Major Requirements |  |  |
| Political Science Core Coursework |  |  |
| POLS 101 | American National Government ${ }^{1}$ | 3 |
| POLS 103 | International Relations ${ }^{1}$ | 3 |
| POLS 110 | Foundations of Political Science ${ }^{1}$ | 3 |
| POLS 255 | Introduction to Public Policy ${ }^{1}$ | 3 |
| POLS 263 | Introduction to Comparative Politics ${ }^{1}$ | 3 |
| POLS 310 | Research Methods ${ }^{1}$ | 3 |
| POLS 444 | Capstone: Political Analysis ${ }^{1}$ | 3 |
| Professional Politics Concentration Required Coursework |  |  |
| Required Courses |  |  |
| POLS 200 | State and Local Government ${ }^{1}$ | 3 |
| POLS 301 | Organized Political Action ${ }^{1}$ | 3 |
| POLS 328 | Assessing Public Opinion ${ }^{1}$ | 3 |
| POLS 372 | Campaign Management \& Strategy ${ }^{1}$ | 3 |
| Select 3 credits in Political Institutions |  | 3 |

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete $0-9$ credits | $0-9$ |  |
| Total Hours | $\mathbf{0 - 9}$ |  |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one | following: | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP $110 \quad$ Beginning Algebra |  |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Ar |  |
| CPSC 110 | Computer Concepts |  |

1 Course counts for $50 \%$ of Major requirements and Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

Political Science BA (568) with Concentration in Professional Politics (PRPL)
This program is effective as of Fall 2021
Revised 06.01.2021
UCC 02.02.2021
RECOMMENDED FOUR-YEAR PLAN

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| POLS 101 | American National Government | 3 |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar * | 1 |
| MODL 1XX | Language and Culture I, II, or III | 3 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
|  | Hours | 16 |
| Spring |  |  |
| POLS 103 | International Relations | 3 |
| POLS 110 | Foundations of Political Science | 3 |
| MODL 1XX | Language and Culture I, II, or III | 3 |
| ENGL 104 | Critical Reading | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
|  | Hours | 15 |
| Second Year |  |  |
| Fall |  |  |
| POLS 255 | Introduction to Public Policy | 3 |
| POLS 263 | Introduction to Comparative Politics | 3 |
| MODL 1XX | Language and Culture I, II, or III | 3 |
| Social Science Inquiry (p. 1378) |  | 3 |
| Creative \& Aesthetic Inquiry (p. 1378) |  | 3 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |


|  | Hours | $\mathbf{1 5}$ |
| :--- | :--- | ---: |
| Spring |  |  |
| POLS 310 | Research Methods | 3 |
| POLS 2XX | Concentration Requirement | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| Elective/Minor/Certificate/Second Major | $\mathbf{3}$ |  |
| Hours | $\mathbf{1 5}$ |  |

Third Year
Fall
POLS 3XX/4XX Concentration Requirement 6
SCI 101 Science of Life 3
Elective/Minor/Certificate/Second Major ..... 3
Thematic Thread Requirement (p. 1378) ..... 3Hours15


- Research Skills: Political Science students will demonstrate competency with basic tools underlying modern social and political science research, including proficiency in both quantitative and qualitative analysis, which will allow students to ask and answer basic political questions.
- Engagement in Politics: Political Science students will be prepared for active citizenship and demonstrate an ongoing interest in local, state, national and global politics.


## RELATED LINKS

Political Science, BA Program Page (https://www.sru.edu/academics/ majors-and-minors/political-science/)

Political Science Department Page (https://www.sru.edu/academics/ colleges-and-departments/cla/departments/political-science/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## CURRICULUM GUIDE

 GPA REQUIREMENTMajor GPA: 2.00 or higher
Overall GPA: 2.00 or higher

## SUMMARY*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Modern Language Requirement | $0-9$ |
| Other Basic Requirements | $0-3$ |
| Computer Competency | $0-3$ |
| Major Requirements | 42 |
| Electives | 36 |

## ROCK STUDIES REQUIREMENTS

| Code | Title | Hours |
| :--- | :--- | :--- |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: | 3 |  |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |


| Subtotal | 15 |
| :--- | :---: |
| Integrated Inquiry |  |
| Creative and Aesthetic Inquiry | 3 |
| Select 3 Credits (p. 1378) | 3 |
| Humanities Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Social Science Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Natural Sciences Inquiry |  |
| SCI 101 | Science of Life |
| Physical Sciences Inquiry |  |


| SCI 102 | Understanding the Physical World | 3 |
| :--- | ---: | ---: |
| Subtotal | 15 |  |
| Thematic Thread | 12 |  |
| Select 12 Credits (p. 1378)${ }^{2}$ | 42 |  |
| Total Hours |  |  |
| 1 | Course offered in multiple subjects; cannot take course in first major |  |
| 2 | subject. |  |

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete $0-9$ credits | $0-9$ |  |
| Total Hours | $\mathbf{0 - 9}$ |  |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Ar |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## MAJOR REQUIREMENTS

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :---: | :---: | :---: |
| Major Requirements |  |  |
| Political Science Core Coursework |  |  |
| POLS 101 | American National Government ${ }^{1}$ | 3 |
| POLS 103 | International Relations ${ }^{1}$ | 3 |
| POLS 110 | Foundations of Political Science ${ }^{1}$ | 3 |
| POLS 255 | Introduction to Public Policy ${ }^{1}$ | 3 |
| POLS 263 | Introduction to Comparative Politics ${ }^{1}$ | 3 |
| POLS 310 | Research Methods ${ }^{1}$ | 3 |



1 Course counts for $50 \%$ of Major requirements and Major GPA

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Political Science BA (5 68) with Concentration in Public Policy (PUPL) This program is effective as of Fall 2021.
Revised 06.01.2021
UCC 02.02.2021

3 RECOMMENDED FOUR-YEAR PLAN

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| POLS 101 | American National Government | 3 |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar* | 1 |
| MODL 1XX | Language and Culture I, II, or III | 3 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
|  | Hours | 16 |


| Spring |  |  |
| :--- | :--- | :--- |
| POLS 103 | International Relations | 3 |
| POLS 110 | Foundations of Political Science | 3 |
| MODL 1XX | Language and Culture I, II, or III | 3 |
| ENGL 104 | Critical Reading | 3 |
| Select one of the following: | 3 |  |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
|  | Hours | $\mathbf{1 5}$ |


| Second Year |  |  |
| :--- | :--- | :--- |
| Fall |  | 3 |
| POLS 255 | Introduction to Public Policy | 3 |
| POLS 263 | Introduction to Comparative Politics | 3 |
| MODL 1XX | Language and Culture I, II, or III | 3 |
| Social Science Inquiry (p. 1378) | 3 |  |
| Creative \& Aesthetic Inquiry (p. 1378) |  |  |
| Declare a Thematic Thread ${ }^{2}$ |  |  |


|  | Hours | $\mathbf{1 5}$ |
| :--- | :--- | ---: |
| Spring |  |  |
| POLS 310 | Research Methods | 3 |
| POLS 2XX | Concentration Requirement | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| Elective/Minor/Certificate/Second Major | 3 |  |
|  | Hours | $\mathbf{1 5}$ |
| Third Year |  |  |
| Fall |  | 6 |
| POLS 3XX/4XX | Concentration Requirement | 3 |
| SCI 101 | Science of Life | 3 |
| Elective/Minor/Certificate/Second Major | 3 |  |
| Thematic Thread Requirement (p. 1378) | $\mathbf{1 5}$ |  |
|  | Hours |  |


| Spring |  | 6 |
| :--- | ---: | ---: |
| POLS 3XX/4XX Concentration Requirement |  |  |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| SCI 102 $\quad$ Understanding the Physical World | 3 |  |
| Elective/Minor/Certificate/Second Major | 3 |  |
| Hours | $\mathbf{1 5}$ |  |


| Fourth Year |  |  |
| :--- | ---: | ---: |
| Fall |  |  |
| POLS 444 | Capstone: Political Analysis | 3 |
| POLS 3XX/4XX | Concentration Requirement | 3 |
| Thematic Thread | Requirement (p. 1378) | 3 |
| Free/Minor/Certificate/Second Major | 6 |  |
|  | Hours | $\mathbf{1 5}$ |
| Spring |  | 12 |
| Free/Minor/Certificate/Second Major |  |  |
| POLS | Concentration Elective | 3 |
|  | Hours | $\mathbf{1 5}$ |
|  | Total Hours** | $\mathbf{1 2 1}$ |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 Work with your Academic Adviser to declare a Thematic
Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/ ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UldNTi4u)to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 568
Concentration Code: PUPL
Revised: 10.18.2021

## Political Science, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Political Science, Minor Program Page (https://www.sru.edu/academics/ majors-and-minors/political-science/)

Political Science Department Page (https://www.sru.edu/academics/ colleges-and-departments/cla/departments/political-science/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper
- A minor shall be no fewer than 18 credits.

Code Title Hours

## Minor Requirement

Select six courses of the following; no more than nine (9) of the eighteen (18) credits may be in any one of the Area Elective blocks:
American Political Institutions

| POLS 101 | American National Government |
| :---: | :--- |
| POLS 200 | State and Local Government |
| POLS 223 | Law and Courts |
| POLS 321 | The Presidency |
| POLS 325 | The Congress |
| Political Theory and Thought |  |
| POLS 110 | Foundations of Political Science |
| POLS 215 | Introduction to Political Theory |
| POLS 303 | Seminar in Democracy |
| POLS 349 | Utopian Experiments: Issues of Gender and |
| International Relations and Politics |  |
| POLS 103 | International Relations |
| POLS 220 | Foreign Policy |
| POLS 322 | The United Nations and International Law |
| POLS 350 | Transnational Terrorism |
| POLS 365 | International Political Economy |
| POLS 367 | National and International Security: |

## Comparative Politics

POLS 263 Introduction to Comparative Politics
POLS 370 Latin American Politics and Development
Public Policy and Law

| POLS 255 | Introduction to Public Policy |
| :--- | :--- |
| POLS 357 | Civil Liberties and Civil Rights |
| POLS 359 | Policy Analysis and Evaluation |
| POLS 364 | Using Evidence to Solve Public Problems |
| Political Behavior |  |
| POLS 301 | Organized Political Action |
| POLS 306 | Campaigns \& Elections |
| POLS 310 | Research Methods |
| POLS 327 | Public Opinion and Political Attitudes |
| POLS 328 | Assessing Public Opinion |
| POLS 329 | Political Learning |
| POLS 333 | The Political Film |
| POLS 351 | Politics of Race |
| POLS 354 | Seminar in Religion and Politics |
| POLS 356 | Gay and Lesbian Politics |
| POLS 369 | Politics of Developing Areas |
| POLS 372 | Campaign Management \& Strategy |
| POLS 375 | Women and Politics |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
MINOR IN POLITICAL SCIENCE (68C)
This program is effective as of Fall 2019
Revised 10-2019
UCC 9.10.2019

## Theatre

| Chair | Secretary | Location | Department <br> Phone |
| :--- | :--- | :--- | :--- |
| Ms. Rebecca | Melanie Martin | 139 West | 724-738-2090 |
| Morrice |  | Performing |  |
|  |  | Arts Building, |  |

Department Web Site URL (https://www.sru.edu/academics/colleges-and-departments/cla/departments/theatre/)
Department Fact Sheet URL (http://www.sru.edu/Documents/programs/ factsheets/undergraduate/theatre-fs.pdf)

## Faculty

Aaron Galligan-Stierle
Assistant Professor
Theatre
M.F.A., Penn State University
B.F.A., Shenandoah University

## Mary Hodson

Instructor
Theatre

## Kari-Anne Innes

Assistant Professor
Theatre

## Samantha Kuchta

Instructor
Theatre
M.F.A., University of Georgia
B.A., Slippery Rock University

## Rebecca Morrice

Associate Professor
Theatre
M.F.A., University of Illinois
B.A., University of Illinois

Theatre
M.M., Arizona State University
B.F.A., Carnegie Mellon University

## David Skeele

Professor
Theatre
Ph.D., University of Pittsburgh
M.F.A., University of New Orleans
M.A., Smith College
B.A., Marlboro College

## Laura Smiley

Associate Professor
Theatre
M.F.A., University of Pittsburgh
B.F.A., Catholic University of America

Edward Tarzia
Instructor
Theatre
M.A., Carnegie Mellon University
B.A., Point Park University

## Programs

All first-year students who enter SRU in the Summer and Fall terms of 2019 and after will follow Rock Studies. Students who entered SRU before Spring 2019 will follow Liberal Studies. All new transfer students beginning Summer 2019 and after will follow Liberal Studies. We anticipate that transfer students will begin to enter under Rock Studies during the Summer/Fall term of 2021.

## Majors

- Acting, Bachelor of Fine Arts (BFA) - Concentration in Acting (p. 1043)
- Acting, Bachelor of Fine Arts (BFA) - Concentration in Musical Theatre (p. 1046)
- Theatre, Bachelor of Arts (BA) - Concentration in Acting (p. 1048)
- Theatre, Bachelor of Arts (BA) - Concentration in Design \& Technology (p. 1051)
- Theatre, Bachelor of Arts (BA) - Concentration in Theatre Arts Management (p. 1054)
- Theatre, Bachelor of Arts (BA) - Concentration in Theatre Studies (p. 1057)


## Minors

- Theatre, Minor (p. 1060)


## Courses

## THEA 131 - Fundamentals of Acting

An introduction to the theory and practice of acting.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Body and Self,
Creating Art, Political Arts, Transfer Thread Completion Course

## Emily Scott

Instructor

## THEA 132 - Stagecraft

Fundamentals of modern set construction, stage lighting, properties, and costume practice. Students assist with current productions in laboratory sessions.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Creating Art, Transfer Thread Completion Course

## THEA 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## THEA 141 - Art of the Theatre

An introduction to the elements of the theatre: acting, playwriting, directing, producing, design and technology. Attention to the ways in which theatre springs from the nature of the community in historical as well as contemporary settings. A lecture course; no performance skills required.

Credits: 3
Term(s) Typically Offered: Offered Every Term

## THEA 142 - Wellness for the Actor

Wellness for the Actor is a foundation class that establishes a physical, mental, and emotional wellness practice that supports advanced training in voice, movement and acting. In the course students will learn to: foster fuller breathing to connect body and mind as a practice for grounding and centering; create a stronger and more versatile physical body; learn physical conditioning practices; gain experience calming the mind and emotional body; study the practice of personal nutrition to enhance general health; and develop their ability to become attuned and connected to their physical self.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students in the BFA 5390 program
Enrollment limited to students with department of Theatre.

## THEA 145 - Musicianship for Musical Theatre

This course focuses on the development of vocal performance techniques through training in aural and sight-singing skills including solfege, rhythmic notation, ear training, tempo, meter and dictation Students will expand their understanding of harmonic progression, body alignment, muscle memory, and technical accuracy. Basic piano skills will also be covered.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Enrollment is limited to students with a program in Musical Theatre.
Enrollment limited to students in the BFA 5390 program

## THEA 146 - Class Voice For Musical Theatre

This course focuses on musical theatre singing technique, skills, and styles for entry-level performers. In addition, the course is designed to familiarize students with industry practices in the field of professional musical theatre performance. Students become familiar with basic concepts of voice production as well as developing an understanding and awareness of vocal health issues. Additionally, students are exposed to a variety of musical theatre popular sung repertory while they are encouraged to develop perceptive listening skills by interacting and responding to their peers in class.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Enrollment is limited to students with a program in Musical Theatre. Enrollment limited to students in the BFA 5390 program.
Enrollment limited to students in a Bachelor of Fine Arts degree.
Enrollment limited to students in the College of Liberal Arts college.
THEA 151 - Rehearsal and Production
Supervised experience in theatre performance and stagecraft by acting or crew participation in one Department of Theatre production. Prospective actors will have to participate in a competitive audition. May be repeated for a maximum of 12 credits.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms

## THEA 159 - Introduction to Theatre Arts Management

This course covers the basic principles, theories, concepts, processes, and practices relating to organizations in the arts industry, with a focus on the theatre industry. Topics include the structure of arts industries, organizational structures, leadership, staffing, volunteerism, fund raising, intellectual property, grants writing, advocacy, etc.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Thematic Thread(s): Creating Art, Leadership Development, Transfer Thread Completion Course

## THEA 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## THEA 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## THEA 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## THEA 215 - Drawing/Drafting/CAD

Principles and techniques used for the creation and implementation of theatrical designs. Introduction to design elements and techniques, drawing, rendering, and computer-aided drafting. Emphasis on set, costume, lighting and property designs.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms Odd
Thematic Thread(s): Creating Art, Transfer Thread Completion Course

## THEA 222 - Acting II

Intermediate-level course designed to continue the actor training begun in THEA 131. Emphasis on realistic acting techniques.

Prerequisite: THEA $131^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
THEA 235-Costume Technology
Basic techniques of constructing costumes for the stage, emphasizing sewing, pattern making and cutting, draping. Includes the study of fabrics, millinery, and accessories.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Creating Art, Transfer Thread Completion Course

## THEA 244 - Acting for Song I

A course designed to synthesize the process of acting through song. Students will apply various acting and singing methodologies to connect to the emotional, physical and vocal requirements of both character and song.

Prerequisites: THEA $145^{\mathrm{C}}$ and THEA $222^{\mathrm{C}}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with a semester level of Junior 1, Junior 2,
Senior 1, Senior 2, Sophomore 1 or Sophomore 2.
Enrollment is limited to students with a program in Musical Theatre.
Enrollment limited to students in the BFA 5390 program.
Enrollment limited to students with department of Theatre.
THEA 246 - Private Musical Theatre Voice
Students will continue to develop musicianship, sight singing and vocal skills through individualized training designed to match their vocal range and skills. Repeatable up to 6 credits.

Prerequisites: THEA $145^{C}$ and THEA $146^{C}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Enrollment is limited to students with a program in Musical Theatre.
Enrollment limited to students in the BFA 5390 program.
Enrollment limited to students in the College of Liberal Arts college.

## THEA 254 - Musical Theatre Dance I

Musical Theatre Dance I will introduce the students to the fundamentals of dance for musical theatre performance, including jazz, tap, ballroom, and hip hop. Students will learn correct alignment and techniques applicable to all musical theatre genres, and apply those principles to the dance styles found within those genres.

Prerequisite: DANC $125^{\text {C }}$
${ }^{C}$ Requires minimum grade of C .
Credits: 2
Term(s) Typically Offered: Offered as Needed
Enrollment is limited to students with a program in Musical Theatre.
Enrollment limited to students in the BFA 5390 program.

## THEA 269 - Playwriting

An introduction to the fundamentals of playwriting, including clear storytelling, character development, scene structure and style. The particular demands of writing in a theatrical medium, as distinct from film, television or novel, will be emphasized.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## THEA 281-Survey of Dramatic Literature I

Analysis and discussion of some of history's most celebrated works of dramatic literature, ranging from classical drama to drama of the eighteenth century. Texts will be examined within the historical context of the cultures that produced them, and in light of their respective theatrical conditions, performance styles, etc. Emphasis will also be placed on various methods of textual analysis.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
THEA 283 - Survey of Dramatic Literature II
Analysis and discussion of some of history"s most celebrated works of dramatic literature, ranging from the early 18th century to the most exciting and groundbreaking contemporary drama. Texts will be examined within the historical context of the cultures that produced them, and in light of their respective theatrical conditions, performance styles, etc. Emphasis will also be placed on various methods of textual analysis.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms

## THEA 290-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## THEA 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## THEA 298-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
THEA 303-Acting III
Acting III is an advanced-level course designed to give the performer facility with the acting approach known as Meisner Technique.

Prerequisite: THEA $222^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.
Enrollment limited to students in the BFA 5390 program.
Enrollment limited to students with department of Theatre.

## THEA 304-Acting for Song II

A continuation of Acting for Song I. Students will undergo advanced study in synthesizing the process of acting through song. Students will apply advanced acting and singing methodologies to connect to the emotional, physical and vocal requirements of both character and song.

Prerequisite: THEA $244^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.
Enrollment is limited to students with a program in Musical Theatre.
Enrollment limited to students in the BFA 5390 program.
Enrollment limited to students with department of Theatre.

## THEA 322 - Acting Technique

An intensive focus on one or more of the following: role preparation, scene study, physical disciplines of acting. Approach varies from offering to offering. May be repeated for credit three times.

Prerequisite: THEA $222^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 324 - Stage Makeup

Theory, practice, and materials of stage make-up. Practical application is mandatory and extensive; students will analyze various characters and design makeup for them.

Prerequisites: THEA $131^{\text {D }}$ and THEA $151^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 328-Acting Shakespeare

An advanced-level course designed to provide the student with tools for the analysis and performance of the plays of Shakespeare.

Prerequisite: THEA $222^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 329-Shakespeare Tour

An ensemble composed of actors and technicians, selected by audition and interview, performing Shakespeare-based scripts in the community and region. May be repeated twice for credit.

Prerequisite: THEA $328^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 330 - Voice and Movement for the Actor

Introduction to disciplines of voice and movement essential for the wellprepared actor. Emphasis will be on performance rather than theory.

Prerequisite: THEA $131^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 332-Advanced Stagecraft

Advanced methods and materials of stagecraft: emphasis on furniture, metals, projected scenery, unusual rigging situations, hydraulics, computer applications, and special effects.

Prerequisite: THEA $132^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 333-Scene Design

The principles and application of design for stage, emphasizing sketches, diagrams, drafting, and model making.
Prerequisite: THEA $215^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 334-Stage Lighting

The theory and practice of stage lighting as practiced in modern theatre.
Prerequisite: THEA $215^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 335 - Costume Design and History

A survey of costume history from the ancient world to the present with an emphasis on social, political, religious, and technological conditions. The process of costume design will be explored using the principles of variety and order, character analysis, period research, and the elements of design.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Thematic Thread(s): Body and Self, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 337 - Directing

The theory and practice of directing for the modern theatre.
Prerequisites: THEA $131^{\mathrm{D}}$ and THEA $132^{\mathrm{D}}$ and THEA $151^{\mathrm{D}}$ and
(THEA $281^{\text {D }}$ or THEA $283^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 339 - New Play Development

This course is designed for actors, directors, and designers to learn how to collaborate with a playwright on a new work and to successfully mount a production of this new work. Students participate through a collaborative process of rehearsal and design, problem-solving and experimentation. Class culminates in a public performance on campus and perhaps another local venue. Student should be a theatre major Permission of instructor via audition or portfolio review.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Theatre.

## THEA 340 - International Theatre Experience

This course is designed for actors, designers and public relations students to create,design and market a production for overseas performance. Students participate through a collaborative process of rehearsal and design, problem-solving and experimentation. Students will also have the opportunity to participate in theater activities involving international performance groups. Class culminates in a public performance both on campus and overseas. Permission of instructor via audition or portfolio review.

Credits: 3
Term(s) Typically Offered: Offered Summer Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students in the BA 592 program

## THEA 342 - IPA/Dialects

A course designed to train actors in phonetics, diction and dialects. Students will learn the International Phonetic Alphabet and master its use for Standard American English stage diction, as well as a variety of national variants and foreign dialects, through both phonetic notation and performance of dramatic texts.

Prerequisites: THEA $143^{C}$ or THEA $353^{C}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students in the BFA 5390 program.

## THEA 344 - Auditioning

Students will learn techniques designed to develop skills in auditioning for theatre productions. Over the course of the semester, students will prepare a diverse repertoire of audition material, including classical and contemporary, as well as dramatic and comedic monologues. Cold readings, appearance and attire, and interview skills will also be covered.

Prerequisite: THEA $303{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students in the BFA 5390 program.
THEA 345 - Stage Management and Safety
Safe and effective production management on the modern stage. Safety education in shop, performance, and public spaces.

Prerequisite: THEA $132^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 347-Auditioning for Musical Theatre

This class will explore personal relationships between performer and song as well as develop reading skills to learn performance readiness. Active performance and application of feedback are core to this work, as well as understanding techniques and the vocabulary of a musical theatre audition. Students will learn how to choose well-suited songs and develop an audition book comprising of different styles.

Prerequisites: THEA $304^{\text {C }}$ and THEA $303^{\text {C }}$
${ }^{\text {C }}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Musical Theatre.
Enrollment limited to students in the BFA 5390 program.

## THEA 348 - Musical Theatre Repertory

Musical Theatre Repertory is an advanced-level course designed to provide the musical theatre performer with a series of individuallytailored audition pieces, while also providing a thorough grounding in the historical background and stylistic demands of the various musical theatre genres. Students will develop solo performance pieces drawn from all major musical theatre styles, including "golden age," contemporary, rock, hip-hop, etc.

Prerequisite: THEA $244^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Musical Theatre.
Enrollment limited to students in the BFA 5390 program.
Enrollment limited to students in the College of Liberal Arts college.

## THEA 351 - Movement for the Actor

Movement for the Actor is an advanced-level course designed to facilitate and develop expressive, responsive movement in the stage performer. In addition to learning a battery of stretching and strengthening exercises, the student will explore physical character development through approaches such as Feldenkrais, "authentic movement" and Chekhov Technique.

Prerequisite: THEA $303^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with a semester level of Junior 1, Junior 2,
Senior 1, Senior 2, Sophomore 1 or Sophomore 2.
Enrollment limited to students in the BFA 5390 program.
THEA 353-Voice for the Actor
Voice for the Actor: A study of breath and vocal work that will inform explorations to develop awareness of the voice and body and how that connects to vocal energy. This will foster breath support, range and stamina. Students will learn the basics of vocal anatomy as well as develop skills for healthy vocal usage.
Prerequisite: THEA $303{ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Theatre or Acting. Enrollment limited to students in a Bachelor of Arts or Bachelor of Fine Arts degrees.
Students in the College of Liberal Arts college may not enroll.

## THEA 354 - Musical Theatre Dance II

Musical Theatre Dance II will continue the exploration of jazz, tap, ballroom and hip hop dance begun in Musical Theatre Dance I. This second level technique course will continue to refine the student's skills in performance and stylistic techniques.

Prerequisite: THEA $254^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 2
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.
Enrollment is limited to students with a program in Musical Theatre.
Enrollment limited to students in the BFA 5390 program.

## THEA 355 - Projects in Theatre

The study and performance of a major role in a Department of Theatre production, or participation in a production as a crew head with significant responsibility, or planning and execution of a study of moderate scope in the history, literature, or criticism of the theatre. May be taken for credit four times for a maximum of 6 credits. Junior standing and permission of the instructor.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 359-Studies in Audience Development

An advanced-level course focusing on audience development strategies for arts institutions.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Thematic Thread(s): Art \& Society, Building a Healthy Society, Political
Arts, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 369 - Advanced Playwriting

An advanced class devoted to building upon fundamental skills learned in Playwriting (93 269), such as characterization, plot structure, exposition, etc.

Prerequisite: THEA $269^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 370 - Playwriting Genres and Styles

An advanced class devoted to exploring one or more of the following advanced topics: playing genres, devised theatre, documentary theatre, non-realistic writing, non-traditional structures and forms.

Prerequisite: THEA $369^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## THEA 372 - Senior Seminar in Playwriting

An advanced-level seminar for senior playwriting majors, in which major playwriting projects are shared and developed.

Prerequisite: THEA $369^{D}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 390-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum. Permission of instructor via audition or portfolio review.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 392 - History of Musical Theatre

This survey course will explore the historical use of music in drama with a focus on the invention, development and masterworks of the American musical genre. Major genres, composers, lyricists, librettists, directors, choreographers, and performers will be discussed. The socio-historical context of various musicals will be explored through the literature of the genre.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Being
American, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 393 - History of Theatre Design and Architecture

A review of the history and evolution of scene, costume, lighting, prop and sound design for the theatre. Course will also examine the evolution of theatre spaces, from the outdoor theatre of the Ancient Greeks to traveling wagon stages of the medieval period to modern architectural trends. The course will examine non-western forms of theatre such as aboriginal and African theatre as well as western world theatre traditions.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Thematic Thread(s): Art \& Society, Transfer Thread Completion Course, Transnational Culture
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 394 - Theories of Acting and Directing

A history of the art, craft and theories of acting. Also, a historical investigation into the role of the "director" in pre-modern theatre and the evolution into its present predominant place in contemporary theatre.

Prerequisites: THEA $281^{\text {D }}$ or THEA $283^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

THEA 395 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 425 - Professional Theatre Practice

A study of the working conditions of the professional actor, designer, technician, and director in the contemporary theatre. Preparation for effective career development.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

THEA 442-Senior Showcase
This course is designed to give each graduating BFA Acting student the opportunity to prepare for and perform in a showcase as a step towards establishing their professional career. The showcase will invite theatre professionals such as agents, producers, casting directors, and directors to attend and will be presented in a major metropolitan area and on campus. The course also builds on the foundational practices of working in professional theatre. Professional headshots will be required.

Prerequisites: THEA $344^{\text {C }}$ or THEA $347^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students in the BFA 5390 program.
Enrollment limited to students with department of Theatre.

## THEA 450-Internship

Supervised placement in a working theatre situation off campus. Extensive and successful experience in theatre performance on campus, 2.000 GPA overall and in all theatre courses attempted, and permission of the department's curriculum committee.

Credits: 1-12
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 490 - Independent Study

A faculty-supervised project in an advanced area of theatre studies carried out independently by a qualified upper-class student. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Acting, Bachelor of Fine Arts (BFA) Concentration in Acting <br> Program Learning Outcomes

- Communication: Students will demonstrate the ability to think, speak and write about theatre clearly and effectively.
- Creation/Production/Performance: Students will create, produce and perform theatre at a pre-professional level.
- Professional Proficiency: Students will successfully prepare for employment in the professional theatre community.
- Professional Proficiency: Students will demonstrate successful leadership, initiative, attitude, and punctuality in adherence with professional standards.
- Historical Knowledge: Students will accurately identify specific knowledge related to plays, conventions, practitioners, movements, and/or theatre spaces drawn from the range of world theatre Degree Program Writing Competency: Students will gain proficiency in various areas of writing common to theatre practice.


## Related Links

Acting, BFA Program Page (https://www.sru.edu/academics/majors-and-minors/theatre-bfa-acting-(acting)/)

Theatre Department Page (https://www.sru.edu/academics/colleges-and-departments/cla/departments/theatre/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 3.00 or higher
Overall GPA: 2.50 or higher

## Summary*

Code Title Hours

Rock Studies Requirements 42
Other Basic Requirments 0-3
Computer Competency 0-3

Major/Concentration Requirements 78

* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p.1378) |  | 3 |
| Natural Science Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Science Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |
| Thematic Thread |  |  |
| Select 12 Credits (p.1378) ${ }^{2}$ |  | 12 |
| Subtotal |  | 12 |
| Total Hours |  | 42 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 from at least 3 Categories; no more than 6 credits from one department; 6 credits must be $300-$ level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.


## Writing Competency Requirements

| Requirement | Course |
| :--- | :---: |
| Scholarly Paper in MLA <br> format | Grade |
| Professional Resume | ASPM |
| Professional Cover | APR |

Letter

## Major/Concentration Requirements

- 39 major credits must be taken at SRU or PASSHE
- 39 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :--- | :--- | ---: |
| Core Requirements |  |  |
| DANC 125 | Experiencing Dance: Techniques and Styles | 3 |
| THEA 131 | Fundamentals of Acting | 3 |
| THEA 132 | Stagecraft | 3 |
| THEA 142 | Wellness for the Actor | 3 |
| THEA 222 | Acting II | 3 |
| THEA 281 | Survey of Dramatic Literature I | 3 |
| THEA 283 | Survey of Dramatic Literature II | 3 |
| THEA 303 | Acting III | 3 |
| THEA 324 | Stage Makeup | 3 |
| THEA 337 | Directing | 3 |
| THEA 351 | Movement for the Actor | 3 |
| THEA 353 | Voice for the Actor | 3 |
| THEA 425 | Professional Theatre Practice | 3 |
| THEA 442 | Senior Showcase | 3 |
| Subtotal |  | 42 |
| Acting Concentration | Core | 9 |
| THEA 322 | Acting Technique Repeat 3 times. | 3 |
| THEA 328 | Acting Shakespeare | 3 |
| THEA 342 | IPA/Dialects | 2 |
| THEA 344 | Auditioning | 3 |
| THEA 355 | Projects in Theatre | 3 |

THEA 394 Theories of Acting and Directing 3
Subtotal 23

Electives
At least one elective course must be at the 300/400 level
Health and Fitness Elective
Select one course from the following: 3

| ERS 230 | Stress Management |
| :--- | :--- |
| HLTH 101 | Personal Health |
| HLTH 314 | Nutrition and Health |
| PE 342 | Wellness through Movement |

Career Enhancement Electives
Select two courses from the following: 6

| THEA 159 | Introduction to Theatre Arts Management |
| :--- | :--- |
| THEA 235 | Costume Technology |
| THEA 269 | Playwriting |
| THEA 332 | Advanced Stagecraft |
| THEA 345 | Stage Management and Safety |
| THEA 359 | Studies in Audience Development |
| THEA 498 | Selected Topics (Scene Painting) |

Advanced Acting Electives

| Select four credits from the following: |  | 4 |
| :--- | :--- | :--- |
| DANC XXX | Dance course ${ }^{1}$ |  |
| THEA 145 | Musicianship for Musical Theatre |  |
| THEA 151 | Rehearsal and Production |  |
| THEA 244 | Acting for Song I |  |
| THEA 246 | Private Musical Theatre Voice |  |
| THEA 322 | Acting Technique |  |
| THEA 329 | Shakespeare Tour |  |
| THEA 339 | New Play Development |  |
| THEA 340 | International Theatre Experience |  |
| THEA 355 | Projects in Theatre |  |
| THEA 450 | Internship |  |
| THEA 490 | Independent Study | 13 |
| THEA 498 | Selected Topics | 78 |
| Subtotal |  |  |
| Total Hours |  |  |

1 Choose from DANC 220-DANC 222, DANC 224, DANC 298, DANC 305, DANC 320-DANC 322, DANC 420-DANC 422, DANC 424, DANC 426, DANC 428.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs International study programs (including Edinburgh, Scotland, Fringe Festival Trip)
2. SRU Theatre Department Productions
3. Theatre internships and summer theatre employment
4. High-Impact Practice (HIP) designated classes
5. Student-faculty research
6. Student leadership development
7. Department field trips
8. Theatre Department Student Staff
9. Student Lab Productions in Sheehy Theatre
10. Guest Artist lectures, workshops, and productions

THEATRE - BFA (5390)
Concentration in Acting (THPE)
This program is effective as of Fall 2020.
Revised 08.04.20
UCC 03.03.20

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| THEA 131 | Fundamentals of Acting | 3 |
| THEA 142 | Wellness for the Actor | 3 |
| DANC 125 | Experiencing Dance: Techniques and Styles | 3 |
| ENGL 102 | Critical Writing | 3 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| INDS 101 | FYRST Seminar * | 1 |
|  | Hours | 16 |
| Spring |  |  |
| THEA 132 | Stagecraft | 3 |
| THEA 222 | Acting II | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Humanities Inquiry (p. 1378) |  | 3 |
|  | Hours | 15 |

## Second Year

Fall

| THEA 281 | Survey of Dramatic Literature I | 3 |
| :--- | :--- | :--- |
| THEA 322 | Acting Technique | 3 |
| SCI 101 | Science of Life | 3 |
| Creative \& Aesthetic $\operatorname{Inquiry}$ (p. 1378) | 3 |  |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |
| :--- | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |


| Declare a Thematic Thread ${ }^{2}$ |  |  |
| :---: | :---: | :---: |
|  | Hours | 15 |
| Spring |  |  |
| THEA 283 | Survey of Dramatic Literature II | 3 |
| THEA 324 | Stage Makeup | 3 |
| THEA 328 | Acting Shakespeare | 3 |
| SCI 102 | Understanding the Physical World | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 15 |


| Third Year |  |  |
| :--- | :--- | ---: |
| Fall |  | 3 |
| THEA 303 | Acting III | 3 |
| THEA 322 | Acting Technique | 3 |
| THEA 342 | IPA/Dialects | 3 |
| THEA 353 | Voice for the Actor | 3 |
| THEA 394 | Theories of Acting and Directing | $\mathbf{1 5}$ |


| Spring |  |  |
| :--- | :--- | ---: |
| THEA 328 | Acting Shakespeare (OR Acting Elective) | 3 |
| THEA 337 | Directing | 3 |
| THEA 344 | Auditioning | 3 |
| THEA 351 | Movement for the Actor | 3 |
| THEA 355 | Projects in Theatre | 2 |
| Thematic Thread Requirement (p. 1378) | 3 |  |
|  | Hours | $\mathbf{1 7}$ |
|  |  |  |

Fall

| THEA 322 | Acting Technique | 3 |
| :--- | :--- | ---: |
| THEA 425 | Professional Theatre Practice | 3 |
| Acting Electives |  | 4 |
| Social Science Inquiry (p. 1378) | 3 |  |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| Hours | $\mathbf{1 6}$ |  |

## Spring

THEA 442 Senior Showcase 3
Acting Electives 6
Thematic Thread Requirement (p. 1378) 3

| Hours | 12 |
| :--- | ---: | ---: |
| Total Hours** | 121 |

1 Course offered in multiple subjects; cannot take course in first major subject
2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 5390
Concentration Code: THPE
Revised date: 10.04.2021

## Acting, Bachelor of Fine Arts (BFA) Concentration in Musical Theatre

 Program Learning Outcomes
## Acting - Musical Theatre, BFA

- Students will demonstrate an advanced level of musical skills including voice performance, musicianship, music theory and sight singing.
- Students will demonstrate basic to proficient dance skills in a variety of musical theatre styles.


## Theatre Department, Overall

- Communication: Students will demonstrate the ability to think, speak and write about theatre clearly and effectively.
- Creation/Production/Performance: Students will create, produce and perform theatre at a pre-professional level.
- Professional Proficiency: Students will successfully prepare for employment in the professional theatre community.
- Professional Proficiency: Students will demonstrate successful leadership, initiative, attitude, and punctuality in adherence with professional standards.
- Historical Knowledge: Students will accurately identify specific knowledge related to plays, conventions, practitioners, movements, and/or theatre spaces drawn from the range of world theatre Degree Program Writing Competency: Students will gain proficiency in various areas of writing common to theatre practice.


## Related Links

Acting - Musical Theatre, BFA Program Page (https://www.sru.edu/ academics/majors-and-minors/theatre-bfa-acting-(musical-theatre)/)

Theatre Department Page (https://www.sru.edu/academics/colleges-and-departments/cla/departments/theatre/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Major GPA: 3.00 or higher
Overall GPA: 2.50 or higher

## Summary*

Code Title Hours

Rock Studies Requirements 42
Other Basic Requirments 0-3
Computer Competency 0-3
Major/Concentration Requirements 78

* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.


## Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credits (p. 1378) |  | 3 |
| Natural Science Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Science Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |
| Thematic Thread |  |  |
| Select 12 Credits (p.1378) ${ }^{2}$ |  | 12 |
| Subtotal |  | 12 |
| Total Hours |  | 42 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 from at least 3 Categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.


| CPSC 130 | Introduction to Computing and <br> Programming |
| :---: | :--- |
| PE 202 | Technology for Wellness |

Total Hours 0-3

## Writing Competency Requirements

| Requirement | Course |
| :--- | :--- | Grade | Scholarly Paper in MLA | ASPM |
| :--- | :--- |
| format |  |
| Professional Resume | APR |
| Professional Cover <br> Letter | APCL |

## Major Requirements

- 39 major credits must be taken at SRU or PASSHE
- 39 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :--- | :--- | ---: |
| Core Requirements |  |  |
| DANC 125 | Experiencing Dance: Techniques and Styles | 3 |
| THEA 131 | Fundamentals of Acting | 3 |
| THEA 132 | Stagecraft | 3 |
| THEA 142 | Wellness for the Actor | 3 |
| THEA 222 | Acting II | 3 |
| THEA 281 | Survey of Dramatic Literature I | 3 |
| THEA 283 | Survey of Dramatic Literature II | 3 |
| THEA 303 | Acting III | 3 |
| THEA 324 | Stage Makeup | 3 |
| THEA 337 | Directing | 3 |
| THEA 353 | Voice for the Actor | 3 |
| THEA 351 | Movement for the Actor | 3 |
| THEA 425 | Professional Theatre Practice | 3 |
| THEA 442 | Senior Showcase | 3 |
| Subtotal |  | 42 |


| Musical Theatre Concentration |  |
| :--- | :--- |
| THEA 145 | Musicianship for Musical Theatre |
| THEA 146 | Class Voice For Musical Theatre |
| THEA 244 | Acting for Song I |
| THEA 246 | Private Musical Theatre Voice (Repeat 5 |


|  | semesters for 5 total credits) | 3 |
| :--- | :--- | :--- |
| THEA 304 | Acting for Song II | 3 |
| THEA 347 | Auditioning for Musical Theatre | 9 |
| THEA 348 | Musical Theatre Repertory (Repeat 3 <br> semester for 9 total credits) | 3 |

Select two of the following: 4

| DANC 220 | Modern Dance Technique: Level II |
| :--- | :--- |
| DANC 221 | Ballet II |
| DANC 222 | Jazz Dance II |
| DANC 224 | Improvisation |
| DANC 298 | Selected Topics |
| DANC 305 | Society and Social Dance |
| DANC 320 | Modern Dance Technique: Level III |
| DANC 321 | Ballet III |


| DANC 322 | Jazz Dance III |
| :--- | :--- |
| DANC 420 | Modern Dance Technique: Level IV |
| DANC 421 | Ballet IV |
| DANC 422 | Jazz Dance IV |
| DANC 424 | Contemporary Partnering |
| DANC 426 | Modern Dance Technique: Level V |
| DANC 428 | Modern Dance Technique: Level VI |
| THEA 254 | Musical Theatre Dance I |
| THEA 354 | Musical Theatre Dance II |
| Subtotal |  |
| Total Hours |  |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs International study programs (including Edinburgh, Scotland, Fringe Festival Trip)
2. SRU Theatre Department Productions
3. Theatre internships and summer theatre employment
4. High-Impact Practice (HIP) designated classes
5. Student-faculty research
6. Student leadership development
7. Department field trips
8. Theatre Department Student Staff
9. Student Lab Productions in Sheehy Theatre
10. Guest Artist lectures, workshops, and productions

THEATRE - BFA (5390)
Concentration in Musical Theatre (MTHP)
This program is effective as of Fall 2020
Revised 07.07.2021
UCC 03.05.20

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall | Fundamentals of Acting |  |
| THEA 131 | Wellness for the Actor | 3 |
| THEA 142 | Musicianship for Musical Theatre (F) | 3 |
| THEA 145 | Class Voice For Musical Theatre | 3 |
| THEA 146 | Critical Writing | 3 |
| ENGL 102 | FYRST Seminar | 3 |
| INDS 101 | Hours | $\mathbf{3}$ |
|  | Acting II | $\mathbf{1 6}$ |
| Spring | Private Musical Theatre Voice | 3 |
| THEA 222 | History of Musical Theatre | 1 |
| THEA 246 | Experiencing Dance: Techniques and Styles | 3 |
| THEA 392 | Critical Reading | 3 |
| DANC 125 | Unversity Seminar ${ }^{1}$ | 3 |
| ENGL 104 | Hours | 3 |
| SUBJ 139 |  | $\mathbf{1 6}$ |

## Second Year

Fall

| THEA 244 | Acting for Song I | 3 |
| :--- | :--- | :--- |
| THEA 246 | Private Musical Theatre Voice | $\mathbf{1}$ |
| THEA 281 | Survey of Dramatic Literature I | 3 |
| THEA 348 | Musical Theatre Repertory | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Humanities Inquiry (p. 1378) | 3 |  |
| Declare a Thematic Thread ${ }^{2}$ | $\mathbf{1 6}$ |  |


| Spring |  |  |
| :--- | :--- | ---: |
| THEA 246 | Private Musical Theatre Voice | 1 |
| THEA 283 | Survey of Dramatic Literature II | 3 |
| THEA 304 | Acting for Song II | 3 |
| THEA 324 | Stage Makeup | 3 |
| THEA 348 | Musical Theatre Repertory | 3 |
| Thematic Thread Requirement (p. 1378) | $\mathbf{3}$ |  |
|  | Hours | $\mathbf{1 6}$ |

Third Year
Fall

| THEA 246 | Private Musical Theatre Voice | $\mathbf{1}$ |
| :--- | :--- | ---: |
| THEA 303 | Acting III | 3 |
| THEA 347 | Auditioning for Musical Theatre | 3 |
| THEA 353 | Voice for the Actor | 3 |
| Social Science Inquiry (p. 1378) | 3 |  |
| Thematic Thread Requirement (p. 1378) | 3 |  |
| Hours | $\mathbf{1 6}$ |  |

## Spring

| THEA 132 | Stagecraft | 3 |
| :--- | :--- | :--- |
| THEA 246 | Private Musical Theatre Voice | 1 |
| THEA 348 | Musical Theatre Repertory | 3 |
| THEA 351 | Movement for the Actor | 3 |



Students are encouraged to take INDS 101 as a Free Elective.
Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread.

Course offered in multiple subjects; cannot take course in first major subject.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 5390
Concentration Code: MTHP
Revised date: 10.04.2021

## Theatre, Bachelor of Arts (BA) Concentration in Acting <br> Program Learning Outcomes

- Students will demonstrate the ability to act believably within a set of given/imagined circumstances.
Students will free the voice and body of unnecessary tension, while building strength and versatility in the vocal and physical instruments.


## Theatre Department, Overall

- Creation/Production/Performance: Students will create, produce and perform theatre at a pre-professional level.
- Professional Proficiency: Students will successfully prepare for employment in the professional theatre community.
- Professional Proficiency: Students will demonstrate successful leadership, initiative, attitude, and punctuality in adherence with professional standards.
- Historical Knowledge: Students will accurately identify specific knowledge related to plays, conventions, practitioners, movements, and/or theatre spaces drawn from the range of world theatre Degree Program Writing Competency: Students will gain proficiency in various areas of writing common to theatre practice.


## Related Links

Theatre - Theatre Arts Management, BA Program Page (https:// www.sru.edu/academics/majors-and-minors/theatre-ba-acting/)

Theatre Department Page (https://www.sru.edu/academics/colleges-and-departments/cla/departments/theatre/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide GPA Requirement

Major GPA: 2.00 or higher
Overall GPA: 2.00 or higher

## Summary*

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Modern Language Requirement | $0-9$ |
| Other Basic Requirments | $0-3$ |
| Computer Competency | $0-3$ |
| Major/Concentration Requirements | 42 |
| Flectives | 36 |

* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

Rock Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credit | 378) | 3 |


| Humanities Inquiry |  |
| :--- | ---: |
| Select 3 Credits (p. 1378) | 3 |
| Social Science Inquiry |  |
| Select 3 Credits (p. 1378) | 3 |
| Natural Science Inquiry |  |
| SCI 101 | 3 |
| Physical Science Inquiry |  |
| SCI 102 | 3 |
| Subtotal | 15 |
| Thematic Thread |  |
| Select 12 Credits (p. 1378) |  |
| Subtotal | 12 |
| Total Hours | 12 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 from at least 3 Categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete $0-9$ credits | $0-9$ |  |
| Total Hours | $\mathbf{0 - 9}$ |  |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra | $\mathbf{0 - 3}$ |
| Total Hours |  |  |

## Computer Competency

Code Title Hours
Demonstrate "computer competency" by one of the following: 0-3 Pass Computer Competency Exam OR Select one of the following at SRU or another post-secondary institution: CPSC 100 Introduction to Computing for Liberal Arts
CPSC 110 Computer Concepts
CPSC 130 Introduction to Computing and
Programming
PE 202 Technology for Wellness
Total Hours

## Major/Concentration Requirements

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above


Declare a Thematic Thread ${ }^{2}$

|  | Hours | 15 |
| :---: | :---: | :---: |
| Spring |  |  |
| THEA 151 | Rehearsal and Production | 1 |
| THEA 283 | Survey of Dramatic Literature II | 3 |
| THEA 324 | Stage Makeup | 3 |
| Modern Language 102 |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Elective |  | 3 |
|  | Hours | 16 |
| Third Year |  |  |
| Fall |  |  |
| THEA 322 | Acting Technique | 3 |
| $\begin{aligned} & \text { THEA } 353 \\ & \text { or THEA } 351 \end{aligned}$ | Voice for the Actor or Movement for the Actor | 3 |
| THEA 394 | Theories of Acting and Directing | 3 |
| Modern Language 103 |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| THEA 151 | Rehearsal and Production | 1 |
| THEA 328 | Acting Shakespeare | 3 |
| THEA 337 | Directing | 3 |
| Rock Studies Requirement |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Elective |  | 3 |
|  | Hours | 16 |
| Fourth Year |  |  |

## Fall

THEA $425 \quad$ Professional Theatre Practice 3
Rock Studies Requirement 3
Thematic Thread Requirement (p. 1378) 3
Elective 3
Elective 3

|  | Hours | $\mathbf{1 5}$ |
| :--- | :--- | ---: |
| Spring |  |  |
| THEA 151 | Rehearsal and Production | 1 |
| Elective |  | 3 |
| Elective |  | 3 |
| Elective |  | 3 |
| Elective |  | 3 |
|  | Hours | $\mathbf{1 3}$ |
|  | Total Hours** | $\mathbf{1 2 1}$ |

1 Course offered in multiple subjects; cannot take course in first major subject
2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread.

* Students are encouraged to take INDS 101 as a free elective.

Revised: 12.04.2020
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Theatre, Bachelor of Arts (BA) - Concentration in Design \& Technology

## Program Learning Outcomes

## Theatre - Design \& Technology, BA

- Students will synthesize and produce original theatrical designs.
- Students will demonstrate proficiency in both freehand drawing and digital drafting/rendering techniques.
- Students will demonstrate functional skills in design visualization, such as model-making and rendering.
- Students will demonstrate a working knowledge of a chosen area of theatre technology (i.e. costume technology, sound, stagecraft, scene painting).


## Theatre Department, Overall

- Communication: Students will demonstrate the ability to think, speak and write about theatre clearly and effectively.
- Creation/Production/Performance: Students will create, produce and perform theatre at a pre-professional level.
- Professional Proficiency: Students will successfully prepare for employment in the professional theatre community.
- Professional Proficiency: Students will demonstrate successful leadership, initiative, attitude, and punctuality in adherence with professional standards.
- Historical Knowledge: Students will accurately identify specific knowledge related to plays, conventions, practitioners, movements, and/or theatre spaces drawn from the range of world theatre Degree Program Writing Competency: Students will gain proficiency in various areas of writing common to theatre practice.


## Related Links

Theatre - Design \& Technology, BA Program Page (https://www.sru.edu/ academics/majors-and-minors/theatre-ba-design-and-technology/)

Theatre Department Page (https://www.sru.edu/academics/colleges-and-departments/cla/departments/theatre/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.00 or higher
Overall GPA: 2.00 or higher

## Summary*

| Title | Hours |
| :--- | ---: |
| Code | 42 |
| Rock Studies Requirements | $0-9$ |
| Modern Language Requirement | $0-3$ |
| Other Basic Requirments | $0-3$ |
| Computer Competency | 42 |
| Major/Concentration Requirements | 36 |
| Electives |  |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: | 3 |  |


| COMM 200 | Civil Discourse: Theory \& Practice |
| :---: | :--- |
| PHIL 110 | Ethics and Civil Discourse |
| POLS 235 | Civil Discourse and Democracy |
| Subtotal |  |

Integrated Inquiry
Creative and Aesthetic Inquiry
Select 3 Credits (p. 1378)
Humanities Inquiry
Select 3 Credits (p. 1378) 3
Social Science Inquiry
Select 3 Credits (p. 1378) 3
Natural Science Inquiry
SCI $101 \quad$ Science of Life
Physical Science Inquiry
SCI $102 \quad 3$
Subtotal 15

Thematic Thread

| Select 12 Credits $(\mathrm{p} .1378)^{2}$ | 12 |
| :--- | :--- |
| Subtotal | 12 |
| Total Hours | $\mathbf{4 2}$ |

1 Course offered in multiple subjects; cannot take course in first major subject.
2
from at least 3 Categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

| Code Title | Hours |
| :--- | ---: |
| Complete $0-9$ credits | $0-9$ |
| Total Hours | $\mathbf{0 - 9}$ |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete one of the following: | $0-3$ |  |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | $\mathbf{0 - 3}$ |

## Computer Competency

Code Title Hours

Demonstrate "computer competency" by one of the following: 0-3
Pass Computer Competency Exam OR
Select one of the following at SRU or another post-secondary institution:
CPSC 100 Introduction to Computing for Liberal Arts
CPSC 110 Computer Concepts
CPSC 130 Introduction to Computing and
Programming
PE 202 Technology for Wellness
Total Hours
0-3

## Major/Concentration Requirements

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :---: | :---: | :---: |
| Core Requirements |  |  |
| THEA 131 | Fundamentals of Acting ${ }^{1}$ | 3 |
| THEA 132 | Stagecraft ${ }^{1}$ | 3 |
| THEA 281 | Survey of Dramatic Literature I ${ }^{1}$ | 3 |
| THEA 283 | Survey of Dramatic Literature II ${ }^{1}$ | 3 |
| THEA 337 | Directing ${ }^{1}$ | 3 |
| THEA 425 | Professional Theatre Practice ${ }^{1}$ | 3 |
| Subtotal |  | 18 |
| Design \& Technology Concentration |  |  |
| THEA 151 | Rehearsal and Production ${ }^{1}$ | 1 |
| THEA 151 | Rehearsal and Production ${ }^{1}$ | 1 |
| THEA 151 | Rehearsal and Production ${ }^{1}$ | 1 |
| THEA 215 | Drawing/Drafting/CAD ${ }^{1}$ | 3 |
| THEA 235 | Costume Technology ${ }^{1}$ | 3 |
| THEA 333 | Scene Design ${ }^{1}$ | 3 |
| THEA 334 | Stage Lighting ${ }^{1}$ | 3 |
| THEA 335 | Costume Design and History ${ }^{1}$ | 3 |
| THEA 393 | History of Theatre Design and Architecture | 3 |

Subtotal

21

## Design \& Technology Advance Electives

Select three credits from the following:

| THEA 324 | Stage Makeup $^{1}$ |
| :--- | :--- |
| THEA 329 | Shakespeare Tour $^{1}$ |
| THEA 332 | Advanced Stagecraft $^{1}$ |


| THEA 339 | New Play Development ${ }^{1}$ |  |
| :---: | :---: | :---: |
| THEA 340 | International Theatre Experience ${ }^{1}$ |  |
| THEA 345 | Stage Management and Safety ${ }^{1}$ |  |
| THEA 355 | Projects in Theatre ${ }^{1}$ |  |
| THEA 359 | Studies in Audience Development ${ }^{1}$ |  |
| THEA 394 | Theories of Acting and Directing ${ }^{1}$ |  |
| THEA 450 | Internship ${ }^{1}$ |  |
| THEA 490 | Independent Study ${ }^{1}$ |  |
| THEA 498 | Selected Topics ${ }^{1}$ |  |
| Subtotal |  | 3 |
| Total Hours |  | 42 |

1 Course counts for $50 \%$ of Major requirements and Major GPA.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs International study programs (including Edinburgh, Scotland, Fringe Festival Trip)
2. SRU Theatre Department Productions
3. Theatre internships and summer theatre employment
4. High-Impact Practice (HIP) designated classes
5. Student-faculty research
6. Student leadership development
7. Department field trips
8. Theatre Department Student Staff
9. Student Lab Productions in Sheehy Theatre
10. Guest Artist lectures, workshops, and productions

THEATRE - BA (5 92)
Concentration in Design \& Technology (DEST)
This program is effective as of Fall 2019.
Revised 7-2019
UCC RISP 2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | ---: |
| First Year |  |  |
| Fall |  |  |
| THEA 132 | Stagecraft | 3 |
| THEA 215 | Drawing/Drafting/CAD | 3 |
| ENGL 102 | Critical Writing | 3 |
| SUBJ 139 | University Seminar |  |
| INDS 101 | FYRST Seminar | 3 |
| Rock Studies Requirement | 1 |  |
|  | Hours | 3 |
| Spring |  | $\mathbf{1 6}$ |
| THEA 131 | Fundamentals of Acting | 3 |
| THEA 235 | Costume Technology | 3 |
| ENGL 104 | Critical Reading | 3 |
| Rock Studies Requirement | 3 |  |
| Elective | Hours | 3 |
|  | $\mathbf{1 5}$ |  |


| Second Year |  |  |
| :--- | :--- | ---: |
| Fall |  | 3 |
| THEA 281 | Survey of Dramatic Literature I |  |

Modern Language 1013
Rock Studies Requirement 3
Rock Studies Requirement 3
Elective 3

| Declare a Thematic Thread $^{2}$ | $\mathbf{1 5}$ |
| :---: | :---: |

Spring
THEA 151 Rehearsal and Production 1
THEA 283 Survey of Dramatic Literature II 3
THEA 333 Scene Design 3
Modern Language 1023
Thematic Thread Requirement (p. 1378) 3

| Elective | 3 |
| :--- | ---: |
|  | Hours |

Third Year
Fall

| THEA 334Stage Lighting <br> or THEA 335 <br> or Costume Design and History | 3 |
| :--- | ---: |
| BA Design \& Technology Elective | 3 |
| Modern Language 103 | 3 |
| Rock Studies Requirement | 3 |
| Thematic Thread Requirement (p. 1378) | 3 |
| Hours | $\mathbf{1 5}$ |


| Spring |  |  |
| :--- | :--- | :--- |
| THEA 151 | Rehearsal and Production | 1 |
| THEA 334 | Stage Lighting |  |
| or THEA 335 | or Costume Design and History | 3 |
| THEA 337 | Directing | 3 |
| THEA 393 | History of Theatre Design and Architecture | 3 |
| Rock Studies Requirement | 3 |  |



Major Code: 5390
Concentration Code: THPE
Revised date: 12.04.2020

## Theatre, Bachelor of Arts (BA) <br> - Concentration in Theatre Arts Management

## Program Learning Outcomes

## Theatre - Theatre Arts Management, BA

- Students will develop, conduct, and construct effective marketing research and plans
- Students will develop, conduct, and construct effective audience development research and plans.
- Students will identify and understand the history, organizational structures, practices, current policy issues, and standard matters related to the nonprofit arts sector.


## Theatre Department, Overall

- Communication: Students will demonstrate the ability to think, speak and write about theatre clearly and effectively.

Creation/Production/Performance: Students will create, produce and perform theatre at a pre-professional level.

- Professional Proficiency: Students will successfully prepare for employment in the professional theatre community.
- Professional Proficiency: Students will demonstrate successful leadership, initiative, attitude, and punctuality in adherence with professional standards.
- Historical Knowledge: Students will accurately identify specific knowledge related to plays, conventions, practitioners, movements, and/or theatre spaces drawn from the range of world theatre Degree Program Writing Competency: Students will gain proficiency in various areas of writing common to theatre practice.


## Related Links

Theatre - Theatre Arts Management, BA Program Page (https:// www.sru.edu/academics/majors-and-minors/theatre-ba-theatre-artsmanagement/)

Theatre Department Page (https://www.sru.edu/academics/colleges-and-departments/cla/departments/theatre/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.00 or higher
Overall GPA: 2.00 or higher

## Summary*

| Code Title | Hours |
| :--- | ---: |
| Rock Studies Requirements | 42 |
| Modern Language Requirement | $0-9$ |
| Other Basic Requirments | $0-3$ |
| Computer Competency | $0-3$ |
| Major/Concentration Requirements | 42 |
| Electives | 36 |
| * All undergraduate degree programs require a minimum of 120 credits. |  |
| Some courses meet multiple requirements, but are only counted once |  |
| toward the 120 credit total required to graduate. |  |

## Rock Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| The Rock |  |  |
| SUBJ 139 | University Seminar 1 | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: | 3 |  |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy | 15 |
| Subtotal |  |  |
| Integrated Inquiry |  | 3 |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credits (p. 1378) |  |  |



## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete $0-9$ credits | $0-9$ |  |
| Total Hours | $\mathbf{0 - 9}$ |  |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 0-3 |
| Meet required minimum SAT or ACT math score OR |  |  |
| ESAP 110 | Beginning Algebra |  |
| Total Hours |  | 0-3 |
| Computer Competency |  |  |
| Code | Title | Hours |
| Demonstrate | ter competency" by one of the following: | 0-3 |
| Pass Computer Competency Exam OR |  |  |
| Select one of the following at SRU or another post-secondary institution: |  |  |
| CPSC 100 | Introduction to Computing for Liberal Ar |  |
| CPSC 110 | Computer Concepts |  |
| CPSC 130 | Introduction to Computing and Programming |  |
| PE 202 | Technology for Wellness |  |
| Total Hours |  | 0-3 |

## Major/Concentration Requirements

[^26]| Code | Title | Hours |
| :--- | :--- | ---: |
| Core Requirements |  |  |
| THEA 131 | Fundamentals of Acting | 3 |
| THEA 132 | Stagecraft | 3 |
| THEA 281 | Survey of Dramatic Literature I | 3 |
| THEA 283 | Survey of Dramatic Literature II | 3 |
| THEA 337 | Directing ${ }^{1}$ | 3 |
| THEA 425 | Professional Theatre Practice ${ }^{1}$ | 3 |
| Subtotal |  | 18 |
| Theatre Arts Concentration | 3 |  |
| THEA 159 | Introduction to Theatre Arts Management | 3 |
| THEA 345 | Stage Management and Safety ${ }^{1}$ | 3 |
| THEA 359 | Studies in Audience Development ${ }^{1}$ | 3 |
| THEA 450 | Internship | 3 |
| NLPA 220 | Introduction to Nonprofit Management | 3 |
| Subtotal |  | 15 |

Theatre Arts Management Level 1 Courses
Select 3 credits from the following:

| THEA 151 | Rehearsal and Production |
| :--- | :--- |
| ACCT 209 | Financial Accounting |
| COMM 231 | Introduction to Public Relations and IMC |
| COMM 235 | Introduction to Digital Design |
| COMM 248 | Interactive Multimedia 1 |
| COMM 254 | Video Production |
| ENGL 205 | Introduction to Professional Writing |
| CSLD 251 | Leadership Theory |
| NLPA 120 | Civic Engagement and Community <br> Decision-Making |
| NLPA 305 | Financial Best Practices for Decision |
|  | Makers |

Subtotal 3
Theatre Arts Management Level 2 Courses
Select 6 credits from the following:

| THEA 329 | Shakespeare Tour ${ }^{1}$ |
| :---: | :---: |
| THEA 339 | New Play Development ${ }^{1}$ |
| THEA 340 | International Theatre Experience ${ }^{1}$ |
| THEA 355 | Projects in Theatre ${ }^{1}$ |
| THEA 390 | Experimental ${ }^{1}$ |
| THEA 392 | History of Musical Theatre ${ }^{1}$ |
| THEA 393 | History of Theatre Design and Architecture 1 |
| THEA 394 | Theories of Acting and Directing ${ }^{1}$ |
| THEA 490 | Independent Study ${ }^{1}$ |
| ACCT 322 | Business Analysis and Decision Making ${ }^{1}$ |
| COMM 307 | Social Media ${ }^{1}$ |
| COMM 318 | Professional Presentation |
| INDP 318 | Research Methods in Interdisciplinary Studies ${ }^{1}$ |
| MGMT 351 | Organizational Behavior ${ }^{1}$ |
| MRKT 230 | Principles of Marketing ${ }^{1}$ |
| NLPA 320 | Community Change and Development |
| NLPA 325 | Social and Ethical Issues in Philanthropy and Fundraising |



Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs International study programs (including Edinburgh, Scotland, Fringe Festival Trip)
2. SRU Theatre Department Productions
3. Theatre internships and summer theatre employment
4. High-Impact Practice (HIP) designated classes
5. Student-faculty research
6. Student leadership development
7. Department field trips
8. Theatre Department Student Staff
9. Student Lab Productions in Sheehy Theatre
10. Guest Artist lectures, workshops, and productions

## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions
THEATRE - BA (5 92)
Concentration in Theatre Arts Management (THAM)
This program is effective as of Fall 2019.
Revised 08.03.2021
UCC 02.04.20

## Recommended Four-Year Plan

| Course | Title | Hours |
| :--- | :--- | :---: |
| First Year |  |  |
| Fall |  |  |
| THEA 132 | Stagecraft | 3 |
| THEA 159 | Introduction to Theatre Arts Management | 3 |
| ENGL 102 | Critical Writing | 3 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| Rock Studies Requirement | 3 |  |


| INDS 101 | FYRST Seminar * | 1 |
| :---: | :---: | :---: |
|  | Hours | 16 |
| Spring |  |  |
| THEA 131 | Fundamentals of Acting | 3 |
| ENGL 104 | Critical Reading | 3 |
| Theatre Arts Management Level 1 Course |  | 3 |
| Rock Studies Requirement |  | 3 |
| Elective |  | 3 |
|  | Hours | 15 |
| Second Year |  |  |
| Fall |  |  |
| THEA 281 | Survey of Dramatic Literature I | 3 |
| Modern Language 101 |  | 3 |
| Rock Studies Requirement |  | 3 |
| Rock Studies Requirement |  | 3 |
| Elective |  | 3 |
| Declare a Thematic Thread ${ }^{2}$ |  |  |
|  | Hours | 15 |
| Spring |  |  |
| THEA 283 | Survey of Dramatic Literature II | 3 |
| THEA 345 | Stage Management and Safety | 3 |
| NLPA 220 | Introduction to Nonprofit Management | 3 |
| Modern Language 102 |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 15 |
| Third Year |  |  |
| Fall |  |  |
| Theatre Arts Management Level 2 Course |  | 3 |
| Modern Language 103 |  | 3 |
| Rock Studies Requirement |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Elective |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| THEA 337 | Directing | 3 |
| THEA 359 | Studies in Audience Development | 3 |
| Theatre Arts Management Level 2 Course |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Elective |  | 3 |
|  | Hours | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| THEA 425 | Professional Theatre Practice | 3 |
| Rock Studies Requirement |  | 3 |
| Rock Studies Requirement |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Elective |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| THEA 450 | Internship | 3 |
| Elective |  | 3 |
| Elective |  | 3 |



Major Code: 592
Concentration: THAM
Revised date: 12.04.2020

## Theatre, Bachelor of Arts (BA) Concentration in Theatre Studies

## Program Learning Outcomes

- Communication: Students will demonstrate the ability to think, speak and write about theatre clearly and effectively.
- Creation/Production/Performance: Students will create, produce and perform theatre at a pre-professional level.
- Professional Proficiency: Students will successfully prepare for employment in the professional theatre community.
- Professional Proficiency: Students will demonstrate successful leadership, initiative, attitude, and punctuality in adherence with professional standards.
- Historical Knowledge: Students will accurately identify specific knowledge related to plays, conventions, practitioners, movements, and/or theatre spaces drawn from the range of world theatre Degree Program Writing Competency: Students will gain proficiency in various areas of writing common to theatre practice.


## Related Links

Theatre - Theatre Studies, BA Program Page (https://www.sru.edu/ academics/majors-and-minors/theatre-ba-theatre-studies/)

Theatre Department Page (https://www.sru.edu/academics/colleges-and-departments/cla/departments/theatre/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

GPA Requirement
Major GPA: 2.00 or higher
Overall GPA: 2.00 or higher

| Summary* |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| Rock Studies | ments | 42 |
| Modern Lang | quirement | 0-9 |
| Other Basic R | ents | 0-3 |
| Computer Com |  | 0-3 |
| Major/Concen | Requirements | 42 |
| Electives |  | 36 |
| * All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. |  |  |
| Rock Studies Requirements |  |  |
| Code | Title | Hours |
| The Rock |  |  |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: |  | 3 |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |
| Subtotal |  | 15 |
| Integrated Inquiry |  |  |
| Creative and Aesthetic Inquiry |  |  |
| Select 3 Credit | 378) | 3 |
| Humanities Inquiry |  |  |
| Select 3 Credit | 378) | 3 |
| Social Science Inquiry |  |  |
| Select 3 Credit | 378) | 3 |
| Natural Science Inquiry |  |  |
| SCI 101 | Science of Life | 3 |
| Physical Science Inquiry |  |  |
| SCI 102 | Understanding the Physical World | 3 |
| Subtotal |  | 15 |
| Thematic Thread |  |  |
| Select 12 Cred | 1378) ${ }^{2}$ | 12 |
| Subtotal |  | 12 |
| Total Hours |  | 42 |
| 1 Course offered in multiple subjects; cannot take course in first major subject. |  |  |
| from at least 3 Categories; no more than 6 credits fro department; 6 credits must be 300 -level or above. |  |  |
| BA Modern Language Requirement |  |  |
| BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible. |  |  |
| Code | Title | Hours |
| Complete 0-9 |  | 0-9 |
| Total Hours |  | 0-9 |

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.


## Major/Concentration Requirements

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above

| Code | Title | Hours |
| :---: | :---: | :---: |
| Core Requirements |  |  |
| THEA 131 | Fundamentals of Acting ${ }^{1}$ | 3 |
| THEA 132 | Stagecraft ${ }^{1}$ | 3 |
| THEA 281 | Survey of Dramatic Literature ${ }^{1}$ | 3 |
| THEA 283 | Survey of Dramatic Literature II ${ }^{1}$ | 3 |
| THEA 337 | Directing ${ }^{1}$ | 3 |
| THEA 425 | Professional Theatre Practice ${ }^{1}$ | 3 |
| Subtotal |  | 18 |
| Theatre Studies - Core |  |  |
| THEA 151 | Rehearsal and Production ${ }^{1}$ | 1 |
| THEA 151 | Rehearsal and Production ${ }^{1}$ | 1 |
| THEA 151 | Rehearsal and Production ${ }^{1}$ | 1 |
| THEA 215 | Drawing/Drafting/CAD | 3 |
| Select one of the following: |  | 3 |
| THEA 222 | Acting II |  |
| THEA 269 | Playwriting |  |
| THEA 159 | Introduction to Theatre Arts Management |  |
| THEA 235 | Costume Technology |  |
| Subtotal |  | 9 |

## Theatre Studies - Management Coursework

Select one of the following:

| THEA 345 | Stage Management and Safety ${ }^{1}$ |
| :--- | :--- |
| THEA 359 | Studies in Audience Development ${ }^{1}$ |

Subtotal

## Theatre Studies - Design Coursework

| THEA 333 | Scene Design ${ }^{1}$ |
| :---: | :---: |
| THEA 334 | Stage Lighting ${ }^{1}$ |
| THEA 335 | Costume Design and History ${ }^{1}$ |
| Subtotal |  |
| Theatre Studies - Advanced Coursework |  |
| Select nine credits from the following: |  |
| THEA 324 | Stage Makeup ${ }^{1}$ |
| THEA 328 | Acting Shakespeare ${ }^{1}$ |
| THEA 329 | Shakespeare Tour ${ }^{1}$ |
| THEA 330 | Voice and Movement for the Actor ${ }^{1}$ |
| THEA 332 | Advanced Stagecraft ${ }^{1}$ |
| THEA 333 | Scene Design ${ }^{1}$ |
| or THEA 334 | Stage Lighting |
| or THEA 335 | Costume Design and History |
| THEA 339 | New Play Development ${ }^{1}$ |
| THEA 340 | International Theatre Experience ${ }^{1}$ |
| THEA 342 | IPA/Dialects ${ }^{1}$ |
| THEA 345 | Stage Management and Safety ${ }^{1}$ |
| THEA 355 | Projects in Theatre ${ }^{1}$ |
| THEA 359 | Studies in Audience Development ${ }^{1}$ |
| THEA 392 | History of Musical Theatre ${ }^{1}$ |
| THEA 393 | History of Theatre Design and Architecture 1 |
| THEA 394 | Theories of Acting and Directing ${ }^{1}$ |
| THEA 450 | Internship ${ }^{1}$ |
| THEA 490 | Independent Study ${ }^{1}$ |
| THEA 498 | Selected Topics ${ }^{1}$ |
| Subtotal |  |
| Total Hours |  |

1 Course counts for 50\% of Major requirements and Major GPA.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course


## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs International study programs (including Edinburgh, Scotland, Fringe Festival Trip)
2. SRU Theatre Department Productions
3. Theatre internships and summer theatre employment
4. High-Impact Practice (HIP) designated classes
5. Student-faculty research
6. Student leadership development
7. Department field trips
8. Theatre Department Student Staff
9. Student Lab Productions in Sheehy Theatre
10. Guest Artist lectures, workshops, and productions

THEATRE - BA (5 92)

Concentration in Theatre Studies (THST)
This program is effective as of Fall 2019.
Revised 7-2019
UCC RISP 2019

## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

| Course | Title | Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| THEA 132 | Stagecraft ${ }^{2}$ | 3 |
| THEA 215 | Drawing/Drafting/CAD ${ }^{2}$ | 3 |
| ENGL 102 | Critical Writing | 3 |
| INDS 101 | FYRST Seminar * | 1 |
| SUBJ 139 | University Seminar ${ }^{1}$ | 3 |
| Rock Studies Requirement |  | 3 |
|  | Hours | 16 |
| Spring |  |  |
| THEA 131 | Fundamentals of Acting ${ }^{2}$ | 3 |
| THEA XXX | Theatre Studies Core Course | 3 |
| ENGL 104 | Critical Reading | 3 |
| Rock Studies Requirement |  | 3 |
| Elective |  | 3 |
|  | Hours | 15 |
| Second Year |  |  |
|  |  |  |
| THEA 281 | Survey of Dramatic Literature I | 3 |
| MODL 101 | Modern Language 101 | 3 |
| Rock Studies Requirement |  | 3 |
| Rock Studies Requirement |  | 3 |
| Elective |  | 3 |
| Declare a Thematic Thread ${ }^{3}$ |  |  |
|  | Hours | 15 |
| Spring |  |  |
| THEA 151 | Rehearsal and Production | 1 |
| THEA 283 | Survey of Dramatic Literature II | 3 |
| THEA XXX | Theatre Studies Management Course | 3 |
| MODL 102 | Modern Language 102 | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Elective |  | 3 |
|  | Hours | 16 |


| Third Year |  |  |
| :---: | :---: | :---: |
| Fall |  |  |
| THEA 33X | Theatre Studies Design Course | 3 |
| THEA XXX | Theatre Studies Advance Course | 3 |
| MODL 103 | Modern Language 103 | 3 |
| Rock Studies Requirement |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| THEA 151 | Rehearsal and Production | 1 |
| THEA XXX | Theatre Studies Advanced Course | 3 |
| THEA 337 | Directing | 3 |
| Rock Studies Requirement |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Elective |  | 3 |
|  | Hours | 16 |
| Fourth Year |  |  |
| Fall |  |  |
| THEA 425 | Professional Theatre Practice | 3 |
| THEA XXX | Theatre Studies Advanced Course | 3 |
| Rock Studies Requirement |  | 3 |
| Thematic Thread Requirement (p. 1378) |  | 3 |
| Elective |  | 3 |
|  | Hours | 15 |
| Spring |  |  |
| THEA 151 | Rehearsal and Production | 1 |
| Elective |  | 3 |
| Elective |  | 3 |
| Elective |  | 3 |
| Elective |  | 3 |
|  | Hours | 13 |
|  | Total Hours** | 121 |

1 Course offered in multiple subjects; cannot take course in first major subject.
2 Students should complete THEA 131,THEA 132, and THEA 215 as early as possible in the program.
Students are highly encouraged to complete a minor or second major course of studies (i.e., Education, Art, Communication, History, etc.)
Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here to declare a thread.

* Students are encouraged to take INDS 101 as a Free Elective.
** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

MAJOR: BA Theatre (5 92)
Concentration: Theatre Studies (THST)
Revised 12.04.2020

## Theatre, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Theatre, Minor Program Page (https://www.sru.edu/academics/majors-and-minors/theater-minor/)

Theatre Department Page (https://www.sru.edu/academics/colleges-and-departments/cla/departments/theatre/)

Professional Licensure/Certification Page (https://www.sru.edu/ students/student-consumer-information/professional-licensures/)

## Curriculum Guide

## GPA Requirement

Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU

A minimum of 6 credit hours must be upper division (courses numbered 300 and above)

- A minor shall be no fewer than 18 credits.



## Advanced Level Requirements

Select six credits of the following
THEA 322 Acting Technique (may be repeated 3
times)

| THEA 324 | Stage Makeup |
| :--- | :--- |
| THEA 328 | Acting Shakespeare |
| THEA 329 | Shakespeare Tour |
| THEA 332 | Advanced Stagecraft |
| THEA 333 | Scene Design |
| THEA 334 | Stage Lighting |
| THEA 335 | Costume Design and History |
| THEA 337 | Directing |


| THEA 339 | New Play Development |
| :--- | :--- |
| THEA 340 | International Theatre Experience |
| THEA 342 | IPA/Dialects |
| THEA 345 | Stage Management and Safety |
| THEA 355 | Projects in Theatre |
| THEA 359 | Studies in Audience Development |
| THEA 392 | History of Musical Theatre |
| THEA 393 | History of Theatre Design and Architecture |
| THEA 394 | Theories of Acting and Directing |
| THEA 425 | Professional Theatre Practice |
| THEA 450 | Internship |
| THEA 490 | Independent Study |
| THEA 498 | Selected Topics |
| Total Hours |  |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


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PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN THEATRE (93A)
This program is effective as of Fall 2018.
Revised 07.08.20
UCC 03.05.20

## Course Descriptions

## A

- Accounting (ACCT) (p. 1062)
- American Sign Language (ASL) (p. 1065)
- Art (ART) (p. 1065)

B

- Biology (BIOL) (p. 1079)
- Business Administration (BUSA) (p. 1088)

C

- Chemistry (CHEM) (p. 1089)
- Chinese (CHIN) (p. 1094)
- Civil Engineering (CIVL) (p. 1096)
- Communication (COMM) (p. 1099)
- Computer Science (CPSC) (p. 1107)
- Corporate Security (CSS) (p. 1114)
- Counseling \& Development (CDEV) (p. 1117)
- Criminology \& Criminal Justice (CRIM) (p. 1119)
- Cybersecurity (CYBR) (p. 1124)


## D

- Dance (DANC) (p. 1125)


## E

- Economics (ECON) (p. 1131)
- Elementary Education/Early Childhood (ELEC) (p. 1134)
- Engineering (ENGR) (p. 1141)
- English (ENGL) (p. 1143)
- English as a Second Language (ESL) (p. 1152)
- Environmental Geoscience (EGEO) (p. 1155)
- Environmental Science (ENVS) (p. 1159)
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## Accounting (ACCT)

## ACCT 101 - Taxes in America

In America, our income is taxed when we earn it and when we spend it. Our property is taxed when we own it and sometimes even when we give it away! We pay taxes to our local, state, and federal governments. Learn where you tax dollars go, how they are used, and how you influence tax legislation. Evaluate how our taxes affect diverse populations in American society.

Credits: 3
Term(s) Typically Offered: Offered Summer \& Winter Terms

## ACCT 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## ACCT 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## ACCT 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## ACCT 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ACCT 209 - Financial Accounting

A study of accounting concepts and principles that govern the recording, processing, and reporting of accounting information. The significance of the financial statements and the analysis of accounting information for investors, creditors, and other external users in the decision making process is emphasized.

## Credits: 3

Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): International Business, Innovation, Entrepreneurship, and Positive Change, Leadership Development, Transfer Thread
Completion Course

## ACCT 210 - Managerial Accounting

A study of accounting concepts and procedures used for cost analysis, cost allocation, planning, and reporting accounting information with an internal perspective. The significance of accounting information and the financial statements for management"s decision-making process is emphasized.

Prerequisite: ACCT 209 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

## ACCT 230-Accounting Information Systems

Designing effective accounting information systems to generate reliable accounting information is the focus of the course. The significance of accounting information, transaction cycles, systems controls, document flowcharts, and accounting software are emphasized.

Prerequisites: ACCT $209^{C}$ and (CPSC $210^{\text {D }}$ or MIS $210^{\text {D }}$ )
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Every Term

## ACCT 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ACCT 295-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## ACCT 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ACCT 308-Federal Individual Income Tax

Study of the federal income tax system, individual returns, rates, income exclusions and inclusions, gains and losses, deductions, alternate tax methods, and withholding of taxes. Prerequisite: Advanced business standing.

Prerequisite: ACCT 209 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ACCT 310 - Cost Accounting

A study of control concepts and costing methods including systems for management control, inventory valuation, cost-volume-profit analysis, standard variance analysis, budgeting, decision models, product cost accumulation, and quantitative methods in cost analysis.

Prerequisites: ACCT $209^{\text {C }}$ and (ECON $219^{\text {D }}$ or MGMT $219^{\text {D }}$ )
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ACCT 311 - Federal Corporate and Transfer Taxes

Corporate, partnership, estate and trust taxation are covered along with topics such as depletion, net operating losses, and installment and deferred payment sale.

Prerequisite: ACCT 308 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ACCT 313 - Intermediate Accounting I

An examination of accounting principles and the study of the foundations of accounting theory and practice. Emphasis is placed on the conceptual framework of accounting and the development of generally accepted accounting principles including the FASB Codification, SEC, IASB, and other standards setting bodies; time value of money concepts, accounting for stockholders' equity and the presentation of the balance sheet and income statement. Ethical issues and concerns are stressed throughout the course.

Prerequisites: ACCT $209^{\text {C }}$ and ACCT $230^{\circ}$ and ECON $202^{\text {D }}$ and (ECON $219^{\text {D }}$ or MGMT 219 ${ }^{\text {D }}$ )
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall, Spring, \& Summer
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ACCT 314 - Intermediate Accounting II

A continuation of ACCT 313 covering the detailed examination and application of generally accepted accounting procedures in accounting for stockholders' equity: contributed capital and retained earnings; revenue and expense determination, recognition, and measurement with particular emphasis on pensions, leases, and deferred taxes. Ethical issues and concerns are stressed throughout the course.

Prerequisite: ACCT $313^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall, Spring, \& Summer
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## ACCT 315 - Intermediate Accounting III

A continuation of ACCT 313 covering the detailed examination and application of generally accepted accounting principles in accounting for stockholders' equity issues: revenue recognition, pensions, leases, deferred taxes, share based compensation, EPS, accounting changes and error corrections; and the cash flow statement. Ethical issues and concerns are stressed throughout the course.

Prerequisite: ACCT 314 ${ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ACCT 320 - Forensic Accounting

Forensic Accounting as an accounting field of study has surged with the high profile corporate misappropriation of assets/financial statement manipulation and fraud situations over the last 20 years. White collar fraud and the resulting increased legislation has heightened awareness of fraud and increased the need for accountants with forensic accounting skills. Certifications such as the Certified Fraud Examiner (CFE) now increasingly sought after by practitioners and students. ACCT 320 is dual listed as ACCT 620.

Prerequisites: ACCT $209^{C}$ and ACCT $313{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ACCT 322 - Business Analysis and Decision Making

This course acquaints students with the process used to construct and understand the financial reports of organizations. An important objective is to understand the decisions that must be made in the financial reporting process and to develop the ability to evaluate and use accounting data. Included in the content are a study of accounting concepts and procedures used for financial statement analysis, cost analysis, cost allocation, planning and reporting accounting information. The significance of accounting information and the financial statements for management's decision-making process is emphasized.

Prerequisite: ACCT 209 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Every Term
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ACCT 324 - Cost Accounting II

This course is a continuation of Cost Accounting, ACCT 310. This course covers breakeven analysis, activity based costing, inventory management, differential analysis, transfer pricing, product pricing, capital planning, cost centers, the balanced scorecard, and decision making under uncertainty.

Prerequisite: ACCT $310^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ACCT 341 - Legal Environment of Business II

An analysis of complex transactions including mergers and acquisitions, antitrust law, financial instruments, intellectual property, bankruptcy, environmental, estate and international law.
Prerequisite: ACCT $340^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ACCT 345 - Volunteer Income Tax Assistance (VITA)

The focus of this class is service learning. The students will be afforded the opportunity to receive IRS certification as a tax preparer while making a difference in their community. Students will prepare annual federal and state income tax return for low income individuals that quality for the Volunteer Income Tax Assistance (VITA) Program. Students must pass an IRS certification exam and receive training on the Tax software. All Individual tax returns prepared as part of this class will be detailed reviewed prior to filing the tax. Students will develop and enhance a number of soft skills such as problem solving, teamwork, critical thinking, and leadership, each of which is valuable to entry-level accounting and business professionals.

Prerequisite: ACCT 308 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Enrollment limited to students with a semester level of Junior 2, Post Baccalaureate, Senior 1 or Senior 2.
Enrollment limited to students in the College of Business college.
Enrollment limited to students with department of Accounting,Economics \& Finance.

## ACCT 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ACCT 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ACCT 398-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ACCT 411 - Auditing Theory and Practice

Objective examination of financial statements with emphasis on internal control, review and evaluation, sampling theory and application, and procedural testing.
Prerequisite: ACCT $315^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ACCT 412 - Accounting Seminar

Analysis of current accounting theory and application in practice.
Additional focus on ethics, written and oral communication, organization skills, professionalism, and current topics.

Prerequisite: ACCT 314 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ACCT 413 - Advanced Accounting

In this course, advanced accounting concepts and procedures affecting partnerships, governmental entities, not-for-profit organizations, estates, and trusts are presented. Diverse global accounting issues, diversity in application of generally accepted accounting standards (GAAP), and the harmonization of GAAP in the development of international financial reporting standards (IRFS) as it applies to business combinations, consolidations, and transactions between international entities are highlighted.

Prerequisite: ACCT 315 ${ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ACCT 419 - Auditing Systems

Continuation of ACCT 411 with emphasis on computerized accounting systems and auditing procedures.

Prerequisite: ACCT 411 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$. Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ACCT 423 - Advanced Accounting II

This course is a continuation of Advanced Accounting, ACCT 413. Covers various topics, with emphasis on not-for-profit accounting (government, education, hospitals, and volunteer organizations), fiduciary accounting (estates, trusts, and insolvent companies), and advanced financial statement presentations (interim reporting, foreign currency, and segment reporting). Related pronouncements from the Financial Accounting Standards Board and the Governmental Accounting Standards Board will also be introduced.

Prerequisite: ACCT $413^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

## ACCT 429 - Accounting Data Analytics

Analysis of data for accounting and finance applications. Focus on accounting data analysis concepts and techniques for decisions making and the use of large data sets involving accounting information. Development of analysis and problem solving skills using current software tools available to accounting professionals. ACCT 429 is dual listed as ACCT 629.

Prerequisite: ACCT $230^{\circ}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

ACCT 450 - Internship
Supervised placement in selected public and private agencies at appropriate institutions. Prerequisites: Application and permission of the instructor. It is recommended that this be taken as a 3 credit internship.

Credits: 1-12
Term(s) Typically Offered: Offered Fall, Spring, \& Summer Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ACCT 490 - Independent Study

In-depth reading and/or research in an area of particular interest to the student, done with the guidance of a faculty member. Prerequisites: 12 credits of accounting courses, application, and permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ACCT 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ACCT 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## American Sign Language (ASL)

## ASL 101 - American Sign Language and Culture

This course is the first of a three-course series and focuses on American Sign Language and Culture. This course introduces basic aspects of the grammar and proper use of hand configuration and facial expressions in sign language communication.

Credits: 3

## Art (ART)

## ART 100-2-D Design

An introductory studio course examining the underlying structure of basic design in two-dimensional art. Students will be involved in the actual production of two-dimensional design solutions. The history of design is explored, as well as the various techniques employed by artists to express personal visions, communicate ideas or examine and interpret the human experience.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment is limited to students with a program in Art Graphic
Design(Comm Major), Art, Art or Art With Certification (K-12).
ART 101-3-D Design
An introductory studio course examining the underlying structure of basic design in three-dimensional art. Students will be involved in the actual production of three-dimensional design solutions. The history of design is explored, as well as the various techniques employed by artists to express personal visions, communicate ideas or examine and interpret the human experience.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment is limited to students with a major in Art, Art or Art With Certification ( $\mathrm{K}-12$ ).

## ART 105 - Basic Studio Drawing

This course will provide students with introductory level drawing knowledge and skills, emphasizing fine art approaches. Drawing will be explored through production, critique, history and aesthetics. Students will be provided with the fundamental technical, historical and conceptual information necessary to produce fine art drawings and maintain a portfolio. The elements and principles of design will be incorporated through the use of various drawing materials and techniques. Emphasis will be placed on the hands-on exploration of formal, technical and conceptual relationships. Students will develop a sensitive response to subtleties in drawing as well as to the whole. Critical thinking will be addressed with each project, allowing students to improve their ability to analyze visual works of art. Through creative studio practice, students discover relationships relevant to their role as an artist and work to develop the following emphasized artistic traits: perceptual openness, flexibility/adaptability, the courage to take a risk, the ability to analyze, and self-confidence.

## Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, \& Summer Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Building a Healthy Society, Creating Art, Fighting Social Problems, The Future, Mind \& Brain, Political Arts, Transfer Thread Completion Course

## ART 106 - Basic Studio Painting

This course will provide students with introductory level painting knowledge and skills, emphasizing fine art approaches. Painting will be explored through production, critique, history and aesthetics in order to achieve individual artistic goals. Students will be provided with the fundamental technical, historical and conceptual information necessary to produce fine art paintings and develop a portfolio. The elements and principles of design will be incorporated through the use of various painting materials and techniques. Emphasis will be placed on the hands-on exploration of formal, technical and conceptual relationships. Students will develop a sensitive response to subtleties in paintings as well as to the whole. Critical thinking will be addressed with each project, allowing students to improve their ability to analyze visual works of art. Through creative studio practice, students discover relationships relevant to their role as an artist and work to develop the following emphasized artistic traits: perceptual openness, flexibility/adaptability, the courage to take a risk, the ability to analyze, and self-confidence.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Building a Healthy Society, Creating Art, Fighting Social Problems, The Future, Mind \& Brain, Political Arts, Transfer Thread Completion Course

## ART 107 - Basic Studio Photography

This course will provide students with introductory level photographic knowledge and skills, emphasizing fine art approaches. Photography will be explored through production, critique, history and aesthetics in order to achieve individual artistic goals. Students will be provided with the fundamental technical, historical and conceptual information necessary to produce fine art prints and maintain a portfolio. The elements and principles of design will be incorporated into the study of photography, with focus on formal, technical and conceptual relationships. Students will gain knowledge of various genres of photography, styles, tips and techniques. Critical thinking will be addressed with each project, allowing students to improve their ability to visually analyze artwork. Through creative studio practice, students discover relationships relevant to their role as an artist and work to develop the following emphasized artistic traits: perceptual openness, flexibility/adaptability, the courage to take a risk, the ability to analyze, and self-confidence.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Building a Healthy Society, Creating Art, Fighting Social Problems, The Future, Mind \& Brain, Political Arts, Transfer Thread Completion Course

## ART 108 - Basic Studio Printmaking

This course will provide students with introductory level printmaking knowledge and skills. Printmaking will be explored through production, critique, history and aesthetics. Students will be provided with the fundamental, technical, historical and conceptual information necessary to produce fine art prints and and editions of prints. The elements and principles of design will be incorporated through the use of various printmaking material and techniques. Emphasis will be placed on the hands-on exploration of formal, technical and conceptual relationships. Critical thinking will be addressed with each project, allowing students to improve their ability to analyze visual works of art. Through creative studio practice, students discover relationships relevant to their role as an artist and work to develop the following emphasized artistic traits: perceptual openness, flexibility/adaptability, the courage to take a risk, the ability to analyze, and self-confidence.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Building a Healthy Society, Creating Art, Fighting Social Problems, The Future, Mind \& Brain, Political Arts, Transfer Thread Completion Course

## ART 109 - Basic Studio Metalsmithing

This course will provide students with introductory Metalsmithing knowledge and skills, emphasizing fine art approaches while utilizing a variety of materials, predominantly metal. Metalsmithing will be explored through production, critique, history and aesthetics in order to achieve individual artistic goals and expression. Students will be provided with the fundamental technical, historical and conceptual information necessary to produce fine art forms and develop a portfolio. Students gain an understanding of various techniques, styles and approaches to metalsmithing. Critical thinking will be addressed with each project, allowing students to improve their ability to analyze visual works of art. Through creative studio practice, students discover relationships relevant to their role as an artist and work to develop the following emphasized artistic traits: perceptual openness, flexibility/adaptability, the courage to take a risk, the ability to analyze, and self-confidence.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Building a Healthy Society, Creating Art, Fighting Social Problems, The Future, Mind \& Brain, Political Arts, Transfer Thread Completion Course

## ART 110 - Basic Studio Sculpture

This course will provide students with introductory Sculpture knowledge and skills, emphasizing fine art approaches while utilizing a variety of materials. Sculpture will be explored through production, critique, history and aesthetics in order to achieve individual artistic goals and expression. Students will be provided with the fundamental technical, historical and conceptual information necessary to produce fine art forms and develop a portfolio. Students gain an understanding of various techniques, styles and approaches to contemporary sculpture. Critical thinking will be addressed with each project, allowing students to improve their ability to analyze visual works of art. Through creative studio practice, students discover relationship relevant to their role as an artist and work to develop the following emphasized artistic traits: perceptual openness, flexibility/adaptability, the courage to take a risk, the ability to analyze, and self-confidence.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Building a Healthy Society, Creating Art, Fighting Social Problems, The Future, Mind \& Brain, Political Arts, Transfer Thread Completion Course

## ART 111 - Basic Studio Fiber Art

This course will provide students with introductory level Fiber Art knowledge and skills. Fiber Art will be explored through production, critique, history and aesthetics. Students will be provided with the fundamental technical, historical and conceptual information necessary to produce fine art forms and develop a portfolio. Through two-and threedimensional projects, students will have an opportunity to creatively explore a variety of traditional and non-traditional flexible materials, techniques and concepts while developing a portfolio. Emphasis will be place upon the ability to investigate the unique qualities and characteristics of materials and the development of an original response to an assignment. Critical thinking will be addressed with each project, allowing students to improve their ability to analyze visual works of art. Through creative studio practice, students discover relationships relevant to their role as an artist and work to develop the following emphasized artistic traits: perceptual openness, flexibility/adaptability, the courage to take a risk, the ability to analyze, and self-confidence.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Building a Healthy Society, Creating Art, Fighting Social Problems, The Future, Mind \& Brain, Political Arts, Transfer Thread Completion Course

## ART 112 - Basic Studio Ceramics

This course will provide students with introductory ceramics knowledge and skills, emphasizing fine art approaches while utilizing a variety of materials. Ceramics will be explored through production, critique, history and aesthetics in order to achieve individual artistic goals, and expression. Students will be provided with the fundamental technical, historical and conceptual information necessary to produce fine art forms and develop a portfolio. Students gain an understanding of various techniques, styles and approaches to contemporary ceramics. Emphasis will be placed upon the ability to investigate the unique qualities and characteristics of materials and the development of an original response to an assignment. Critical thinking will be addressed with each project, allowing students to improve their ability to analyze visual works of art. Through creative studio practice, students discover relationships relevant to their role as an artist and work to develop the following emphasized artistic traits: perceptual openness, flexibility/adaptability, the courage to take a risk, the ability to analyze, and self-confidence.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Building a Healthy Society, Creating Art, Fighting Social Problems, The Future, Mind \& Brain, Political Arts, Transfer Thread Completion Course

## ART 113 - Basic Studio Graphic Design

Students will explore Graphic Design with a beginning level of production, critique, history and aesthetics. This course is intended to develop the student's skill level and personal aesthetic. Creative responses to assignments will include the application of visual language skills to communicate ideas, meaning and information. Coursework will include traditional, digital and mixed media. It will also focus on studies in perception, visual organization, the graphic design process and ideation, with investigations into experimental and expressive aspects of graphic design. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problems; ability to synthesize.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Building a Healthy Society, Creating Art, Fighting Social Problems, The Future, Mind \& Brain, Political Arts, Transfer Thread Completion Course

## ART 114 - Basic Studio Digital Media

This course will provide students with introductory level Digital Media knowledge and skills, emphasizing fine art approaches that utilize the computer in addition to other various technologies to produce works of art. Digital Media will be explored through production, critique, history and aesthetics in order to achieve individual artistic goals. Students will be provided with the fundamental technical, historical and conceptual information necessary to produce digitally-based art. Technical ability and development, conceptual development, and media experimentation will be stressed. Critical thinking will be addressed with each project, allowing students to improve their ability to analyze visual works of art. Through creative studio practice, students discover relationships relevant to their role as an artist and work to develop the following emphasized artistic traits: perceptual openness, flexibility/adaptability, the courage to take a risk, the ability to analyze, and self-confidence.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Building a Healthy Society, Creating Art, Fighting Social Problems, The Future, Mind \& Brain, Political Arts, Transfer Thread Completion Course

## ART 115 - Visual Literacy

A cornerstone course involving the study of visual forms of communication with an emphasis on image-based media (newspaper, magazine, film, television, photography, informational graphics, interactive multimedia, digital games and web-based technologies). Topics include visual interpretation, visual manipulation, visual conventions, the role of visual media in cultural processes and aesthetic appreciation.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Global Citizenship, Creating Art, Innovation, Entrepreneurship, and Positive Change, Transfer Thread Completion Course

## ART 121 - Introduction to Visual Arts

This course provides an introduction to visual arts for high school students enrolled in SRU"s Summer Arts Academy.

Credits: 1
Term(s) Typically Offered: Offered as Needed

## ART 139- University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## ART 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ART 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## ART 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ART 200-Activities and Fundamentals

A course providing for the study of child development through creative activities. It includes theory, experimentation with two and threedimensional processes appropriate to the elementary classroom, methods of motivation, evaluation and classroom management.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## ART 205 - Intermediate Studio Drawing

The student will explore Drawing with an increased level of production, critique, history and aesthetics. This course will provide the student with a moderate level of fine art studio drawing. Students will explore how to work with the fine art medium of mark-making through process and production, including art history and discussion. Students will review fundamental technical and conceptual information necessary to further the creation of fine art pieces. Students will develop individual applications of drawing with an increased level to critically analyze both individual and peer artwork. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problem; ability to synthesize. Repeatable: consult individual curriculum guide.

Prerequisites: ART $100^{\mathrm{D}}$ or ART $101^{\mathrm{D}}$ or ART $105^{\mathrm{D}}$ or ART $106^{\mathrm{D}}$ or ART $107^{\mathrm{D}}$ or ART $108^{\mathrm{D}}$ or ART $109^{\mathrm{D}}$ or ART $110^{\mathrm{D}}$ or ART $111^{\mathrm{D}}$ or ART $112^{\mathrm{D}}$ or ART $114^{D}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall, Spring, \& Summer Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Creating Art, The Future, Transfer Thread Completion Course

## ART 206 - Intermediate Studio Painting

The student will explore Painting with an increased level of production, critique, history and aesthetics. This course will provide the student with a moderate level of fine art studio painting. Students will explore how to work with the fine art medium of paint through process and production, including art history and discussion. Students will review fundamental technical and conceptual information necessary to further the creation of fine art pieces. Students will develop individual applications of painting with an increased level to critically analyze both individual and peer artwork. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure: sensitivity to problems: ability to synthesize. Repeatable: consult individual curriculum guide.

Prerequisites: ART $100^{\mathrm{D}}$ or ART $101^{\mathrm{D}}$ or ART $105^{\mathrm{D}}$ or ART $106^{\mathrm{D}}$ or ART $107^{\mathrm{D}}$ or ART $108^{\mathrm{D}}$ or ART $109^{\mathrm{D}}$ or ART $110^{\mathrm{D}}$ or ART $111^{\mathrm{D}}$ or ART $112^{\mathrm{D}}$ or ART $114^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Creating Art, The Future, Transfer Thread Completion Course

## ART 207 - Intermediate Studio Photography

The student will explore Photography with an increased level of production, critique, history and aesthetics. Student will continue to develop photographic knowledge and skills, emphasizing fine art approaches. Students will review fundamental technical and conceptual information necessary to further the creation of fine art photographs. Students will continue to receive technical, historical and conceptual information to help advance their portfolios. Primary emphasis will be placed on technical refinement alongside development of creative problem-solving skills. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problems; ability to synthesize. Repeatable: consult individual curriculum guide.

Prerequisites: ART $100^{\mathrm{D}}$ or ART $101^{\mathrm{D}}$ or ART $105^{\mathrm{D}}$ or ART $106^{\mathrm{D}}$ or ART $107^{\mathrm{D}}$ or ART $108^{\mathrm{D}}$ or ART $109^{\mathrm{D}}$ or ART $110^{\mathrm{D}}$ or ART $111^{\mathrm{D}}$ or ART $112^{\mathrm{D}}$ or ART $114^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Creating Art, The Future, Transfer Thread Completion Course

## ART 208 - Intermediate Studio Printmaking

The student will explore Printmaking with an increased level of production, critique, history and aesthetics. This course will provide students with opportunities to explore and develop techniques and concepts of Printmaking. Emphasis will be on the manual procedures of printing black and white as well as color prints. Continued development of technical ability, conceptual development and media experimentation will be stressed. Primary emphasis will be place on the development of creative problem-solving skills, Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problems; ability to synthesize. Repeatable: consult individual curriculum guide.
Prerequisites: ART $100^{\mathrm{D}}$ or ART $101^{\mathrm{D}}$ or ART $105^{\mathrm{D}}$ or ART $106^{\mathrm{D}}$ or ART $107^{\mathrm{D}}$ or ART $108^{\mathrm{D}}$ or ART $109^{\mathrm{D}}$ or ART $110^{\mathrm{D}}$ or ART $111^{\mathrm{D}}$ or ART $112^{\mathrm{D}}$ or ART $114^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Creating Art, The Future, Political Arts, Transfer Thread Completion Course

## ART 209 - Intermediate Studio Metalsmithing

The student will explore Metalsmithing with an increased level of production, critique, history and aesthetics. this course is intended to increase skill level while continuing to develop the student's personal aesthetic. Students will demonstrate a variety of metalsmithing techniques while understanding Metalsmithing's technical and historical contexts. Students are expected to be self-motivated in terms of idea generation and execution. Students will explore avenues to make their work more personal by combining metalsmithing technical skills with form and concept. Primary emphasis will be placed on technical refinement alongside development of creative problem-solving skills. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problems; ability to synthesize. Repeatable: consult individual curriculum guide.

Prerequisites: ART $100^{\mathrm{D}}$ or ART $101^{\mathrm{D}}$ or ART $105^{\mathrm{D}}$ or ART $106^{\mathrm{D}}$ or ART $107^{\mathrm{D}}$ or ART $108^{\mathrm{D}}$ or ART $109^{\mathrm{D}}$ or ART $110^{\mathrm{D}}$ or ART $111^{\mathrm{D}}$ or ART $112^{\mathrm{D}}$ or ART $114^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Creating Art, The Future, Transfer Thread Completion Course

## ART 210 - Intermediate Studio Sculpture

The student will explore Sculpture with an increased level of production, critique, history and aesthetics. This course is intended to increase skill level while continuing to develop the student's personal aesthetic. Students will demonstrate a variety of sculptural techniques while understanding Sculpture's contemporary and historical contexts. Students are expected to be self-motivated in terms of idea generation and execution. Students will explore avenues to make their work more personal by combining technical skills with form and concept. primary emphasis will be placed on technical refinement alongside development of creative problem-solving skills. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure: sensitivity to problems; ability to synthesize. Repeatable: consult individual curriculum guide

Prerequisites: ART $100^{\mathrm{D}}$ or ART $101^{\mathrm{D}}$ or ART $105^{\mathrm{D}}$ or ART $106^{\mathrm{D}}$ or ART $107^{\mathrm{D}}$ or ART $108^{\mathrm{D}}$ or ART $109^{\mathrm{D}}$ or ART $110^{\mathrm{D}}$ or ART $111^{\mathrm{D}}$ or ART $112^{\mathrm{D}}$ or ART $114^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Creating Art, The Future, Transfer Thread Completion Course

## ART 211 - Intermediate Studio Fiber Art

The student will continue to explore Fiber Art with an increased level of production, critique, history and aesthetics This course will provide students with opportunities to explore both traditional and non-traditional flexible materials, techniques and concepts within contemporary Fiber Art. Through two- and three-dimensional projects, students will continue to develop their skills, artistic perception and conceptual thinking. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problems; ability to synthesize. Repeatable: consult individual curriculum guide.

Prerequisites: ART $100^{\mathrm{D}}$ or ART $101^{\mathrm{D}}$ or ART $105^{\mathrm{D}}$ or ART $106^{\mathrm{D}}$ or ART $107^{\mathrm{D}}$ or ART $108^{\mathrm{D}}$ or ART $109^{\mathrm{D}}$ or ART $110^{\mathrm{D}}$ or ART $111^{\mathrm{D}}$ or ART $112^{\mathrm{D}}$ or ART $114^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Creating Art, The Future, Transfer Thread Completion Course

## ART 212 - Intermediate Studio Ceramics

The student will explore Ceramics with an increased level of production, critique, history and aesthetics. Students will explore avenues to make their work more personal by combining Ceramic technical skills with form and concept. Primary emphasis will be placed on technical refinement of wheel-throwing and hand-building construction alongside development of creative prob em-solving skills. Various methods of glazing and firing are addressed as they relate to student work on specific projects. Technical refinement alongside development of creative problemsolving skills will be emphasized also. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problems; ability to synthesize. Repeatable: consult individual curriculum guide.

Prerequisites: ART $100^{\mathrm{D}}$ or ART $101^{\mathrm{D}}$ or ART $105^{\mathrm{D}}$ or ART $106^{\mathrm{D}}$ or ART $107^{\mathrm{D}}$ or ART $108^{\mathrm{D}}$ or ART $109^{\mathrm{D}}$ or ART $110^{\mathrm{D}}$ or ART $111^{\mathrm{D}}$ or ART $112^{\mathrm{D}}$ or ART $114^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Creating Art, The Future, Transfer Thread Completion Course

## ART 213 - Intermediate Studio Graphic Design

The student will explore Graphic Design with an increased level of production, critique, history and aesthetics. This course is intended to increase skill level while continuing to develop the student's personal aesthetic. Creative responses to assignments will include the application of visual language skills to communicate ideas, meaning and information Coursework will include traditional, digital and mixed media. Coursework will focus on studies in perception, visual organization, the graphic design process and ideation, with investigations into experimental and expressive aspects of graphic design. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problems; ability to synthesize. Repeatable: consult individual curriculum guide.

Prerequisites: ART $100^{\mathrm{D}}$ or ART $101^{\mathrm{D}}$ or ART $105^{\mathrm{D}}$ or ART $106^{\mathrm{D}}$ or ART $107^{\mathrm{D}}$ or ART $108^{\mathrm{D}}$ or ART $109^{\mathrm{D}}$ or ART $110^{\mathrm{D}}$ or ART $111^{\mathrm{D}}$ or ART $112^{\mathrm{D}}$ or ART $114^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Creating Art, The Future, Transfer Thread Completion Course

## ART 214 - Intermediate Studio Digital Media

The student will explore Digital media with an increased level of production, critique, history and aesthetics in order to achieve individual artistic goals. Emphasis will be placed upon production and process. Students will review fundamental technical and conceptual information necessary to further the creation of fine art pieces while maintaining a portfolio. New digital techniques will be explored as they become necessary to articulate and advance individual creative needs. Primary emphasis will be place on technical refinement alongside development of creative problem-solving skills. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problems; ability to synthesize. Repeatable: consult individual guide.

Prerequisites: ART $100^{\mathrm{D}}$ or ART $101^{\mathrm{D}}$ or ART $105^{\mathrm{D}}$ or ART $106^{\mathrm{D}}$ or ART $107^{\mathrm{D}}$ or ART $108^{\mathrm{D}}$ or ART $109^{\mathrm{D}}$ or ART $110^{\mathrm{D}}$ or ART $111^{\mathrm{D}}$ or ART $112^{\mathrm{D}}$ or ART $114^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Creating Art, The Future, Transfer Thread Completion Course

## ART 225 - Overview of Western Art

A sweeping survey intended to acquaint the student with the stylistic development and chronology of the western tradition in the arts. Covers the period and styles prevalent in the Western World from the Beginnings of art to the modern era.

Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): Transfer Thread Completion Course

## ART 226 - Overview of World Art

A survey course intended to acquaint the student with the stylistic developments and chronology of the visual arts in Asia, Africa, India and South America. Special emphasis will be given to the expression of cultural, religious and aesthetic purposes of art works created outside the western tradition.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Creating Art, Political Arts, Transfer Thread Completion Course, Transnational Culture, Who Do We Think We Are

## ART 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ART 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## ART 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ART 300-Art Seminar

A seminar for advanced art studio majors, designed to sharpen the students' critical and evaluation skills.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ART PORTFOLIO APPROVED attribute.

## ART 305 - Advanced Studio Drawing

This course will investigate an advanced level of drawing production, critique, history and aesthetics, and will focus on the achievement of individual artistic goals through the exploration of concept-based assignments. A wide range of traditional and non-traditional materials and processes will be utilized to further the skillful creation of artwork, and new drawing techniques will be explored to aid in the articulation of individual creative ideas. Emphasis will be placed upon making judgments and developing fluency through heightened production and an expanded exploration of process. Additionally, students will strengthen their ability to critically analyze artwork, and will maintain a drawing portfolio. CAPP Prerequisites: Must take 1 of the following: ART 205, ART 206, ART 207, ART 208, AT 209, ART 210, ART 211, ART 212, ART 213 or ART 214.

Credits: 3
Term(s) Typically Offered: Offered Fall, Spring, \& Summer
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 306 - Advanced Studio Painting

This course will investigate an advanced level of painting production, critique, history and aesthetics, and will focus on the achievement of individual artistic goals through the exploration of concept-based assignments. A wide range of traditional and non-traditional materials and processes will be utilized to further the skillful creation of artwork, and new drawing techniques will be explored to aid in the articulation of individual creative ideas. Emphasis will be placed upon making judgments and developing fluency through heightened production and an expanded exploration of process. Additionally, students will strengthen their ability to critically analyze artwork, and will maintain a painting portfolio. CAPP Prerequisites: Must take 1 of the following: ART 205,
ART 206, ART 207, ART 208, AT 209, ART 210, ART 211, ART 212, ART 213 or ART 214.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 307 - Advanced Studio Photography

This course will investigate an advanced level of photographic production, critique, history and aesthetics. Students will continue to investigate genres of photography, and new photographic techniques will be explored to aid in the articulation of individual artistic goals Emphasis will be placed upon strengthening portfolios through heightened production and an expanded exploration of process. Students will continue to strengthen their ability to critically analyze artwork. Through creative studio practice, students should develop the following emphasized artistic traits: independence in making judgments and fluency in ideas and materials. Repeatable: consult individual curriculum guide.

Prerequisites: ART $205^{\mathrm{D}}$ or ART $206^{\mathrm{D}}$ or ART $207^{\mathrm{D}}$ or ART $208^{\mathrm{D}}$ or ART $209^{\mathrm{D}}$ or ART $210^{\mathrm{D}}$ or ART $211^{\mathrm{D}}$ or ART $212^{\mathrm{D}}$ or ART $213^{\mathrm{D}}$ or ART $214^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 308 - Advanced Studio Printmaking

This course will provide students with opportunities to explore techniques and concepts of printmaking at an advanced level. Through projects students will have an opportunity to develop their skills, artistic perception and conceptual thinking. The course will focus on students gaining independence in making judgments, and developing fluency in their art process. Through creative studio practice, students should be able to develop the following emphasized artistic traits: independence in making judgments and fluency in ideas and materials.

Prerequisites: ART $205^{\mathrm{D}}$ or ART $206^{\mathrm{D}}$ or ART $207^{\mathrm{D}}$ or ART $208^{\mathrm{D}}$ or ART $209^{\mathrm{D}}$ or ART $210^{\mathrm{D}}$ or ART $211^{\mathrm{D}}$ or ART $212^{\mathrm{D}}$ or ART $213^{\mathrm{D}}$ or ART $214^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## ART 309 - Advanced Studio Metalsmithing

This course will investigate an advanced level of metalsmithing production, critique, history and aesthetics. Students will continue to investigate genres of metalsmithing, and new metalsmithing techniques will be explored to aid in the articulation of individual artistic goals. Emphasis will be placed upon strengthening portfolios through heightened production and an expanded exploration of process. Students wilt continue to strengthen their ability to critically analyze artwork. Through creative studio practice, students should develop the following emphasized artistic traits: independence in making judgments and fluency in ideas and materials. Repeatable: consult individual curriculum guide.

Prerequisites: ART $205^{\mathrm{D}}$ or ART $206^{\mathrm{D}}$ or ART $207^{\mathrm{D}}$ or ART $208^{\mathrm{D}}$ or ART $209^{\mathrm{D}}$ or ART $210^{\mathrm{D}}$ or ART $211^{\mathrm{D}}$ or ART $212^{\mathrm{D}}$ or ART $213^{\mathrm{D}}$ or ART $214^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 310 - Advanced Studio Sculpture

This course will investigate an advanced level of Sculpture production, critique, nistory and aesthetics. Students will continue to investigate genres of Sculpture, and new Sculpture techniques will be explored to aid in the articulation of individual artistic goals. Emphasis will be placed upon strengthening portfolios through heightened production and an expanded exploration of process. Students will continue to strengthen their ability to critically analyze artwork. Through creative studio practice, students should develop the following emphasized artistic traits: independence in making judgments and fluency in ideas and materials. Repeatable: consult individual curriculum guide.

Prerequisites: ART $205^{\mathrm{D}}$ or ART $206^{\mathrm{D}}$ or ART $207^{\mathrm{D}}$ or ART $208^{\mathrm{D}}$ or ART $209^{\mathrm{D}}$ or ART $210^{\mathrm{D}}$ or ART $211^{\mathrm{D}}$ or ART $212^{\mathrm{D}}$ or ART $213^{\mathrm{D}}$ or ART $214^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 311 - Advanced Studio Fiber Art

This course will provide students with opportunities to explore traditional and non-traditional flexible materials, techniques and concepts of contemporary Fiber Art at an advanced level. Through two-and threedimensional projects students will have an opportunity to develop their skills, artistic perception and conceptual thinking. The course will focus on students gaining independence in making judgments, and developing fluency in their art process. Through creative studio practice, students should be able to develop the following emphasized artistic traits: independence in making judgments and fluency in ideas and materials. Repeatable: consult individual curriculum guide.

Prerequisites: ART $205^{\mathrm{D}}$ or ART $206^{\mathrm{D}}$ or ART $207^{\mathrm{D}}$ or ART $208^{\mathrm{D}}$ or ART $209^{\mathrm{D}}$ or ART $210^{\mathrm{D}}$ or ART $211^{\mathrm{D}}$ or ART $212^{\mathrm{D}}$ or ART $213^{\mathrm{D}}$ or ART $214^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 312 - Advanced Studio Ceramics

This course will investigate an advanced level of ceramics production, critique, history and aesthetics, and will focus on the achievement of individual artistic goals through the exploration of functional and concept-based assignments. A wide range of traditional and nontraditional materials and processes will be utilized to further the skillful creation of artwork, and new ceramic techniques will be explored to aid in the articulation of individual creative endeavors. Emphasis will be placed on fluency through heightened production and an expanded exploration of process. Students will strengthen their ability to critically analyze artwork, and will maintain a ceramics portfolio. Through creative studio practice, students should develop the following emphasized artistic traits: independence in making judgments and fluency in ideas and materials. Repeatable: consult individual curriculum guide.

Prerequisites: ART $205^{D}$ or ART $206^{D}$ or ART $207^{D}$ or ART $208^{D}$ or ART $209^{D}$ or ART $210^{D}$ or ART $211^{D}$ or ART $212^{D}$ or ART $213^{D}$ or ART $214^{D}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## ART 313 - Advanced Studio Graphic Design

This course will investigate an advanced level of graphic design production, critique, history and aesthetics, and will focus on the achievement of individual artistic goals through the exploration of concept-based assignments. A wide range of traditional and nontraditional materials and processes will be utilized to further the skillful creation of artwork, and new graphic design techniques will be through heightened production and an expanded exploration of process. Students will strengthen their ability to critically analyze artwork, and will maintain a graphic design portfolio. Through creative studio practice, students would develop the following emphasized artistic traits: independence in making judgments and fluency in ideas and materials. Repeatable: consult individual curriculum guide.

Prerequisites: ART $205^{\mathrm{D}}$ or ART $206^{\mathrm{D}}$ or ART $207^{\mathrm{D}}$ or ART $208^{\mathrm{D}}$ or ART $209^{\mathrm{D}}$ or ART $210^{\mathrm{D}}$ or ART $211^{\mathrm{D}}$ or ART $212^{\mathrm{D}}$ or ART $213^{\mathrm{D}}$ or ART $214^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## ART 314 - Advanced Studio Digital Media

This course will investigate an advanced level of digital media production, critique, history and aesthetics, and will focus on the achievement of individual artistic goals through the exploration of concept-based assignments. A wide range of traditional and non-traditional materials and processes will be utilized to further the skillful creation of artwork, and new digital media techniques will be explored to aid in the articulation of individual creative endeavors. Emphasis will be placed on fluency through heightened production and an expanded exploration of process. Students will strengthen their ability to critically analyze artwork, and will maintain a digital media portfolio. Through creative studio practice, students should develop the following emphasized artistic traits: independence in making judgments and fluency in ideas and materials. Repeatable: consult individual curriculum guide. CAPP Prerequisites: Must take 1 of the following: ART 205, ART 206, ART 207, ART 208, AT 209, ART 210, ART 211, ART 212, ART 213 or ART 214.

Credits: 3
Term(s) Typically Offered: Offered Fall, Spring, \& Summer
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 315 - Master Studio

A course in which master artists and craftsmen speak to the history and development of their discipline. They will also demonstrate techniques and critique student work. May be repeated for a maximum of 9 credits.

Credits: 1
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 317 - Elementary Art Methods and Materials

This course provides an exploration of age appropriate instructional methods, materials and techniques for comprehensive elementary art programs. Art education theory, developmental stages of artistic growth, the importance of the arts in the curriculum, issues of inclusion, differentiation of instruction and assessment, PA Standards for the Arts, and strategies to enhance interdisciplinary connections will be included. Opportunity is provided to engage in, and analyze, actual instruction and artistic products. Field placement required.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 325 - North American Art History

Explores the history of the visual arts produced on the North American continent and covers the artistic expressions of Native Americans and the development of European colonial art to the Second World War.Can be repeated for up to 6 credits.

Prerequisite: ART $225^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Being
American, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## ART 335-The Renaissance Tradition

Explores the historical development of the visual arts in Europe from the mid-14th century to the mid-17th century. Can be repeated for up to 6 credits.

Prerequisite: ART $225^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread
Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 345 - Foundations of Modern Art

The development of modern concepts and approaches in the visual arts from the late 18th century up to and including Impressionism in the late 19th century.Can be repeated for up to 6 credits.
Prerequisite: ART $225^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Art \& Society, Creating Art, Revolutions, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 355 - Early Modern Art

Explores the history of the visual arts during the late nineteenth century culminating with the surrealist movement before the Second World War. Can be repeated for up to 6 credits.
Prerequisite: ART $225^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 365 - Art Since 1945

Explores the development of the visual arts in the late twentieth century. It will cover the social, cultural and stylistic movements from Abstract
Expressionism to contemporary art.Can be repeated for up to 6 credits.
Prerequisite: ART $225^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Art \& Society, Creating Art, Political Arts, Revolutions, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## ART 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 398-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 405 - Senior Studio Drawing

The student will demonstrate intrinsic motivation and a high degree of self-awareness in a personal investigation of drawing production, critique, history and aesthetics, and will demonstrate self-directed behavior relevant to professionalism and artistry. Coursework will require an understanding of self that extends to an integral commitment in the production of drawing. The quality and caliber of drawing work produced in this course will define the student as a drawing artist. CAPP Prerequisites: Must take 1 of the following: ART 305, ART 306, ART 307, ART 308, ART 309, ART 310, ART 311, ART 312, ART 313 or ART 314

## Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, \& Summer
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 406-Senior Studio Painting

The student will demonstrate intrinsic motivation and a high degree of self-awareness in a personal investigation of painting production, critique, history and aesthetics, and will demonstrate self-directed behavior relevant to professionalism and artistry. Coursework will require an understanding of self that extends to an integral commitment in the production of painting. The quality and caliber of drawing work produced in this course will define the student as a painter. CAPP Prerequisites: Must take 1 of the following: ART 305, ART 306, ART 307, ART 308, ART 309, ART 310, ART 311, ART 312, ART 313 or ART 314

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 407 - Senior Studio Photography

This course will encourage students to explore personal investigations of photographic production, critique, history and aesthetics. Students will demonstrate self-directed behavior relevant to professionalism and artistry. The course requires students to build a cohesive body of work with an integral emphasis on the photographic image, allowing students to supplement their technical and conceptual aptitude while developing a greater understanding of their placement in a larger historical context. Coursework will emphasize a high level of quantity, caliber and ambition to further articulate a professional portfolio. Through creative studio practice, students should develop a high degree of self-awareness and intrinsic motivation. Repeatable: consult individual curriculum guide. CAPP Prerequisites: Must take 1 of the following: ART 305, ART 306, ART 307, ART 308, ART 309, ART 310, ART 311, ART 312, ART 313 or ART 314.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 408 - Senior Studio Printmaking

The quality and caliber of prints produced in this course will define the student as an artist. Emphasis will be placed on artistic perception, developing concepts and individual artistic vision. Students will focus on a personal investigation of printmaking, technique, critique, history and aesthetics, and will demonstrate self-directed behavior relevant to professionalism and artistry. Through creative studio practice, students should develop a high degree of self-awareness and intrinsic motivation. CAPP Prerequisites: Must take 1 of the following: ART 305, ART 306, ART 307, ART 308, ART 309, ART 310, ART 311, ART 312, ART 313 or ART 314.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 409-Senior Studio Metalsmithing

This course will encourage students to explore a personal investigation of metalsmithing production, critique, history and aesthetics. Students will demonstrate self-directed behavior relevant to professionalism and artistry. Coursework will require an understanding of self that extends to an integral commitment in the production of a variety of work that is representative of the student's individual aesthetic. The quality and caliber of work produced in this course will define the student as a metalsmith. Through creative studio practice, students should develop a high degree of self awareness and intrinsic motivation. Repeatable: consult individual curriculum guide. CAPP Prerequisites: Must take 1 of the following: ART 305, ART 306, ART 307, ART 308, ART 309, ART 310, ART 311, ART 312, ART 313 or ART 314.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 410-Senior Studio Sculpture

This course will encourage students to explore a personal investigation of Sculpture through production, critique, history and aesthetics. Students will demonstrate self-directed behavior relevant to professionalism and artistry. Coursework will require an understanding of self that extends to an integral commitment in the production of a variety of work that is representative of the student's individual aesthetic. The quality and caliber of work produced in this course will define the student as a sculptor. Through creative studio practice, students should develop a high degree of self-awareness and intrinsic motivation. Repeatable: consult individual curriculum guide. CAPP Prerequisites: Must take 1 of the following: ART 305, ART 306, ART 307, ART 308, ART 309, ART 310, ART 311, ART 312, ART 313 or ART 314.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 411 - Senior Studio Fiber Art

The quality and caliber of fiber artwork produced in this course will define the student as an artist. Emphasis will be placed on artistic perception, developing concepts and individual artistic vision. Students will focus on a personal investigation of fiber art materials, technique, critique, history and aesthetics, and will demonstrate self-directed behavior relevant to professionalism and artistry. Through creative studio practice, students should develop a high degree of self-awareness and intrinsic motivation. Repeatable: consult individual curriculum guide.

Prerequisites: ART $305^{\mathrm{D}}$ or ART $306^{\mathrm{D}}$ or ART $307^{\mathrm{D}}$ or ART $308^{\mathrm{D}}$ or ART $309^{\mathrm{D}}$ or ART $310^{\mathrm{D}}$ or ART $311^{\mathrm{D}}$ or ART $312^{\mathrm{D}}$ or ART $313^{\mathrm{D}}$ or ART $314^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$. Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 412 - Senior Studio Ceramics

This course will encourage students to explore a personal investigation of ceramics production, critique, history and aesthetics. Students will demonstrate self-directed behavior relevant to professionalism and artistry. Coursework will require an understanding of self that extends to an integral commitment in the production of ceramics. The quality and caliber of ceramic work produced in this course will define the student as a ceramic artist. Through creative studio practice, students should develop a high degree of self-awareness and intrinsic motivation. Repeatable: consult individual curriculum guide. CAPP Prerequisites: Must take 1 of the following: ART 305, ART 306, ART 307, ART 308, ART 309, ART 310, ART 311, ART 312, ART 313 or ART 314.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 413 - Senior Studio Graphic Design

This course will encourage students to explore a personal investigation of graphic design production, critique, history and aesthetics. Students will demonstrate self-directed behavior relevant to professionalism and artistry. coursework will require an understanding of self that extends to an integral commitment in the production of graphic design. The quality and caliber of graphic design work produced in this course will define the student as a graphic artist. Through creative studio practice, students should develop a high degree of self-awareness and intrinsic motivation. Repeatable: consult individual curriculum guide.

Prerequisites: ART $305^{D}$ or ART $306^{D}$ or ART $307^{D}$ or ART $308^{D}$ or ART $309^{D}$ or ART $310^{D}$ or ART $311^{D}$ or ART $312^{D}$ or ART $313^{D}$ or ART $314^{D}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 414-Senior Studio Digital Media

This course will encourage students to explore a personal investigation of digital media production, critique, history and aesthetics. Students will demonstrate self-directed behavior relevant to professionalism and artistry. Coursework will require an understanding of self that extends to an integral commitment in the production of digital media. The quality and caliber of digital media work produced in this course will define the student as a digital artist. Through creative studio practice, students should develop a high degree of self-awareness and intrinsic motivation. Repeatable: consult individual curriculum guide. CAPP Prerequisites: Must take 1 of the following: ART 305, ART 306, ART 307, ART 308, ART 309, ART 310, ART 311, ART 312, ART 313 or ART 314.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 420 - Art History Seminar

A seminar for students qualified to do independent study and research in art history. Topics selected through consultation with the instructor.Can be repeated for up to 6 credits.
Prerequisite: ART $225^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 425 - Senior Project Drawing

A capstone course emphasizing the articulation of ideas and presentation. This course provides independent study in drawing, culminating in a public exhibition demonstrating the student's artistic direction. The student will focus on concepts relevant to individual interests, and will determine the content and form based on past study of drawing production, critique, history and aesthetics. The student is responsible for all necessary components of a professional exhibition of their drawing work. Permission of the instructor.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## ART 426 - Senior Project Painting

This course provides independent study in painting, culminating in a public exhibition demonstrating the student's artistic direction. The student will focus on concepts relevant to individual interests, and will determine the content and form based on past study of painting production, critique, history and aesthetics. The student is responsible for all necessary components of a professional exhibition of their graphic design work. Permission of the instructor.
Prerequisites: ART $306^{\text {D }}$ or ART $406^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## ART 427 - Senior Project Photography

A capstone course emphasizing the articulation of ideas and presentation. Senior students will engage in an individually proposed project, culminating in a public exhibition with supporting materials that demonstrate the student's artistic expertise. The student will focus on an individual direction in Photography, the content and form of which will be determined by past photographic investigations, critique, history and aesthetics while working closely with the Photography professor. The student is responsible for all components of their projects while displaying a high level of self-awareness, intrinsic motivation, and professionalism. By permission of instructor.

Prerequisites: ART $307^{\text {D }}$ or ART $407^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## ART 428 - Senior Project Printmaking

In this capstone course the senior student will engage in an individually proposed project, culminating in a public exhibition demonstrating the student's artistic direction. The student will focus on concepts relevant to individual interests in printmaking, and will determine the content and form based on past study of printmaking production creation, critique, history and aesthetics, and under the supervision of the Fiber Art Professor. The student is responsible for all necessary components of a professional exhibition of their work. By permission of the instructor.
Prerequisites: ART $308^{\text {D }}$ or ART $408^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## ART 429-Senior Project Metalsmithing

A capstone course emphasizing the articulation of ideas and presentation. Senior students will engage in an individually proposed project, culminating in a public exhibition with supporting materials that demonstrate the student's artistic expertise. The student will focus on an individual direction in Metalsmithing, the content and form of which will be determined by past studio investigations, critique, history and aesthetics while working closely with the Metalsmithing professor. The student is responsible for all components of their projects while displaying a high level of self-awareness, intrinsic motivation, and professionalism. By permission of instructor.

Prerequisites: ART $309^{\text {D }}$ or ART $409^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 430-Senior Project Sculpture

A capstone course emphasizing the articulation of ideas and presentation. Senior students will engage in an individually proposed project, culminating in a public exhibition with supporting materials that demonstrate the student's artistic expertise. The student will focus on an individual direction in Sculpture, the content and form of which will be determined by past studio investigations, critique, history and aesthetics while working closely with the Sculpture professor. The student is responsible for all components of their projects whiJe displaying a high level of self-awareness, intrinsic motivation, and professionalism. By permission of instructor.

Prerequisites: ART $310^{\mathrm{D}}$ or ART $410^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## ART 431 - Senior Project Fiber Art

In this capstone course the senior student will engage in an individually proposed project, culminating in a public exhibition demonstrating the student's artistic direction. The student will focus on concepts relevant to individual interests in fiber art, and will determine the content and form based on past study of fiber art production creation, critique, history and aesthetics, and under the supervision of the Fiber Art Professor. The student is responsible for all necessary components of a professional exhibition of their work. By permission of the instructor.

Prerequisites: ART $311^{\mathrm{D}}$ or ART $411^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## ART 432 - Senior Project Ceramics

A capstone course emphasizing the articulation of ideas and presentation. Senior students will engage in an individually proposed project, culminating in a public exhibition with supporting materials that demonstrate the student's artistic expertise. The student will focus on an individual direction in ceramics, the content and form of which will be determined by past ceramics investigations, critique, history and aesthetics while working closely with the ceramics professor. The student is responsible for all components of their projects while displaying a high level of self-awareness, intrinsic motivation, and professionalism. By permission of instructor.

Prerequisites: ART $312^{\mathrm{D}}$ or ART $412^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## ART 433 - Senior Project Graphic Design

A capstone course emphasizing the articulation of ideas and presentation. Senior students will engage in an individually proposed project, culminating in a public exhibition with supporting materials that demonstrate the student's artistic expertise. The student will focus on an individual direction in Graphic Design, the content and form of which will be determined by past Graphic Design professor. The student is responsible for all components of their projects while displaying a high level of self-awareness, intrinsic motivation, and professionalism. By permission of instructor.

Prerequisites: ART $313^{\mathrm{D}}$ or ART $413^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 434-Senior Project Digital Media

A capstone course emphasizing the articulation of ideas and presentation. Senior students will engage in an individually proposed project, culminating in a public exhibition with supporting materials that demonstrate the student's artistic expertise. The student will focus on an individual direction in Digital Media, the content and form of which will be determined by past digital media investigations, critique, history and aesthetics while working closely with the Digital Media professor. The student is responsible for all components of their projects while displaying a high level of self-awareness, intrinsic motivation, and professionalism. By permission of instructor.

Prerequisites: ART $314^{\mathrm{D}}$ or ART $414^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## ART 440 - Art Education Methods

This class meets once a week to discuss field placement experiences and teaching skills and fulfills part of the Pennsylvania Department of Education (PDE) Stage 3 Pre-Student Teaching Practical requirements. Activities include discussions on research, development and preparation of art lesson plans, strategies for success in an inclusive art classroom, and analysis and assessment of teaching experiences.

Credits: 1
Term(s) Typically Offered: Offered Fall Terms Odd
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.
Enrollment is limited to students with a program in Art.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## ART 450 - Internship

Professional experiences geared to student vocational goals. Working in galleries, museums or graphic design studios, working with professional artists in their studios and other job-related experiences.

Corequisite(s): ART 451
Credits: 1-12
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 451 - Art Education Methods Internship

This internship covers some of the Stage 3 Pre-Student Teaching field experiences: 90 hours of documented placement under the supervision and mentorship of certified K - 12 Art Teacher(s). At least one experience during Stage 3 must include students with special needs in inclusive settings. Activities include assisting small or large groups of children, lesson development/preparation, and lesson plans. Observation and evaluation of teaching by the professor will occur near the end of the semester.

Corequisite(s): ART 440
Credits: 2
Term(s) Typically Offered: Offered Fall Terms Odd
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.
Enrollment is limited to students with a program in Art.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## ART 475 - Extended Studio Drawing

This course provides individualized creative work in drawing that focuses on a specific concept, process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## ART 476 - Extended Studio Painting

This course provides individualized creative work in Painting that focuses on a specific concept, process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## ART 477 - Extended Studio Photography

This course provides individualized creative work in Photography that focuses on a specific concept, process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## ART 478 - Extended Studio Printmaking

This course provides individualized creative work in Printmaking that focuses on a specific concept, process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

## Credits: 1

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## ART 479-Extended Studio Metalsmithing

This course provides individualized creative work in Metalsmithing that focuses on a specific concept, process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## ART 480 - Extended Studio Sculpture

This course provides individualized creative work in Sculpture that focuses on a specific concept, process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## ART 481 - Extended Studio Fiber Art

This course provides individualized creative work in Fiber Art that focuses on a specific concept process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## ART 482 - Extended Studio Ceramics

This course provides individualized creative work in Ceramics that focuses on a specific concept, process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## ART 483 - Extended Studio Graphic Design

This course provides individualized creative work in Graphic Design that focuses on a specific concept, process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 484 - Extended Studio Digital Media

This course provides individualized creative work in Digital Media that focuses on a specific concept, process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## ART 490 - Independent Study

Offers the opportunities of advanced creative activity in a single area of concentration (painting, graphics, ceramics, art history, etc.) to be chosen by the student with the consent of the department. Prerequisites: Junior or senior standing, completion of lower level course offerings in chosen area of concentration, acceptance of project proposal by the department and permission of the instructor, departmental chairperson and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ART 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Biology (BIOL)

## BIOL 100 - Introductory Biology Laboratory

This laboratory activity course is designed to introduce the non-biology major to science as a process. Basic biological concepts and principles are the focal points for the laboratory activities. The scientific process is used throughout the hands on exercises to facilitate the learning experience.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
BIOL 101 - General Biology
A principles course in biology, designed for non-biology majors, which emphasizes cellular structure and function, Mendelian and molecular genetics, reproduction, and classic and modern concepts of ecology and evolution.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## BIOL 102 - Human Biology

This non-biology majors course considers the human as a whole organism, with emphasis on the interrelationships of organ systems, the relationship to the environment, and human origins and genetics.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Body and Self, Healthy Body, Mind \& Environment, Transfer Thread Completion Course, Who Do We Think We Are

BIOL 104 - Principles of Biology with Lab
A laboratory and lecture course that emphasizes basic biological principles to prepare students for subsequent sequential courses required of biology majors.

Credits: 4
Term(s) Typically Offered: Offered Every Term
Enrollment limited to students with department of Biology.
BIOL 105 - Environmental Biology
A non-biology majors course which provides an introduction to ecological principles and concepts with an examination of the biological basis of contemporary environmental problems.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Environmental Problems Toolkit, Sustainable International Development, Sustainability, Transfer Thread Completion Course

BIOL 110 - The Human Body: Fundamentals of Structure and Physiology
This one semester lecture course is designed for non-biology majors and provides a basic introduction to the human body and the fundamental anatomy and physiology of each organ system.

Credits: 3
Thematic Thread(s): 21st Century Healthcare, Transfer Thread Completion Course

## BIOL 120 - Plants and Society

Basic structures, functions, and uses of plants. This course, for the nonbiology major, will stress many of the economic and practical aspects of plants. It will also offer historical insights concerning the impact plants have had on world exploration, colonization, etc.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Transfer Thread Completion Course, Transnational Culture

## BIOL 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## BIOL 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with department of Biology.

## BIOL 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with department of Biology.

## BIOL 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with department of Biology.
BIOL 201 - General Botany with Lab
Basic biochemical, morphological, and physiological aspects of plant biology as they relate to evolution. Includes a lab.

Prerequisites: (BIOL $101^{\mathrm{C}}$ and BIOL $100^{\mathrm{C}}$ ) or BIOL $104^{\mathrm{C}}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 4

Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Biology.

## BIOL 207 - Land Plants and Their Environment/Lab

This course for non-biology majors surveys the common plants native to Pennsylvania. Includes a lab.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## BIOL 208 - Introduction to Wildlife Management/Lab

For non-biology majors, this course covers basic ecological principles with emphasis on the taxonomy and life histories of vertebrate animals. Includes a lab.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## BIOL 210 - Medical Microbiology with Lab

The study of pathogenic microorganisms to include taxonomy, structure, biological activities, host defense mechanisms, disease transmission, and disease states. Includes a lab.

Prerequisites: BIOL $101^{\mathrm{D}}$ or BIOL $102^{\mathrm{D}}$ or BIOL $216^{\mathrm{D}}$ or BIOL $110^{\mathrm{D}}$ or BIOL $104^{\text {D }}$ or BIOL $217^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Enrollment is limited to students with a major in Biology, Biology (Pre MEd) (7-12), Biology, Biology-Prof (Pre MEd)(7-12), Health Science - Public Health, Hlth Sci-P Hlth-Pre PT-SRU 3+3, Hlth Sci-P Hlth-Pre PA-SRU 3+2, Cytotechnology, Histotechnology, Medical Technology or Professional.

## BIOL 212 - General Zoology with Lab

The anatomy, physiology, ecology, and economic importance of representative animals with emphasis on the understanding of development and the evolutionary blueprint of the animal kingdom. Includes a lab.
Prerequisites: (BIOL $100^{\mathrm{C}}$ and BIOL $101^{\circ}$ ) or BIOL $104^{\mathrm{C}}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 4
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Biology.

## BIOL 216 - Anatomy and Physiology I with Lab

The first of two lecture and laboratory courses for non-biology majors which surveys the normal structure and function of the human body. It is recommended that 216 be taken prior to 217 . This course includes a lab.

## Credits: 3

Term(s) Typically Offered: Offered Every Term
Enrollment is limited to students with a major in Music Therapy, Biology, Biology (Pre MEd) (7-12), Biology, Biology-Prof (Pre MEd)(7-12), Health Science - Public Health, Hlth Sci-P HIth-Pre PT-SRU 3+3, Therapeutic Recreation Serv, Recreational Therapy, Therapeutic Recreation 3+3 PT, Rec Therapy- Pre PT-SRU 3+3, Rec Therapy-Pre OT-SRU 3+3, Hlth Sci-P Hlth-Pre PA-SRU 3+2, Cytotechnology, Histotechnology, Medical Technology or Professional.

## BIOL 217 - Anatomy and Physiology II with Lab

The second of two lecture and laboratory courses for non-biology majors which surveys the normal structure and function of the human body. It is recommended that 216 be taken prior to 217 . Includes a lab.

Credits: 3
Term(s) Typically Offered: Offered Every Term
Enrollment is limited to students with a major in Music Therapy,
Biology, Biology (Pre MEd) (7-12), Biology, Biology-Prof (Pre MEd)
(7-12), Therapeutic Recreation Serv, Recreational Therapy, Therapeutic Recreation 3+3 PT, Rec Therapy- Pre PT-SRU 3+3, Rec Therapy-Pre OT-
SRU 3+3, Cytotechnology, Histotechnology, Medical Technology or Professional.

## BIOL 250 - Genetics with Lab

An introductory course that covers transmission genetics, molecular genetics, and population genetics, with an emphasis on problem-solving. Examples in both plants and animals (including humans) are considered. Includes a lab.

Prerequisites: (BIOL $100^{C}$ and BIOL $101^{\circ}$ ) or BIOL $104^{C}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 4
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Chemistry or Biology.

## BIOL 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with department of Biology.

## BIOL 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with department of Biology.

## BIOL 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with department of Biology.

## BIOL 300-Social and Ethical Issues in Genetics

Advances in genetics have the potential to do much good, but they may also create difficult social and ethical issues that we are unprepared for. This course seeks to provide students of all majors with the necessary framework for arriving at their own conclusions about the proper role of genetic technology, for themselves, their families, and society at large.

Prerequisites: BIOL $101^{\mathrm{D}}$ or BIOL $102^{\mathrm{D}}$ or BIOL $104^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even
Thematic Thread(s): 21 st Century Healthcare, Transfer Thread
Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## BIOL 301 - Forest Ecology

This course is offered as part of the Pymatuning Laboratory in conjunction with the University of Pittsburgh. For more information, please contact the Biology department, 724-738-2023.

Prerequisites: BIOL $201^{C}$ and (BIOL $100^{C}$ and BIOL $101^{C}$ ) or BIOL $104^{C}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Summer Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 302-Ecology of Amphibians \& Reptiles/Lab

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL $100^{\mathrm{C}}$ and BIOL $101^{\mathrm{C}}$ ) or BIOL $104^{\mathrm{C}}$ and BIOL $212^{\mathrm{C}}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Summer Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 303-Behavioral Ecology/Lab

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL $100^{C}$ and BIOL $101^{\circ}$ ) or BIOL $104^{C}$ and (BIOL $201^{C}$ or BIOL 212 ${ }^{\text {C }}$ )
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Summer Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 305 - Wetlands and Aquatic Plants/Lab

This course deals with the identification and quantification of phytoplankton and vascular hydrophytes, with emphasis placed on the productivity of aquatic plants and their importance as indicator organisms. Includes a lab.

Prerequisites: (BIOL $100^{C}$ and BIOL $101^{C}$ ) or BIOL $104^{C}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Biology, Biology (Pre MEd) (7-12), Environmental Geoscience, Envir Geosci (Pre MEd) (7-12), Biology, Biology-Prof (Pre MEd)(7-12), Environmental Geoscience, Cytotechnology, Environmental Science, Environmental Chemistry, Geology, Histotechnology, Medical Technology or Professional.

## BIOL 306 - Freshwater Biomonitoring/Lab

This course covers the identification and quantification of fish, zooplankton, and benthos organisms, with emphasis placed on the productivity of aquatic animals and their importance as indicator organisms. Includes a lab.
Prerequisites: (BIOL $100^{C}$ and BIOL $101^{C}$ ) or BIOL $104^{C}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## BIOL 307 - Vertebrate Ecology/Lab

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL $100^{C}$ and BIOL $101^{\circ}$ ) or BIOL $104^{C}$ and BIOL $212^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 308 - Aquatic Ecosystem Management / Lab

This field course is offered by the University of Pittsburgh to Slippery
Rock University students who enroll in the summer program at the
Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.
Prerequisites: (BIOL $100^{\circ}$ and BIOL $101^{\text {C }}$ ) or BIOL $104^{\text {C }}$ and (BIOL $201^{\text {C }}$ or BIOL 212 ${ }^{\text {C }}$ )
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 310 - Plant Systematics with Lab

Evolutionary trends in floristic morphology are used to examine family relationships among the major groups of vascular plants. Includes a lab.

Prerequisites: (BIOL $100^{\mathrm{C}}$ and BIOL $101^{\mathrm{C}}$ ) or BIOL $104^{\mathrm{C}}$ and BIOL $201^{\mathrm{C}}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.
BIOL 311 - Entomology/Lab
Insects, including their taxonomy, structure, function, ecology, and economic importance.

Prerequisites: (BIOL $100^{C}$ and BIOL $101^{\circ}$ ) or BIOL $104^{C}$ and BIOL $212^{C}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 313 - Herpetology/Lab

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the
Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL $100^{C}$ and BIOL $101^{\circ}$ ) or BIOL $104^{C}$ and BIOL $212^{C}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 314 - Medical Parasitology with Lab

A lecture and laboratory course which emphasizes the parasites of medical importance.

Prerequisites: (BIOL $100^{\circ}$ and BIOL $101^{\circ}$ ) or BIOL $104^{C}$ and (BIOL $210^{C}$ or BIOL 212 ${ }^{\text {C }}$ )
${ }^{\mathrm{C}}$ Requires minimum grade of C .

## Credits: 1

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 315 - Medical Mycology/Lab

A lecture and laboratory course which emphasizes the fungi of medical importance.

Prerequisites: (BIOL $100^{\mathrm{C}}$ and BIOL $101^{\circ}$ ) or BIOL $104^{\mathrm{C}}$ and (BIOL $210^{\mathrm{C}}$ or BIOL $201{ }^{\text {C }}$ )
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 1

Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 316-Medical Immunology with Lab

A lecture and laboratory course which emphasized immunological principles of medical importance.

Prerequisites: (BIOL $100^{C}$ and BIOL $101^{C}$ ) or BIOL $104^{C}$ and (BIOL $210^{C}$ or BIOL $250{ }^{\text {C }}$ )
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 317 - Ecology and Fungi

This field course is offered by the University of Pittsburgh to Slippery
Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Credits: 3
Term(s) Typically Offered: Offered Summer Terms Even

## BIOL 319 - Medical Virology with a Lab

A lecture and laboratory course which discusses viruses of medical importance. Lecture content will focus on the life cycle, pathology and treatment of clinically relevant viruses. Laboratory content may teach students about topics such as, but not limited to, calculating viral load, detecting lysogens, detecting viruses by ELISA and immunity in lysogens.

Prerequisites: (BIOL $104^{\mathrm{C}}$ or (BIOL $100^{\mathrm{C}}$ and BIOL $101^{\circ}$ ) ) and (BIOL $210^{\mathrm{C}}$ or BIOL $250^{\circ}$ )
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 1
Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2 or Sophomore 2.
Enrollment limited to students with department of Biology.
BIOL 320 - Ornithology/Lab
Anatomy, physiology, taxonomy, ecology, and behavior of birds. Two weekend field trips are required. Includes a lab.

Prerequisites: (BIOL $100^{\mathrm{C}}$ and BIOL $101^{\circ}$ ) or BIOL $104^{\mathrm{C}}$ and BIOL $212^{\mathrm{C}}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Summer Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 321 - Wildlife Management/Lab

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL $100^{C}$ and BIOL $101^{\circ}$ ) or BIOL $104^{C}$ and BIOL $212^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Summer Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 322 - Conservation Biology/Lab

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL $100^{\mathrm{C}}$ and BIOL $101^{\mathrm{C}}$ ) or BIOL $104^{\mathrm{C}}$ and (BIOL $201^{\mathrm{C}}$ or BIOL 212 ${ }^{\text {C }}$ )
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Summer Terms
Thematic Thread(s): Sustainability, Transfer Thread Completion Course Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 323 - Stream Ecology/Lab

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL $100^{C}$ and BIOL $101^{\circ}$ ) or BIOL $104^{C}$ and BIOL $212^{C}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.
BIOL 325 - Biometry with Lab
An introduction to statistical techniques and experimental design as applied to biological problems. Descriptive methods, tests of significance, linear regression, correlation, analysis of variance and covariance, and non-parametric techniques are included. Use of PC and/or mainframe computer is required. Includes a lab.

Prerequisites: (BIOL $100^{\mathrm{C}}$ and BIOL $101^{\circ}$ ) or BIOL $104^{\mathrm{C}}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Geography - Envir Studies Educ, Biology, Biology (Pre MEd) (7-12), Environmental
Geoscience, Envir Geosci (Pre MEd) (7-12), Biology, Biology-Prof (Pre
MEd)(7-12), Environmental Geoscience, Biology-Logan Chiropractic 3+3,
Environmental Science, Geology or Professional.

## BIOL 326 - Field Methods in Biogeography/Lab

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL $100^{\mathrm{C}}$ and BIOL $101^{\mathrm{C}}$ ) or BIOL $104^{\mathrm{C}}$ and (BIOL $201^{\mathrm{C}}$ or BIOL 212 ${ }^{\text {C }}$ )
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Summer Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 327 - Limnology/Lab

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL $100^{C}$ and BIOL $101^{C}$ ) or BIOL $104^{C}$ and (BIOL $201^{C}$ or BIOL 212 ${ }^{\text {C }}$ )
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Summer Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 330 - Microbiology/Lab

A consideration of the structure, metabolism, growth, and genetics of microorganisms with emphasis placed on the bacteria and viruses. Includes a lab.

Prerequisites: BIOL $250^{\text {C }}$ and (CHEM $200^{\text {D }}$ or CHEM $201^{\text {D }}$ ) and
((BIOL $100^{\text {C }}$ and BIOL $101^{\text {C }}$ ) or BIOL $104^{\text {C }}$ )
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Chemistry or Biology.

## BIOL 331 - Mammology/Lab

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: BIOL $212^{\mathrm{C}}$ and (BIOL $100^{\mathrm{C}}$ and BIOL $101^{\mathrm{C}}$ ) or BIOL $104^{\mathrm{C}}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 335 - Cell Biology/Lab

Lecture and laboratory investigations related to cellular structure and function. Topics include consideration of extracellular matrix, cell surface, internalization, intracellular signaling and routing, cell-cell communication, renewal, and development. Includes a lab.

Prerequisites: BIOL $250^{\mathrm{C}}$ and (CHEM $200^{\mathrm{D}}$ or CHEM $201^{\mathrm{D}}$ ) and ((BIOL $100^{\mathrm{D}}$ and BIOL $101^{\mathrm{D}}$ ) or BIOL $104^{\mathrm{D}}$ )
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Chemistry or Biology.

## BIOL 340 - Vertebrate Anatomy with Lab

A comparative study of the adult structure of the organs and systems of representative vertebrates. Includes a lab.

Prerequisites: (BIOL $100^{C}$ and BIOL $101^{\circ}$ ) or BIOL $104^{C}$ and BIOL $212^{C}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.
BIOL 343 - Embryology with Lab
Developmental processes of vertebrate embryology. A comparative study of gaetogenesis, fertilization, cleavage, gastrulation, organogenesis, and embronic adaptations. Includes a lab.

Prerequisites: ((BIOL $100^{\mathrm{C}}$ and BIOL $\left.101^{\mathrm{C}}\right)$ or BIOL $\left.104^{\mathrm{C}}\right)$ and BIOL $212^{\mathrm{C}}$ and BIOL $340^{\circ}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.
BIOL 345 - Introduction to Biological Electron Microscopy
An introduction to the theoretical basis and practice of routine biological electron microscopy. Experiences in the preparation of specimens for transmission and scanning electron microscopy will be presented. The course presentation will involve a one-week workshop and two hours per week during the semester.

Prerequisites: (BIOL $100^{C}$ and BIOL $101^{\circ}$ ) or BIOL $104^{C}$ and BIOL $201^{C}$ and BIOL $212^{\text {C }}$ and BIOL $250^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 2
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 350 - Evolution

Stresses evolution as a process. Evidence of early theories, population genetics and ecology, modern synthetic theory, speciation, phylogeny, and the major features characteristic of organic evolution are included.

Prerequisites: (BIOL $100^{\circ}$ and BIOL $101^{\circ}$ ) or BIOL $104^{C}$ and BIOL $201^{C}$ and BIOL $212^{\text {C }}$ and BIOL $250^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 356 - Field Ecology / Lab

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL $100^{\mathrm{C}}$ and BIOL $101^{\circ}$ ) or BIOL $104^{\mathrm{C}}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.
BIOL 357 - Environmental Microbiology with Lab
The interactions of microorganisms with their environment and with other organisms in nutrient cycles and environmental bioremediation, and the effects of microbial activity on plants and animals. Includes a lab.
Prerequisites: (BIOL $100^{\mathrm{C}}$ and BIOL $101^{\circ}$ ) or BIOL $104^{\mathrm{C}}$ and (CHEM $202^{\mathrm{C}}$ or CHEM $200^{\circ}$ )
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 4
Term(s) Typically Offered: Offered Fall Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Biology, Biology (Pre MEd) (7-12), Environmental Geoscience, Envir Geosci (Pre MEd) (7-12), Biology, Biology-Prof (Pre MEd)(7-12), Environmental Geoscience, Cytotechnology, Environmental Science, Geology, Histotechnology, Medical Technology or Professional.

## BIOL 360 - Field Botany

A field course covering the flora of western Pennsylvania. Students will be expected to identify in the field approximately 225 vascular plants.

Prerequisites: (BIOL $100^{\circ}$ and BIOL $101^{\circ}$ ) or BIOL $104^{\text {C }}$ and BIOL $201^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 361 - Flora of Western Pennsylvania

A field class with a lecture component. The primary focus of the class is to enhance student understanding of the taxonomy and ecology of species that compose our flora in western Pennsylvania. Organisms that will be covered include: flowering plants (woody angiosperms and common wildflowers), conifers, ferns \& fern allies, bryophytes, lichens, and some representative fungi and macroalgae in our flora. Terminology associated with general plant/fungal/algal structure as well as life cycles of these aforementioned organisms will be described. Students will be introduced to both terrestrial and aquatic ecosystems and the habitats that select species require.
Prerequisites: (BIOL $100^{\text {C }}$ and BIOL $101^{\circ}$ ) or BIOL $104^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## BIOL 370 - Molecular Biology with Lab

A lecture and laboratory study of the structure and function of biological macromolecules and of the functions of living cells at the molecular level. Topics include macromolecular structures, gene expression and regulation, and manipulations of genetic material. Includes a lab.

Prerequisites: ((BIOL $100^{\mathrm{C}}$ and BIOL $101^{\circ}$ ) or BIOL $\left.104^{\mathrm{C}}\right)$ and BIOL $250^{\mathrm{C}}$ and (CHEM 200 ${ }^{\text {D }}$ or CHEM $2011^{\text {D }}$ )
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Chemistry or Biology.

## BIOL 371 - Vertebrate Field Zoology

Taxonomy, life histories, and ecological relationships of representative vertebrates are stressed. Several field trips are required.

Prerequisites: (BIOL $100^{\circ}$ and BIOL $101^{\circ}$ ) or BIOL $104^{C}$ and BIOL $212^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 373 - Ichthyology/Lab

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL $100^{C}$ and BIOL $101^{\circ}$ ) or BIOL $104^{C}$ and BIOL $212^{C}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 375 - Ecology of Fish / Lab

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.
Prerequisites: (BIOL $100^{C}$ and BIOL $101^{\circ}$ ) or BIOL $104^{C}$ and BIOL $212^{C}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 400 - Disease Ecology

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Credits: 3
Term(s) Typically Offered: Offered Summer Terms

## BIOL 401 - Ecology with Lab

Emphasis is placed on the structure, composition, and dynamics of ecosystems. Lab work primarily consists of field studies.
Prerequisites: (BIOL $100^{\mathrm{C}}$ and BIOL $101^{\circ}$ ) or BIOL $104^{\mathrm{C}}$ and CHEM $108^{\mathrm{C}}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Summer Terms
Thematic Thread(s): Sustainability, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment is limited to students with a major in Biology, Biology (Pre MEd) (7-12), Environmental Geoscience, Envir Geosci (Pre MEd) (7-12), Biology, Biology-Prof (Pre MEd)(7-12), Environmental Geoscience, Cytotechnology, Environmental Science, Environmental Chemistry, Geology, Histotechnology, Medical Technology or Professional.

## BIOL 402 - Biogeography/Lab

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL $100^{\mathrm{C}}$ and BIOL $101^{\mathrm{C}}$ ) or BIOL $104^{\mathrm{C}}$ and BIOL $201^{\mathrm{C}}$ and BIOL $212^{C}$ and BIOL $250^{C}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
BIOL 405 - Animal Physiological Ecology with Lab
The adaptations of animals to deal with specialized environmental situations are studied at levels ranging from biochemical to organismal. Includes a lab.

Prerequisites: $\left(\mathrm{BIOL} 100^{\mathrm{C}}\right.$ and BIOL $101^{\mathrm{C}}$ ) or BIOL $104^{\mathrm{C}}$ and BIOL $212^{\mathrm{C}}$ and CHEM $107^{\text {D }}$ and CHEM $108^{\text {D }}$
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 4

Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 410 - Animal Physiology with Lab

Basic animal physiological processes, including a synthesis that begins at the molecular level and moves to the more complex cellular and organismal levels. Includes a lab.

Prerequisites: (BIOL $100^{C}$ and BIOL $101^{C}$ ) or BIOL $104^{C}$ and BIOL $212^{C}$ and CHEM 201 (may be taken concurrently) ${ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 411 - Population Biology/Lab

This field course is offered by the University of Pittsburgh to Slippery
Rock University students who enroll in the summer program at the
Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.
Prerequisite: BIOL $250^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 412 - Population Biology

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: $\left(\mathrm{BIOL} 100^{\mathrm{C}}\right.$ and BIOL $101^{\mathrm{C}}$ ) or BIOL $104^{\mathrm{C}}$ and BIOL $250^{\mathrm{C}}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed

## BIOL 430 - Pathogenic Microbiology with Lab

This course examines the role of bacteria in disease processes with emphasis on host-pathogen interactions and mechanisms by which pathogenic bacteria cause disease. General topics to be discussed include pathogenesis, epidemiology, and characteristics of the major pathogenic bacteria, which allow them to produce a disease state in the host. Includes a lab.

Prerequisites: (BIOL $100^{C}$ and BIOL $101^{\circ}$ ) or BIOL $104^{\text {C }}$ and BIOL $250^{C}$ and BIOL $330^{\mathrm{D}}$
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 450 - Biology Internship

This course will permit the biology major to obtain credit for on-the-job experience in such areas as hospitals, greenhouses, nurseries, sewage plants, fish, and game commissions, park service, plant breeders, and seed producers, veterinary medicine, etc.

Prerequisites: (BIOL $100^{\mathrm{C}}$ and BIOL $101^{\circ}$ ) or BIOL $104^{\mathrm{C}}$ and BIOL $201^{\mathrm{C}}$ and BIOL $212^{\mathrm{C}}$ and BIOL $250^{\mathrm{C}}$ and CHEM $107^{\mathrm{D}}$ and CHEM $108^{\mathrm{D}}$ and CHEM $111^{\mathrm{D}}$ and CHEM $112^{\mathrm{D}}$ and CHEM $201^{\mathrm{D}}$ and CHEM $211^{\mathrm{D}}$ and CHEM $202{ }^{\text {D }}$ and CHEM $212^{\text {D }}$
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-6
Term(s) Typically Offered: Offered Every Term
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.
BIOL 451 - Plant Physiology/Lab
A lecture-laboratory study of the functional relationships of the plant body including such topics as nutrition, water relations, photosynthesis, photo-periodism, hormones, and growth processes.

Prerequisites: (BIOL $100^{\mathrm{C}}$ and BIOL $101^{\circ}$ ) or BIOL $104^{\mathrm{C}}$ and BIOL $201^{\mathrm{C}}$ and CHEM $201^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 465 - Plant Anatomy with Lab

A macroscoic and microscopic laboratory study of vascular plants. Tissue and organ structure and development in a wide variety of plant groups are emphasized. Includes a lab.

Prerequisites: (BIOL $100^{C}$ and BIOL $101^{\circ}$ ) or BIOL $104^{C}$ and BIOL $201^{C}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 470 - Histology with Lab

Microscopic structure and arrangement of tissues in multicellular organisms. Prepared microscopic slides of representative animal organs are studied. Includes a lab.

Prerequisites: (BIOL $100^{C}$ and BIOL $101^{\circ}$ ) or BIOL $104^{C}$ and BIOL $212^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.
BIOL 490 - Independent Study
Independent research under the guidance of a faculty member.
Prerequisite: Permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. (repeatable up to 6 credits) Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 492 - Biology Seminar

For junior and senior biology majors. Each semester a different area of current research interest is chosen for study.

Prerequisites: (BIOL $100^{C}$ and BIOL $101^{\circ}$ ) or BIOL $104^{C}$ and BIOL $201^{C}$ and BIOL $212^{\text {C }}$ and BIOL $250^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## BIOL 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisites: (BIOL $100^{\circ}$ and BIOL $101^{\circ}$ ) or BIOL $104^{C}$ and BIOL $201^{C}$ and BIOL $212^{\text {C }}$ and BIOL $250^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Biology.

## Business Administration (BUSA)

## BUSA 130 - Dynamics of Global Commerce

Exploration of the challenges of business operations in the global market place. Topics discussed include the business, economic, social and political aspects of the global market place. this may include, but not be limited to, topics such as e-commerce, entrepreneurship, sustainability and business ethics.

Credits: 3
Term(s) Typically Offered: Offered Summer \& Winter Terms
Thematic Thread(s): International Business, Transfer Thread Completion Course

## BUSA 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## BUSA 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
BUSA 195 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## BUSA 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## BUSA 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## BUSA 295-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## BUSA 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## BUSA 303 - Issues in Global Business

This course will focus on fundamental issues in the modern globalization of business. The topics covered will include the cultural environments in which business work, politics and law in global business, economic integration, global trade and investment, global finance, global operations and managing global businesses. A special emphasis will be placed on the challenges and opportunities presented to global businesses by the social, political and economic diversity encountered in the global marketplace.

Prerequisites: ECON $201^{\text {D }}$ and ECON 202 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): Global Citizenship, International Business, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## BUSA 315 - Economics of Sustainable Development

Economic causes and effects of pollution are discussed along with the issue of sustainable economic development. government policy with respect to the environment and renewable energy will be surveyed. The framework connection between sustainability and the core functions of business for profit in the global economy will be presented.

Prerequisite: ECON $202{ }^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Thematic Thread(s): Sustainable International Development,
Sustainability, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## BUSA 340-Legal Environment of Business

A study of the various processes available to resolve business disputes and an exploration of complex legal relationships that affect business, including contracts, business formations, employment, and torts and consumer law.

## Credits: 3

Term(s) Typically Offered: Offered Every Term
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## BUSA 370 - Sustainable Entrepreneurship and Innovation

This integrative course introduces students to issues related to sustainable new venture creation. It includes topics such as the importance of innovation and creativity in opportunity recognition and the design of sustainable business models, industry/market analysis, resource acquisition and disposition, assessing a venture's financial strength, and ethical legal issues. Students will learn the entrepreneurial process while acknowledging multiple stakeholders and addressing social, economic and environmental concerns.

Prerequisites: FIN $320^{\text {D }}$ and MGMT $351^{\mathrm{D}}$ and MRKT $330^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Winter Terms
Thematic Thread(s): Innovation, Entrepreneurship, and Positive Change,
Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## BUSA 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## BUSA 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## BUSA 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## BUSA 451 - Employment Law

This course covers the law as it applies to all aspects of the employer - employee relation, including union activity, discrimination, selection, testing and employment contracts.

Prerequisites: MGMT $351^{\text {D }}$ or MGMT $250^{\text {D }}$ or MGMT $251^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## BUSA 459 - Sustainable Business Consulting

In this course student teams engage in field-based consulting to analyze actual problem situations involving sustainability for regional businesses.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Innovation, Entrepreneurship, and Positive Change, Transfer Thread Completion Course
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

BUSA 490 - Independent Study
Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## BUSA 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## BUSA 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Chemistry (CHEM)

CHEM 104 - Introduction Chemistry I
This course is the first course in a two-semester sequence for nonscience majors which introduces the fundamental principles of Chemistry. Although this course serves as a prerequisite for the next course in the sequence (CHEM 106), it is also designed as a stand-alone course. This allows students to take either this course alone or the twosemester sequence and still obtain a basic understanding of chemical principles. The principles of chemistry are developed and illustrated through selective application. Note: This course is not a substitution for CHEM 107 and students cannot receive credit for CHEM 104 and CHEM 107. Also note that this course does not serve as a prerequisite for CHEM 108.

Credits: 3
Term(s) Typically Offered: Offered Every Term

## CHEM 106- Introductory Chemistry II

This is the second course in a two-semester sequence of an introductory chemistry course for non-science majors. The curse will build on the principles presented in CHEM 104 which is a prerequisite for this course and will focus on the areas of organic and biochemistry. As with CHEM 104, this course will concentrate on the basic principles of chemistry and illustrate them through selected applications.

Prerequisites: CHEM $104^{\text {C }}$ or CHEM $107^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Winter, Spring\&Summer
CHEM 107-General Chemistry I
Topics include nomenclature, stoichiometry, kinetic-molecular theory, gas laws, electronic structure, periodicity, and chemical bonding. Stoichiometry is emphasized.

Prerequisites: (ACSD $110^{\mathrm{D}}$ or ESAP $110^{\mathrm{D}}$ ) or minimum score of 18 in 'Math ACT Exc 2 - EX110-PL MATH' or minimum score of 421 in 'Math SAT Exc 2 - EX110-PL MATH' or MATH $199^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Summer Terms
CHEM 108-General Chemistry II
Topics include intermolecular forces, solutions, colloids, chemical kinetics, thermodynamics, equilibria (acid-base, solubility, and complex ion), electro-chemistry, and the transition elements.

Prerequisite: CHEM $107^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring \& Summer Terms
CHEM 110-Contemporary Chemistry Laboratory
Laboratory to accompany Chemistry 104 providing basic chemistry and environmentally related experiences. One two-hour laboratory per week.
Prerequisite: CHEM 104 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offerings Vary
CHEM 111 - General Chemistry I Lab
A laboratory to accompany CHEM 107. Laboratory experiments are designed to develop basic laboratory skills and illustrate concepts.

Prerequisite: CHEM 107 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Fall \& Summer Terms
CHEM 112-General Chemistry II Lab
A laboratory to accompany CHEM 108. Laboratory experiments illustrate the concepts of General Chemistry II.

Prerequisites: CHEM $107^{\text {C }}$ and CHEM $111^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Term(s) Typically Offered: Offered Spring \& Summer Terms

## CHEM 113 - Clinical Chemistry Laboratory

Laboratory to accompany CHEM 103 providing basic chemistry and health-related experiences. One two-hour laboratory per week.

Prerequisite: CHEM 104 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offerings Vary
CHEM 139 - University Seminar
University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## CHEM 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CHEM 195-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
CHEM 198-Selected Topics
A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
CHEM 200 - Fundamentals of Organic Chemistry
A one semester introductory course that covers the most commonly encountered properties of the major families of organic compounds. The course is designed for students pursuing a B.S. in environmental science. Not equivalent to CHEM 201.

Prerequisites: CHEM $108^{\text {C }}$ and CHEM $112^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Summer \& Winter Terms

## CHEM 201-Organic Chemistry I

Modern theories relating molecular structure to chemical reactivity are stressed. Elucidation of molecular structure by infrared, ultraviolet, nuclear magnetic resonance and mass spectroscopy is also covered.
Prerequisites: CHEM $108^{\text {C }}$ and CHEM $112^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Summer Terms
CHEM 202- Organic Chemistry II
Modern theories relating molecular structure to chemical reactivity are stressed. Elucidation of molecular structure by infrared, ultraviolet, nuclear magnetic resonance and mass spectroscopy is also covered.
Prerequisite: CHEM $201^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Spring \& Summer Terms

## CHEM 204-Introduction to Forensic Science

Forensic science is the application of science to the examination of physical evidence obtained in the investigation of a crime. The Introduction to Forensic Science course uses high impact practices to provide an immersed research experience for students in the different steps of the scientific method, while learning about the multidisciplinary and interdisciplinary nature of Forensic Science.

Credits: 3
Thematic Thread(s): Comparative Perspectives of Justice \& Society, Demystifying Crime \& Justice, Transfer Thread Completion Course
CHEM 211-Organic Chemistry Laboratory I
A laboratory course in which students employ the synthetic techniques and analytical procedures of organic chemistry.
Prerequisites: CHEM $112^{\text {C }}$ and CHEM $201^{* C}$ and CHEM $108^{\text {C (may be }}$ taken concurrently).
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 1
Term(s) Typically Offered: Offered Fall \& Summer Terms
CHEM 212- Organic Chemistry Laboratory II
A laboratory course in which students employ the synthetic techniques and analytical procedures of organic chemistry.

Prerequisites: CHEM $201^{\text {C }}$ and CHEM $211^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 1
Term(s) Typically Offered: Offered Spring \& Summer Terms

## CHEM 240-Industrial Hygiene

Requirements to preserve worker health and safety will be surveyed.
Prerequisites: CHEM $108^{\mathrm{D}}$ and (CHEM $200^{\mathrm{D}}$ or CHEM 201 ${ }^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offerings Vary

## CHEM 243-Introduction to Research in Chemistry

This is a one semester seminar covering faculty research within the chemistry department, use of library resources, internship opportunities available to undergraduate students, and basic safety training. This course is intended primarily for first-semester sophomore chemistry majors but is open to students from other majors in CHES who might be interested in pursuing undergraduate research in chemistry.

Credits: 1
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with a semester level of Junior 1, Junior 2, Sophomore 1 or Sophomore 2.
Enrollment limited to students in the Coll of Health, Engineer \& Sci college.

## CHEM 270 - Industrial Chemistry

A study of industries with emphasis on economic, technical, and possible ecological factors affecting process design. Includes on-site lectures and discussions of various industries in the area.

Prerequisites: CHEM $108^{\mathrm{D}}$ and CHEM $112^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
CHEM 290-Experimental
A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CHEM 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## CHEM 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
CHEM 301 - Physical Chemistry 1
Thermodynamics and chemical kinetics. Cross listed as PHYS301.
Prerequisites: CHEM $108^{\text {C }}$ and CHEM $112^{\text {C }}$ and (PHYS $212^{\text {C }}$ or
PHYS $213^{\text {C }}$ ) and MATH $230^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## CHEM 302 - Physical Chemistry II

Quantum mechanics and spectroscopy.
Prerequisites: MATH $230^{\text {C }}$ and CHEM $108^{C}$ and CHEM $112^{\text {C }}$ and
PHYS $211^{\mathrm{C}}$ and (PHYS $212^{\mathrm{C}}$ or PHYS 213 ${ }^{\mathrm{C}}$ )
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 321 - Physical Chemistry Laboratory I

Principles from Thermodynamic principles will be employed in the laboratory for determining and relating physical properties such as viscosity, surface tension, boiling and freezing points to the identity, and composition of chemical substances.

Prerequisites: CHEM 301 (may be taken concurrently) ${ }^{\text {D }}$ or PHYS 301 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Fall Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 322 - Physical Chemistry Laboratory II

Applied principles from Physical Chemistry II lecture will be used for interpreting results from experiments involving kinetics, equilibria, and spectrophotometric data.

Prerequisite: CHEM 302 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 335-Biochemistry I

The study of structures and physical properties of biological molecules.
Prerequisites: BIOL $104^{\text {C }}$ and CHEM $202{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 336-Biochemistry Laboratory I

A laboratory course in which the student uses techniques employed in biochemical investigations.

Prerequisites: CHEM 335 (may be taken concurrently) ${ }^{\text {C }}$ and CHEM $212^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

CHEM 337-Biochemistry II
Investigates the basic theme of intermediary metabolism. A background for this study is gained through study of the chemistry of cellular constituents.

Prerequisites: CHEM $335^{\text {C }}$ and CHEM $336{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 338-Biochemistry Laboratory II

This is a one-credit course in biochemical techniques used in the investigation, isolation and purification of biomolecules. The student will get an exposure to and an appreciation for problem solving utilizing a research-oriented approach.

Prerequisites: CHEM $336^{\text {C }}$ and CHEM $337^{*}$ ( (may be taken concurrently).
${ }^{\mathrm{C}}$ Requires minimum grade of C .

## Credits: 1

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 340-Air Quality Assessment

A study of the quality of the air environment. Air quality assessment and potential problems will be examined both in lecture discussions and in laboratory or field situations. (Includes ambient air testing.) Three hours of lecture and three hours of laboratory per week.

Prerequisites: CHEM $200^{\text {C }}$ or CHEM $201{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 4
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 350-Analytical Chemistry

Topics include gravimetric and volumetric analysis of chemical systems. Special emphasis is given to titrimetric methods based on acid-base, complexation, and oxidation-reduction reactions.
Prerequisites: CHEM $108^{\text {C }}$ and CHEM $112^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 351-Analytical Chemistry Lab

Students develop practical skills employed in the quantitative analysis of chemical systems.

Prerequisites: CHEM 350 (may be taken concurrently) ${ }^{\text {C }}$ and CHEM $108^{\text {C }}$ and CHEM $112^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 370-Water Quality Assessment

Water quality assessment and water quality problems will be examined both in lecture discussions and in laboratory or field situations. Three hours of lecture and three hours of laboratory per week.

Prerequisites: CHEM $200^{\text {C }}$ or CHEM $201{ }^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 4
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 390-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 395-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 415 - Forensic Analysis

The application of analytical chemistry including instrumental methods to the investigation and interpretation of crime scene evidence.

Prerequisites: CHEM $350^{\text {C }}$ and CHEM $351^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 416 - Forensic Analysis Lab

The application of instrumental methods of analysis to the interpretation of crime scene evidence.

Prerequisites: CHEM $350^{\text {C }}$ and CHEM $351^{\text {C }}$ and CHEM $415^{*}$ (may be taken concurrently).
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 425 - Instrumental Analysis

A lecture course to introduce the student to the theory, advantages, disadvantages, limitations, and power of contemporary chemical instrumentation, including computational methods.

Prerequisites: CHEM $350^{\text {C }}$ and MATH $225^{\text {C }}$ and PHYS $211^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 426 - Instrumental Analysis Laboratory

A three hour per week laboratory accompanying CHEM 425.
Instrumentation and computing technology will be applied to quantitative problems of chemistry.

Prerequisite: CHEM 425 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## CHEM 430 - Industrial Pollution Control Engineering

Economic and technical problems will be discussed as related to the abatement of harmful discharges from industrial sources. Systems analysis will be employed in the examination of engineering solutions in the physical or chemical treatment of discharge. Three hours of lecture per week or a field trip.

Prerequisites: CHEM $108^{\text {D }}$ and CHEM $112^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 442 - Inorganic Chemistry

A lecture course covering atomic structure, bonding, and properties of inorganic compounds. Coordination chemistry and other topics of current research interest are covered. Offered in alternate years.

Prerequisite: CHEM $202{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 450-Chemistry Internship

Supervised placement and research in selected public and private agencies. (Credits earned will be counted as free electives and will not be counted toward the chemistry major.)

Credits: 1-12
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 452 - Physical Inorganic Chemistry Laboratory

A laboratory course illustrating techniques of synthesis and characterization of inorganic compounds using a variety of spectroscopic and magnetic measurements, and using computational chemistry methods to investigate the electronic structure of compounds.

Prerequisites: CHEM $212^{\text {C }}$ and CHEM $442^{* C}$ (may be taken concurrently).
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 1
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 460 - Materials Chemistry

A one semester introductory course that covers the synthesis, analysis, and properties of polymers and solid state materials. Applications to industrial and practical application will be discussed.

Prerequisite: CHEM $202{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 475-Advanced Organic Synthesis

A one semester course that includes an advanced organic chemistry synthesis laboratory. The lecture part covers modern synthetically useful reactions and their applications. The intensive laboratory offers the students an introduction to organic synthesis research, including the use of modern reagents and instruments. Students will become acquainted with techniques of preparation, purification and spectroscopic identifications of organic compounds.

Prerequisites: CHEM $202{ }^{\text {C }}$ and CHEM $212^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 4
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 490 - Independent Study

Independent Study courses offer a student the opportunity to carry out original, chemical research in a Chemistry Department, employeing all facilities available through the department. Students must properly write and submit an ACS-style report to their faculty advisor or department chair for evaluation.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 491-Chemistry Seminar

For junior chemistry majors. On-line searches of the chemical literature lead to oral presentations and written reports in a selected area of research.

Credits: 1
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

CHEM 496 - Research
Offers a student the opportunity to carry out chemical research in the laboratory, employing all departmental facilities, and the experience of writing a thesis under the direction of a faculty mentor.

Credits: 1-3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHEM 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Chinese (CHIN)

## CHIN 101 - Chinese Language and Culture I

This course is the first in a three course series which will provide an introduction to the Mandarin language.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): Becoming America, Being American, Global
Citizenship, Food, Wellness \& Environment Across Cultures, International
Business, Transfer Thread Completion Course, Transnational Culture

## CHIN 102 - Chinese Language and Culture II

This course is the second in a three course series which will provide an introduction to the Mandarin language.
Prerequisite: CHIN $101^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): Becoming America, Being American, Global Citizenship, Food, Wellness \& Environment Across Cultures, International Business, Transfer Thread Completion Course, Transnational Culture

## CHIN 103 - Chinese Language and Culture III

This course is the third in a three course series which will provide an introduction to the Mandarin language.

Prerequisite: CHIN $102^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): Becoming America, Being American, Global
Citizenship, Food, Wellness \& Environment Across Cultures, International Business, Transfer Thread Completion Course, Transnational Culture

## CHIN 139-University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

## CHIN 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CHIN 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## CHIN 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CHIN 202 - Intermediate Chinese I

Comprehensive review of the Mandarin language with emphasis on developing the students" abilities for proficient oral and written accomplishments.

Prerequisite: CHIN $103^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed

## CHIN 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CHIN 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## CHIN 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CHIN 306 - Survey of Chinese Civilization and Culture

A study of the important aspects of China's culture, including its geography, history, social and political values, arts, sciences, literature, religion, and ideology. Course is taught in English and open to all interested persons.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHIN 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

CHIN 395 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHIN 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHIN 490 - Independent Study

Students have an opportunity to study selected areas in greater concentration. The nature of the topic selected and its treatment are determined in consultation with the instructor. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHIN 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CHIN 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Civil Engineering (CIVL)

## CIVL 139-University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## CIVL 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CIVL 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## Credits: 1-6

Term(s) Typically Offered: Offered as Needed

## CIVL 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CIVL 210 - Elementary Survey

Introductory course in surveying methods and theory. Topics will include surveying, and route surveying.

Prerequisite: MATH $225^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms

## CIVL 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CIVL 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## CIVL 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CIVL 310 - Structural Engineering

Introduction to the elastic behavior of structural components. Analysis of statically determinate systems. Deflection calculations by virtual work and elastic load methods. Analysis of simple statically indeterminate structures. Influence lines. Interaction of structural components. Typical structural engineering loads.

Prerequisite: ENGR $230^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 4

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 320 - Transportation Engineering

Introduction to basic concepts in transportation engineering including: planning, design, and operations. Introduces the challenges and issues in modeling transportation problems. Studies of various concepts related to the design of highway facilities, level of service, and demand for transportation services. Concepts related to signal optimization, policy implications and the basics of transportation planning.

Prerequisite: MATH $230^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 330 - Environmental Engineering

A course in environmental engineering fundamentals that applies biological, chemical, and mathematical principles to solve environmental engineering problems using the mass balance approach.
Prerequisites: MATH $230^{\mathrm{D}}$ and BIOL $101^{\mathrm{D}}$ and CHEM $107^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 4
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 340-Geotechnical Engineering

Soil properties, identification and classification of earth material; subsurface exploration; soil strength, stresses, settlement, substructure design; computer applications.

Prerequisite: ENGR $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 350 - Water Resources Engineering

This course is designed to review the fundamentals and practices of water resources engineering with a focus on engineering applications of hydraulics and hydrology. The concepts of fluid mechanics (hydrostatics, conservation laws) will be applied to analyze flow phenomena in demonstrations and field trips.

Prerequisite: ENGR $301{ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 410 - Structural Steel Design

This course covers the analysis and design of structural steel members for tensile, compressive, flexural and combined loading.

Prerequisite: CIVL $310^{D}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 411 - Reinforced Concrete Design

This course covers strength design concepts, beams, columns, slabs, retaining walls, single and combined footings with computer applications.
Prerequisite: CIVL $310^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 412 - Finite Element Analysis

Modern analysis techniques used to investigate a variety of systems in engineering and science. Computational models of problems are developed using energy concepts, structural mechanics, and matrix operations. The methods used are implemented using a general finite element program and the accuracy of the results is evaluated. The learned theoretical approach is applied to common structural elements such as trusses, beams, frames, and plates.

Prerequisite: CIVL $310^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 420 - Traffic Engineering

This course covers the fundamentals of traffic engineering and traffic flow theory: traffic signal design, intersection design, and traffic impact studies. Students will be taught using Highway Capacity Software, SYNCHRO, and other traffic software packages.

Prerequisite: CIVL $320^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 421 - Highway Engineering

Principles of geometric design of highways, intersections, interchanges, and terminals. Practical issues of vertical and horizontal curvature, highway evaluation, driver and vehicle dynamics, and traffic safety are also addressed. Computer-aided design and modeling.
Prerequisite: CIVL $320^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 422 - Transportation Terminal Design

The course covers the transportation design of airports, rail stations and truck terminals to facilitate the transport of passengers and freight in the transportation systems. Terminals are designed to provide security, storage, and access to different modes of transportation.

Prerequisite: CIVL $320^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 430 - Storm Water Management

Quality and quantity of urban storm water. Receiving water problems and sources of pollutants. Runoff quality and quantity characteristics. Selection and design of controls; regulations.

Prerequisite: CIVL $350^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 431 - Environmental Engineering Design

Process design of treatment/remediation systems to solve specific environmental problems, including evaluation alternatives and computer simulation.

Prerequisite: CIVL $330^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 432 - Groundwater Hydrology

The course covers the fundamental science and engineering behind groundwater systems, including but not limited to: the hydrologic cycle, groundwater flow, and wellhead protection and management.

Prerequisite: CIVL $350^{\circ}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 440 - Construction Management

Provides students with an overview of the responsibilities and risk associated with management within the construction industry.
Emphasis is given to responsibilities and relationships between owners, contractors, labor and suppliers, construction estimates and schedules, cohstruction contracts and safety.

Prerequisite: CIVL $340^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 441 - Sustainable Development

Provides an overview of sustainable development with emphasis on the role of the engineer. Study the role of LEED and other sustainable development programs in changing development design.
Prerequisite: CIVL $330^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 460 - Capstone Design I

This course will provide students with the opportunity to work as part of a multi-disciplinary Civil Engineering design team. The course will consist of developing the preliminary design plans with presentations and reports. Students will learn about the regulatory process, LEED design, and site planning. Lectures in professional practice and teaming will augment the design project.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Civil Engineering.
CIVL 461 - Capstone Design II
This course will provide students with the opportunity to work as part of a multi-disciplinary Civil Engineering design team. The course will consist of a design project with presentations and reports. Lectures in professional practice and teaming will augment the design project.

Prerequisite: CIVL $460^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Civil Engineering.
CIVL 490 - Independent Study
Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CIVL 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Communication (COMM)

## COMM 110-Communication Concepts

An overview of basic theories concerning the communication process.
Recommended as a basis for major study in the area.
Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): Transfer Thread Completion Course

## COMM 115-Visual Literacy

A cornerstone course that involves the study of visual forms of communication with an emphasis on image-based media (newspaper, magazine, film, television, photography, informational graphics, interactive multimedia, digital games and web-based technologies). Topics include visual interpretation, visual manipulation, visual conventions, the role of visual media in cultural processes, and aesthetic appreciation.

Credits: 3
Term(s) Typically Offered: Offered Fall, Winter, \& Spring
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Global Citizenship, Creating Art, Innovation, Entrepreneurship, and Positive Change, Transfer Thread Completion Course

## COMM 120-Introduction to Digital Photography

This course provides an introduction to the basic concepts of digital photography. Technical and compositional elements for the creation of quality digital photography are covered. Focus on this course is on the commercial application of photography for media production.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## COMM 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## COMM 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
COMM 195 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## COMM 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## COMM 200-Civil Discourse: Theory \& Practice

Theory and practice of promoting shared understanding and the common good through civil discourse as related to the development and presentation of oral messages. Students will be expected to develop an understanding of the principles and practices of public speechmaking that constitute civil discourse, how the First Amendment enables it, its history and role in problem-solving, and the influence of mediated discourse on democracy.

## Credits: 3

Term(s) Typically Offered: Offered Every Term

## COMM 201 - Digital Imaging

This course exposes students to the use and manipulation of electronically generated images through hands-on experience with digital cameras and scanners. Market specific imaging software is used to further enhance and manipulate imagery. Course topics include visual aesthetics, composition, image layering, photo-retouching, spatial relationships, compression techniques, digital painting, editing, color adjustment, filtering, image capture and file formatting.

Credits: 3
Enrollment limited to students with department of Strategic Comm and Media.

## COMM 204-Environmental Communication

In this course, students will learn about the theoretical and applied concepts that guide the discipline of environmental communication including rhetoric \& discourse, media, public participation, social marketing, collaboration \& conflict resolution, risk communication, and pop culture. Students will demonstrate understanding and show application of materials for successful environmental communication in a variety of protected areas and conservation settings.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even

## COMM 205-Audio Production

An introduction to the aesthetic and technical production of audio for a variety of media and disciplines. Course topics include principles of hearing, sound, acoustics, and psychoacoustics, field and studio recording techniques, tools and applications for single and multi-track production and editing; and the development of vocal techniques associated with on-air announcing for radio, television and online productions.

Prerequisite: COMM $110^{C}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1 may not enroll.

## COMM 215-Small Group Communication

Communication problems and processes in small groups. Topics include role and nature of the small group, communication structure, problemsolving techniques, and leadership.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Thematic Thread(s): Leadership Development, Transfer Thread
Completion Course

## COMM 217- Intercultural Communication

This course is designed to create a greater understanding of communication patterns and breakdowns which occur as members of one culture group interact with those of another culture group. This course will also develop an increased awareness of particular skills and knowledge that can foster more effective intercultural communication.

Credits: 3
Term(s) Typically Offered: Offered Fall, Spring, \& Summer
Thematic Thread(s): Global Citizenship, Comparative Perspectives of Justice \& Society, Leadership Development, Transfer Thread Completion Course, Transnational Culture

## COMM 228 - Principles of Creative Advertising

This course introduces students to the history, role and context of advertising and how advertising messages solve communication problems by informing, changing attitudes and motivating behavioral changes among an organization's target audiences. Students will learn fundamentals about the advertising development and execution process, including theory and strategy, copy writing, design and selection of media.

Credits: 3
Term(s) Typically Offered: Offered as Needed, Offered Spring Terms Even Enrollment limited to students with department of Strategic Comm and Media.

## COMM 231- Introduction to Public Relations and IMC

This course seeks to introduce public relations students to the history, role and context of public relations, and to the process through which public relations professionals establish and maintain lines of communication between an organization and its publics. The course examines the nature of public opinion, methods of audience analysis, and message design, and engages in skill development relevant to the professional practice of public relations.

## COMM 232-Publication Production

This course will be concerned with the nonverbal aspects of print communication, i.e., areas by which the communication process can be enhanced by the use of pictures, charts, graphs, white space, type faces and sizes, etc. It seeks to make students aware of the fact that print communication does not involve only words.

Credits: 3

## COMM 235 - Introduction to Digital Design

Exposes students to the manipulation of digital images and their use in digital publication through hands-on experience with market-specific software. Course topics include visual aesthetics, composition, spatial relationships, type-faces, and file formatting.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## COMM 242 - Journalistic Writing

Basic course in journalistic news structuring techniques and straight news writing for print, broadcast and online news formats. Students practice and write in-class news stories utilizing basic news organization, professional journalistic writing styles, and quotation modes appropriate to different news platforms.
Prerequisite: ENGL $102^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## COMM 247-Photojournalism

Photojournalism upholds the professional standards specific to newspaper photography and the recording of news events visually. Students will be introduced to basic photography skills and required to shoot assignments according to print standards on deadline. The course includes issues related to the specialization of shooting sports, spot news, features and special essays. Technical aspects of digital photography and printing for publication are also reviewed.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd

## COMM 248 - Interactive Multimedia 1

An introduction to the production of written and media-based content for a variety of web-based applications. Course topics include the use of content management systems, the basics of web design and blog creation, writing for the web, making media for the web, connecting to social media and web analytics.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## COMM 254 - Video Production

An introduction to video production as communication media. Emphasis on the processes and technologies of single-camera production, including: (1) operation of audio and video recording equipment, and (2) development of techniques for composition, lighting, scriptwriting, storyboarding, directing, and editing.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## COMM 256 - Message Preparation

An introduction to message preparation for a variety of media and communication functions, including radio, television, video, podcasts, instructional media, social media, websites, and advertising

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Strategic Comm and Media.

## COMM 258 - Interactive Multimedia 2

An introduction to the aesthetic and technical production of basic multimedia content for a variety of applications and disciplines. Course topics include basic aesthetics of multimedia, and introduction to media coding and industry specific applications, and development of graphic, animated, and interactive media assets.

Prerequisites: COMM $235^{\text {D }}$ or COMM $201^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## COMM 263 - Mass Media and Society

An introduction to the mass media that includes an examination of the historical development, current structure, and functions of the traditional and emerging media. The course will also explore the economic, legal, and ethical issues facing the media and introduce the interaction of the media and society, culture, and the individual.

Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): Transfer Thread Completion Course

## COMM 270-Strategic Health Communication

This course examines strategic communication in the areas of health and the healthcare system, current events and issues in health communication, and the role of media and communication technologies in reaching individuals, communities, and specialized target audiences. Topics such as diversity, crisis communication, and ethics in the context of health communication will be addressed. Students will learn how to apply persuasive strategies and health communication tactics in the development of health communication campaigns.

## Credits: 3

## COMM 290-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## COMM 295-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## COMM 298-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## COMM 303-Communication and Media Ethics

This course will address the application of ethical standards, guidelines, and policies to situations related to media and to communication. This course is based on two fundamental premises: (1) we create the sort of person that we are through our actions and inactions, and (2) an ethical communicator is one who acts with integrity. This course will cover what constitutes communication ethics from various historical points of view, how recent ethical conflicts have arisen in media production and communication, and how to apply ethical judgments to issues and controversies.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 305-Broadcast Journalism

An examination of topics critical to practice of broadcast journalism, including researching, news-gathering techniques, writing, and production skills. The course will also introduce the components of the broadcasting system in America including economics, programming, regulations, and broadcast technologies.

Prerequisites: (COMM $242^{\text {D }}$ or COMM $256^{\text {D }}$ ) and COMM $110^{\text {C }}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 307 - Social Media

This course will provide students with a professional approach to using social media tools in their field, examining both the technological and theoretical perspectives of social media through the hands-on application of the technologies.

Prerequisite: COMM $110^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment is limited to students with a program in Communication, Comm-Graphic Design(Art Major), Communication Studies, Communication, Environ Comm \& Heritage Interp, Advertising, Converged Journalism, Digital Media, Integrated Marketing or Public Relations.

## COMM 310-Communication Research Methods

An introduction to the principles, procedures, and tools of research used in the analysis of the communication situation, including consideration of research design and statistical analysis and the identification, control, and measurement of communication variables.

Prerequisite: COMM $110^{C}$
${ }^{C}$ Requires minimum grade of $C$
Credits: 3
Term(s) Typically Offered: Offered Every Term
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 312-Argumentation

A study of argumentation as a decision-making process. Course focuses on theories of argument, the roles of advocates and opponents, the nature of argument building, evidence, and reasoning and argument in various contexts.

Prerequisites: COMM $200^{\circ}$ and COMM $110^{C}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 314-Interpersonal Communication

This is a theory-based course examining the process of communication in dyadic and group settings. Emphasis is placed upon (1) influences upon communication processes and resulting behavior and content and (2) the development of skills and skill assessment in both settings.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 315-Organizational Communication

A study of the communication behavior of persons in organizations. Considers the nature of organizations, communication structures in organizations, and the development of communication training in organizations.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 317- Topics in Global and Intercultural Communication

To promote effective communication with diverse audiences in an increasingly globalized world, this course develops theoretical and applied approaches to global and intercultural communication. Through readings, resources, and case studies, students will explore intercultural communication in a variety of global contexts, analyze current global communication issues, and develop the ability to design communication strategies that are specific and adapted to an audience's historical and cultural milieu.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 318-Professional Presentation

Principles and applications of communication techniques and media for presentations and processes common to professional settings.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 332 - Case Studies in Public Relations and Integrated

 CommunicationThis advanced course seeks to develop critical thinking skills through the examination of audience-centered case studies. Students examine how professionals in public relations and integrated communication develop objectives that translate into communication campaigns, illustrating theoretical applications in realllife situations. The development of analytical skills, ethical guidelines, and issues of diversity in communication practice are emphasized.

Prerequisites: COMM $231^{\mathrm{D}}$ and COMM $110^{\mathrm{C}}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 333-Writing for Public Relations and Integrated Marketing Communication

Course seeks to further develop the writing skills of public relations and integrated marketing communication majors. Course assignments focus on expanding students' ability to make critical decisions regarding the process of gathering necessary information, identifying objectives, and creating appropriate messages for specific target audiences.

Prerequisites: (COMM $242^{\mathrm{D}}$ or COMM $256^{\mathrm{D}}$ ) and COMM $231^{\mathrm{D}}$ and COMM $110^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 334-Publication Production

The course continues to expose students to the in-depth study of electronic publication issues, specifically with design and layout for newspapers, annual reports and other multiple-page publications. The course covers issues related to prepares, separations, advanced topography and paper selection.

Prerequisites: (COMM $235^{\mathrm{D}}$ or COMM $232^{\mathrm{D}}$ ) and COMM $110^{\text {C }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 335 - Digital Animation

An exploration of the aesthetic and technical production of animated and interactive assets for a variety of media applications. Course topics include development of raster and vector graphic elements and design and production of both simple and interactive animation for a variety of applications and disciplines.
Prerequisites: (COMM $235^{\mathrm{D}}$ or COMM $201^{\mathrm{D}}$ ) and COMM $110^{\text {C }}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 336-Media Relations and Crisis Communication

This course focuses on two key areas of public relations and crisis communication. During the first half of the semester, this course will explore how the news media works and how PR practitioners establish and maintain positive relationships with the news media. This course will explain the role of the news media in message dissemination and how to effectively work with reporters. During the second half of the semester, students will build on their media relations knowledge and explore issues and crisis management - before, during and after a crisis. Students will learn common crisis response strategies to address many organizational audiences through well-known case studies. Emphasis will be placed on practical application of crisis communication theory.

Prerequisites: COMM $110^{\circ}$ and COMM $231{ }^{\circ}$
${ }^{C}$ Requires minimum grade of $C$
Credits: 3
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.
Enrollment limited to students in the College of Business college.

## COMM 342 - Sports Journalism

Discussion of ethics and responsible sports journalism, sports information and public relations interview techniques, broadcast sports journalism. Guest lecturers in sports information, public relations, and broadcast journalism may speak on relevant topics.

Prerequisites: COMM $242^{\text {D }}$ and COMM $110^{\text {C }}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 343-Feature Journalism

Course will focus on writing feature articles for newspapers and magazines.

Prerequisites: COMM $242^{\text {D }}$ and COMM $110^{\text {C }}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 347- New-Media Journalism

An examination of new-media forms and the effects of new digital media on media industries and the practice of journalism. The course will examine the differences between traditional and new media journalism in theory and in practice and explore online writing techniques and the impact of social networking sites on the practice of journalism.

Prerequisites: (COMM $242^{\mathrm{D}}$ or COMM $248^{\mathrm{D}}$ or COMM $256^{\mathrm{D}}$ ) and COMM $110^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## COMM 348 - Advanced Journalistic Writing and Reporting

Instruction in writing and reporting techniques beyond the basic news story, focused on detailed, in-depth news-writing and news-gathering practices, including use of human and documentary sources, toward production of public affairs stories; discussions of contemporary journalistic ethics and values.

Prerequisites: COMM $242^{\mathrm{D}}$ and COMM $110^{\mathrm{C}}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 350-Editing for Video

This course provides students with the opportunity to expand their knowledge of video editing. Special attention is given to expanding skill sets associated with digital non-linear editing.

Prerequisites: COMM $254^{\mathrm{D}}$ and COMM $110^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 352 - Digital Radio Production

This course introduces students to the business and production of digital radio broadcasting, including broadcast technology, producing, directing, writing, and performance for radio. Students gain experience in studio and control room operation and production roles.

Prerequisite: COMM $110^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Strategic Comm and Media.

## COMM 354 - TV Studio Production

The course covers the process and technique of multi-camera video production. Students gain experience in studio and control room operation and production roles. The course trains students to integrate video packages produced in the field for presentation in a multi-camera studio broadcast.

Prerequisite: COMM $110^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 355 - TV Field Production

An advanced course in the processes and techniques of single-camera field production and editing. Students will report, film, write, and edit packages for television news.
Prerequisite: COMM $110^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 359- Interactive Multimedia 3

This course provides students the ability to move beyond the traditional models of information distribution using image, sound, motion and text. The course introduces the fundamentals of communicating through digital interfaces with an audience. Topics include digital imaging, creating effective interactive projects, models of information structure, analysis of design problems and distribution models. Theories of communication, learning, human-centered design and project evaluation are discussed.

Prerequisites: COMM $258^{\text {D }}$ and COMM $110^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 360 - Corporate Media

The application of adult training theories, communication theories, and production skills in the planning, design, and implementation of media in the corporate and institutional setting, with emphasis on media management and the use of media in training and development.

Prerequisites: (COMM $235^{\text {D }}$ or COMM $232^{\text {D }}$ ) and COMM $110^{\text {C }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 364 - Brand Management

The main objective of this course is to provide insights on developing effective brand management strategies. This course is designed to offer important concepts, frameworks, theories, practices and skills required to create and manage profitable brands.

Prerequisites: COMM $231^{\text {C }}$ or MRKT $330^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.
Enrollment limited to students in the College of Business college.
COMM 365 - Sports and Esports Production
The course prepares students to broadcast sports and esports events and news. Topics covered include media production, play-by-play announcing, studio sportscasts, field reporting, pre-game and post-game analysis, social media integration, streaming, and content creation for live sports broadcasts.

Credits: 3

## COMM 370 - Health Communication Cases and Strategies

This course further develops students' strategic competencies in the area of health communication through the investigation of case studies and campaign design. Students will analyze proactive and responsive communication strategies; messaging techniques and audience segmentation; multimedia and multiplatform tactics; and media relations and crisis response. Students will utilize qualitative and quantitative research techniques to drive messaging and strategy in the creation of integrated health communication campaigns.

Prerequisite: COMM $270^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2 or Sophomore 2.
Enrollment limited to students in the College of Business college.

## COMM 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Prerequisite: COMM $110^{C}$

${ }^{\mathrm{C}}$ Requires minimum grade of C .

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisite: COMM $110^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 401-Digital Imaging

This course continues to expose students in the use, manipulation and creation of digital images through hands-on experience with market specific imaging software. Course topics include visual aesthetics, image composition, vector graphics, typography, image scalability and file formatting.
Prerequisites: (COMM $235^{\text {C }}$ or COMM $201^{\circ}$ ) and COMM $110^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 405-Global Media

An examination of different regions of the world and their media systems. The course will explore how politics, economics and culture play a role in shaping global media structures. Both historical and contemporary perspectives on the topic are addressed, particularly as they relate to issues of democracy, cultural autonomy, political rights, social justice, media systems of different world regions, global representations in U.S. media, new technologies and developments in global technology and economic media developments.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Global Citizenship, International Business,
Sustainable International Development, Transfer Thread Completion Course, Transnational Culture
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 407-Social Media 2: Analytics and Strategies

This course will examine the concepts of social media networks and the process of collecting, analyzing, measuring, and visualizing data for organization and business. The course will emphasize on understanding the role of theories in social media analytics, and the tools that help collecting, analyzing social media data and preparing reports. As an advanced level course, students will be required to learn and apply data analytics software beside significant writing assignments, formal presentations.
Prerequisite: COMM $307^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Enrollment limited to students with a semester level of Junior 1, Junior 2,
Senior 1 or Senior 2.
Enrollment is limited to students with a program in Communication, Information Systems, Communication Studies, Communication, Information Systems or Environ Comm \& Heritage Interp.

## COMM 410-Communication Law

Discussion of topics related to the field of mass communication (freedom of the press, libel, invasion of privacy, copyright, obscenity, regulations, ethics, and responsibility of the communicator and the agency).

Credits: 3
Term(s) Typically Offered: Offered Every Term
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

## COMM 413-Communication Theory

A study of the significant theories of human communication that help to explain and predict the role of communication in determining the social, cultural, and political behavior of the community.

Prerequisite: COMM $110^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 415 - Persuasion

This course will familiarize students with the processes of persuasion, the relationship of persuasion to other forms of human communication, methods for studying persuasion, the theories of persuasion and ethical concerns about persuasion. The perspectives and tools developed in this course should enable the student to develop effective message strategies in work and personal situations.

Prerequisites: COMM $110^{\mathrm{D}}$ and COMM $200^{\mathrm{D}}$ and COMM $110^{\mathrm{C}}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 419 - Propaganda: Ideology, Communication Warfare, and Social Control

The purpose of this course is to enhance the critical thinking and analytical skills of students to make them better able to cope intellectually with public argument in a world of where sound-bites and terrorism rule the day. This course addresses the ways in which various ideologies compete for global dominance by employing advocacy strategies and propaganda techniques, a process made both more complex and more consequential by rapidly advancing communication technologies. By manipulating visual imagery, propagandists often exert control over the public's perception of political, social and economic reality. Extensive use of art and video examples will be made in this course.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Thematic Thread(s): Global Citizenship, Political Arts, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 422 - History of Journalism

Tracing the history of American journalism from its early English European heritage to modern times. Emphasis on people, organization, and media that have helped establish the press as an American institution.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 431 - PR and IMC Campaigns Capstone

Capstone course in the PR and IMC tracks. Course provides students a thorough experience in conducting public relations and integrated marketing communication campaigns and preparing communication materials. Working in teams, students prepare and conduct the research, planning, implementation and evaluation of an actual campaign for a client.

Prerequisites: COMM $332^{\text {D }}$ and COMM $333^{\text {C }}$ and COMM $110^{\text {C }}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2, Junior 1,
Junior 2, Sophomore 1 or Sophomore 2 may not enroll.

## COMM 434 - Advertising Production

Advanced production course which applies concepts of design, creative strategy and message development to the creation of advertising in a variety of mediums. Course focuses on development of consumer, public service and public relations advertising campaigns.

Prerequisites: (COMM $235^{\circ}$ or COMM $232^{\mathrm{D}}$ ) and COMM $110^{\mathrm{C}}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1
or Sophomore 2 may not enroll.

## COMM 441- Issues in Journalism

An analysis and discussion of the impact of journalism on contemporary society. Among the subjects discussed will be the evolution of journalism in a digital age, ethical concerns for modern journalists, and the impact of mobile technology on the practice of journalism.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 449-Communication Projects

This course provides students an opportunity to investigate in-depth, approved topics in applied communication.
Prerequisite: COMM $110^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 450 - Internship

Supervised placement or research in selected private or public agencies.
Prerequisite: COMM $310^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-12
Term(s) Typically Offered: Offered Every Term
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## COMM 453 - Media Project Management

This course is intended to develop student mastery of the emerging environment of digital information through a project-based, team-based course. The course focuses on issues of team work, project management, strategy development and communication both inside and outside of the team. Other topics include budgeting, development of human capital, leadership, time management and legal issues.

Prerequisites: COMM $258^{\mathrm{D}}$ and (COMM $307^{\mathrm{D}}$ or COMM $347^{\mathrm{D}}$ ) and (COMM $359^{\text {D }}$ or COMM $401^{\text {D }}$ ) and COMM $110^{\text {C }}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 454 - Live Broadcast Production

This course will teach students visual aesthetic principles and technical skills required to produce live programming and graphics for broadcast. Course topics include objective development, composition, element layering, branding, and advanced multi-camera studio and field production.

Prerequisites: (COMM $235^{\mathrm{D}}$ or COMM $201^{\mathrm{D}}$ ) and COMM $350^{\mathrm{D}}$ and COMM $354^{\text {D }}$ and COMM $110^{\text {C }}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 455-History of Broadcasting

A focus on the history and development of radio and television broadcasting in the United States. Students will watch and listen to historical broadcasts and discuss the evolution of entertainment and news programming from the beginning of the 20th century through today.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 458- Media Criticism

A critical examination of film, television, and radio. The course focuses on the formation and application of standards for appraising media and their messages.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): Arts \& Popular Culture, Transfer Thread Completion

## Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 459 - Issues in Communication Technologies

An exploration of current and emerging communication technologies including their development and regulation, as well as the social, individual and ethical impact of these technologies.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Innovation, Entrepreneurship, and Positive Change, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 464 - Advertising Campaigns Capstone

This course is a capstone course in the Advertising program. Students will demonstrate how the knowledge and skills learned in their program can be applied directly to designing and developing creative advertising campaigns. Students will be responsible for conducting research, strategic planning, writing creative briefs, planning and preparation of advertising copy and design, and campaign evaluation.

Prerequisites: COMM $228^{\mathrm{D}}$ and COMM $235^{\mathrm{D}}$ and COMM $310^{\mathrm{D}}$ and COMM $434^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Advertising.

## COMM 480 - The Communication Age

Presentation and discussion of the influences, trends, and issues that permeate the evolution toward a 'Communication Age'. Major issues and influences are examined, including significant technological developments and solutions that have been applied to communication needs and opportunities. Discussion addresses marketplace forces; humanistic, social, personal, and ethical issues; and the impact on organizations, workplace, home, education, government, and international functions. Major attention is given to the role of the impact on the individual amidst these far-reaching changes.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Arts \& Popular Culture, The Future, Revolutions, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 490 - Independent Study

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## COMM 497-Senior Capstone Seminar

The seminar is designed to assist students develop career awareness and proficiency in career/job search skills relevant to obtaining an entrylevel position in a communication-related field, or to obtain entry to graduate study. Students enrolled will participate in career development activities, including portfolio development, job seminars, establishing credential files, participating in mock and actual interviews, on-site mentoring/shadow program and public presentation of their portfolio.

Prerequisite: COMM $110^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2, Junior 1, Junior 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students with department of Strategic Comm and Media.

## COMM 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisite: COMM $110^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Computer Science (CPSC)

## CPSC 099 - Computer Competency Exam

This non-credit course is used to identify students who have met the university's computer competency requirement by earning a passing grade on the Computer Competency Placement Test.

Credits: 0

## CPSC 100 - Introduction to Computing for Liberal Arts

A pass/no credit course to provide an introduction to the computer capabilities needed to succeed in an Information Society. This course is designed to support the SRU Computer Competency requirement. Topics will include computer hardware, software, networking, security and privacy, and societal issues.

Credits: 1
Term(s) Typically Offered: Offered Every Term

## CPSC 102 - Collaborative Information Technology and Society

We will explore how the use of collaborative information technology impacts human interaction in globally diverse contexts. The course provides an introduction to the historical development, current use and future directions of collaborative technology in human societies. We will address how to manage and protect personal computing devices and communication, along with the ethical, legal and social issues involved in the use of these collaborative technologies.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Transfer Thread Completion Course

## CPSC 110 - Computer Concepts

A computer literacy course stressing the use of application software on personal computers. It covers a survey of computers and their impact on society and the use of word processing software. Other application software is also covered, such as spreadsheets and database software, but the particular applications examined may vary from section to section.

Credits: 3
Term(s) Typically Offered: Offered Every Term

## CPSC 125-3D Modeling for Computing

This course introduces students to 3D modeling for applications in computing fields. It covers the basic and intermediate features in 3D modeling software tools, which are utilized in applications such as 30 visualization, 3D animation, virtual reality/augmented reality, and 3D game design. This course also introduces students to the printing of 3D objects.

Prerequisites: CPSC $100^{\mathrm{D}}$ or CPSC $110^{\mathrm{D}}$ or CPSC $130^{\mathrm{D}}$ or PE $202^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed

## CPSC 130 - Introduction to Computing and Programming

An introductory course devoted to programming and to a description of hardware and software concepts. Programming concepts covered include top-down program development using pseudocode, algebraic notation, standard control structures, and arrays in an appropriate programming language. Other topics include binary representation, storage, and general architecture and functioning of a computer system. Keywords: computer science
Prerequisites: (ACSD $110^{\mathrm{D}}$ or ESAP $110^{\mathrm{D}}$ ) or minimum score of 18 in 'Math ACT Exc 2 - EX110-PL MATH' or minimum score of 421 in 'Math SAT Exc 2 -EX110-PL MATH'
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms

## CPSC 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

CPSC 140 - Introduction to Programming Principles
Techniques are stressed that enable systematic development of clear, correct programs. Other topics include data types, algebraic notation, standard control structures, functions; input/output, arrays, and program testing and debugging. This course will be taught in C++.

Prerequisites: ACSD $110^{\mathrm{D}}$ or minimum score of 18 in 'Math ACT Exc 2 -EX110-PL MATH' or minimum score of 421 in 'Math SAT Exc 2 - EX110-PL MATH'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed

## CPSC 146 - Programming Principles

Techniques are stressed that enable systematic development of clear, correct programs. Other topics include data types, algebraic notation, standard control structures, functions; input/output, arrays, and program testing and debugging. Programs will be written in the department's current official programming language of instruction.

Prerequisites: (ACSD $110^{\circ}$ or ESAP $110^{\circ}$ ) or minimum score of 18 in 'Math ACT Exc 2 - EX110-PL MATH' or minimum score of 421 in 'Math SAT Exc 2 - EX110-PL MATH'
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## CPSC 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CPSC 195-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## CPSC 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
CPSC 207 - Shell Commands and Scripting
This course introduces the student to the shell commands and shell programming in prevalent operating systems (OS). The architecture of the PC and how it relates to the OS is discussed conceptually and physically examined. The hardware and software required for data communication are discussed.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## CPSC 210 - Productivity Software

An in-depth, practical study of existing productivity software packages that focuses primarily on decision-support systems for microcomputers. Projects will involve the use of intermediate and advanced features of various software packages, as well as the use of several packages in finding computer-based solutions to information storage and retrieval problems.

Prerequisites: CPSC $100^{\mathrm{P}}$ or CPSC $110^{\mathrm{D}}$ or CPSC $099^{\mathrm{D}}$ or CPSC $130^{\mathrm{D}}$ or minimum score of 01 in 'Computer Competency Exam'
${ }^{P}$ Requires minimum grade of $P$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed

## CPSC 217-Advanced Web Programming

This course continues the coverage of JavaScript features for creating web pages with DOM features. Advanced topics are discussed including CSS scripting, arrays, functions, the creation and utilization of objects, mouse and browser events, pop-up windows, and forms. This course prepares students to learn spin-off languages and introduces the use of 3rd party libraries and APIs.
Prerequisites: CPSC $130^{\circ}$ and CPSC $146^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms

## CPSC 236 - Selected Computer Languages

A selected prevalent computer language(s) other than those taught regularly in other Computer Science courses will be studied and used for programming. Topics will include data structure, control structures, data control, modularization and other features of the language. Special applications, if any, of the language will be studied. The student is expected to have basic programming experience in at least one other language. For different languages, this course may be repeated for credit toward graduation, but not toward Computing major or minor.
Prerequisites: CPSC $130^{\text {D }}$ or CPSC $146^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
CPSC 237 - Mobile App Development for Smart Devices
This course is a practical and comprehensive approach to designing, building, testing, and deploying mobile applications on mobile devices. Students build mobile applications that leverage device features and 3rd party application programming interfaces (APIs) to create stable and robust software Topics covered include application design, memory constraints, input methods, data handling, interfacing with device APIs and connectivity.
Prerequisite: CPSC $217^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms

## CPSC 246 - Advanced Programming Principles

This course places its emphasis on data and their role in software development. Such a study relies on a two-step approach to data abstraction. In the first step, data must be viewed as abstract objects. These objects are selected and specified so as to be useful in the solution of programming projects. In the second step, the abstract objects are translated into program data structures. An extensive examination of data structures provides the student many opportunities to explore the issues of implementing data abstractions. This course will be taught in C ++ , and will include an introduction to Unix/Linux.

Prerequisites: CPSC $146^{\mathrm{D}}$ and (MGMT $219^{\mathrm{D}}$ or ECON $219^{\mathrm{D}}$ or BUSA $219^{\mathrm{D}}$ or MATH $125^{\mathrm{D}}$ or MATH $152^{\mathrm{D}}$ or STAT $152^{\mathrm{D}}$ or MATH $225^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## CPSC 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CPSC 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## CPSC 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
CPSC 300-Challenges of Computer Technology
An in-depth study of the critical issues related to the computerization of society. Ethical, legal, and moral issues raised by the evolution of computer technology will be discussed.

Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): The Future, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 301 - Practical Computer Security

This course is a practical introduction to the threats present to the online, electronic community, and how to protect yourself and your organization from them. We will explore the connectivity structure of the Internet, along with the security and criminal threats to members of the online community. The legal, ethical, and technical issues related to threats such as viruses, worms, and identity theft will be covered.
Prerequisites: CPSC $099^{\mathrm{D}}$ or CPSC $110^{\mathrm{D}}$ or CPSC $130^{\mathrm{D}}$ or CPSC $100^{\mathrm{P}}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
${ }^{P}$ Requires minimum grade of $P$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 305 - Introduction to Expert Systems

An overview of the purpose, structure, and applications of expert systems. Topics covered will include expert systems technology, knowledge engineering, applications of expert systems, expert systems development, and the future of expert systems.

Prerequisites: CPSC $100^{\mathrm{P}}$ or CPSC $110^{\mathrm{D}}$ or CPSC $130^{\mathrm{D}}$ or CPSC $099^{\mathrm{D}}$
${ }^{\mathrm{P}}$ Requires minimum grade of P .
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 311 - Discrete Computational Structures

Introduces computational implementations of the mathematical structures most frequently used in computing including sets, equivalence relations, functions, graphs, trees and standard logic. Also introduces automata, formal languages, countability, decidability and computational complexity, Markov and stochastic processes. The course will stress traditional programming and mathematical approaches to these structures such as the use of recursion, elementary data structure, and proof techniques to instantiate, parse, traverse, demonstrate correctness, or use these computational objects.

Prerequisite: MATH $125^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 315 - Internet of Things (IoT)

This course introduces the students to digital electronics and programming based on popular single-board microcontroller and singleboard computer system platforms to interact with the environment.
Sensors and actuators are utilized for communication and applications in the internet of things (IOT), smart homes, robotics, cyber-physical systems and sensor networks. Topics include the architecture of singleboard microcontroller and single-board computer system, basic electricity and electronics, loT building blocks, connections and configuration, and programming

Prerequisites: CPSC $146^{\text {D }}$ and CPSC $207^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 317 - Server Side Scripting

This course emphasizes programming using scripting languages for the purpose of creating the back-end of web applications. A variety of languages and utilities available on the web server are covered. The student is expected to have programming experience, knowledge of the Unix/Windows environments, and knowledge of database.

Prerequisites: CPSC $217^{\mathrm{D}}$ and CPSC $207^{\mathrm{D}}$ and CPSC $323^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

CPSC 323 - Fundamentals of Database Systems
A practical approach to analysis, design, and implementation of database systems. This course covers topics such as: conceptual, logical and physical data models; relational database and relational algebra; building and mapping entity relationship diagrams (ERDs); normalization; basic and advanced Structured Query Language (SQL) for data retrieval and manipulation; functions, triggers, and procedures; transactions and concurrency control; security, backup, and recovery procedures.

Prerequisites: CPSC $130^{\mathrm{D}}$ or CPSC $146^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 327 - Administration and Security

Students will learn administration techniques for at least two popular computer operating systems, with special attention to system security. Techniques for managing networking, remote printing, storage allocation, account management, and backup will be discussed. Common techniques for breaching system security, and methods of defense against such attacks, will be emphasized.

Prerequisites: CPSC $207^{\mathrm{D}}$ and (CPSC $246^{\mathrm{D}}$ or CPSC $217^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 333 - Introduction to Computer Forensics

This is a fundamental course which covers computer forensics. This class covers methods and tools for gainng forensic information from computer systems and networks. It includes case studies of cyber crimes as well as the application and management of cyber forensics. The course introduces students to forensics tools using hands-on experience and the Internet

Prerequisites: CPSC $099^{\mathrm{P}}$ or CPSC $100^{\mathrm{P}}$ or CPSC $110^{\mathrm{D}}$ or CPSC $130^{\mathrm{D}}$ or CPSC $210^{\mathrm{D}}$ or PE $202^{\mathrm{D}}$ or MIS $210^{\mathrm{D}}$
${ }^{P}$ Requires minimum grade of $P$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 337 - Introduction to Web Graphics

This course will expose the student to the standards for Web and mobile graphics such as SVG, CSS and canvas. Topics include color models, coordinate systems, coordinate transformations and popular image formats. Differences between vector and pixel-based approaches and between declarative and scripted models of graphical content creation are also covered.

Prerequisites: CPSC $217^{\mathrm{D}}$ or (CPSC $130^{\mathrm{D}}$ and CPSC $246^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 342 - Introduction to Bioinformatics

It is a practical course that introduces a wide range of bioinformatics tools, algorithms and biological databases. A broad array of topics in Bioinformatics will be covered such as: overview of Bioinformatics, biological databases, sequence alignment, multiple sequence alignment, molecular phylogeny and evolution, gene expression analysis, protein structure and genome mapping.

Prerequisites: BIOL $250^{\mathrm{C}}$ and (BIOL $104^{\mathrm{C}}$ or (BIOL $101^{\mathrm{C}}$ and $\mathrm{BIOL} 100^{\mathrm{C}}$ ))
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 358- Simulation

Models of real-life phenomena are programmed with a current simulation language. These are run and adjusted for accurate prediction and explanation. Other simulation languages are surveyed, and needed statistical background is reviewed.

Prerequisites: CPSC $146^{\mathrm{D}}$ and (ECON $219^{\mathrm{D}}$ or MGMT $219^{\mathrm{D}}$ or MATH $152^{\mathrm{D}}$ or MATH $352^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 370 - Computer Organization and Architecture

This course will study computer organization topics such as data representation, Boolean logic, memory hierarchy, and data path design. It will study computer architecture topics such as CPU control, pipelining and instruction set architecture. The course will also introduce the architecture and software models involved in parallel computing.
Students will learn the assembly level machine organization by means of a standard assembly language.

Prerequisites: CPSC $150^{\text {D }}$ or CPSC $246^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 374 - Algorithms and Data Structures

This course establishes a foundation for the systematic study of algorithms and data structures. The integration of these two concepts into a single organizational structure emphasizes that algorithms and data structures are inseparably inter-twined. This course builds and elaborates on the concepts introduced in CPSC 246. This course will be taught in a language other than that used in CPSC 246

Prerequisites: CPSC $246^{\text {D }}$ and CPSC $311^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 376 - Programming Language and Theory

Programming languages are studies from the theoretical viewpoint. The goal is deeper understanding of the design and translation of computer languages. Topics include compilation, automata and formal languages, computability by Turing machines and recursive functions, uncomputability, data types, data structures, binding scope, control mechanisms, conversions, storage management, reliability, portability, modularity, documentation, implementation methods and language extensibility.

Prerequisites: CPSC $150^{\text {D }}$ or CPSC $246^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 378- Theory of Computation

Both the classical and the contemporary theories of computation will be discussed in this course. The topics covered include the theory of automata and formal languages, computability by Turing machines and recursive functions, uncomputability, and proof of correctness of code.

Prerequisites: CPSC $311^{\text {D }}$ or MATH $131^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Prerequisites: CPSC $150^{\mathrm{D}}$ or CPSC $246^{\mathrm{D}}$ or CPSC $217^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## CPSC 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 405 - Data Mining \& Analysis

This course provides a survey of data analysis and data mining techniques for finding patterns in data. It will emphasize using data models, data gathering and storage, selection and preparing of data, model building and testing and interpreting and validating results. If the student takes CPSC 405 for the undergraduate program, he/she can take CPSC 605 for additional credits.

Prerequisite: CPSC $323^{D}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Students cannot enroll who have a program in Health Informatics.

## CPSC 406 - Data Visualization

This course provides a survey of techniques for visualizing patterns in data. The course will emphasize modern and traditional methods for data visualization, including interactive visualization for data sets too large to display statically. If the student takes CPSC 406 for the undergraduate program, he/she can take CPSC 606 for additional credits.

Prerequisites: (MATH $152^{\mathrm{D}}$ or STAT $152^{\mathrm{D}}$ ) and CPSC $146^{\mathrm{D}}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Summer Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 415 - Advanced Bioinformatics

Advanced topics in Bioinformatics will be discussed in this course including: motif searching, biological networks analysis, next generation sequencing data analysis, programming for genomic data analysis, Data Mining techniques for biology problems such as Clustering of gene expression data, and Classification for protein function prediction.

Prerequisite: CPSC $342^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

## CPSC 417 - Advanced Web Technologies

This course emphasizes up-to-date technologies that enable the development of interactive Web applications. New Web standards and their applications and development toolkits will be exemplified. Advanced concepts in scripting languages for the Unix and Windows environments will be discussed.

Prerequisite: CPSC $317^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 423 - Computer Networks

This is an introduction to computer networks and data communications. Course content includes: the layered model; transmission and multiplexing; data link protocols; packet, point-to-point, and satellite transmission; local area networks; security and privacy. Examples of some well-known networks will be studied.

Prerequisites: CPSC $150^{\mathrm{D}}$ or CPSC $246^{\mathrm{D}}$ or CPSC $217^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 427 - IT Capstone Project

This Information Technology majors' course uses graphical user interface design concepts to introduce interface design possibilities. This senior-level course requires students to produce an intricate interface that utilizes systems design, information management, systems administration and security, and programming concepts from lower-level courses. This course is intended as a capstone course that introduces human user interface theory and practice.

Prerequisite: CPSC $317^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 450 - Internship

Professional work experience performed as an intern at selected agencies supervised both by the agency and by the Computer Science Department.

Credits: 1-12
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 456 - Introduction to Computer Graphics

This course introduces the basics of interactive computer graphics including software and hardware requirements for computer graphics systems, graphics data structures, algorithms and programming languages, raster and random display devices, and graphics applications. Students will work with dedicated graphics computers in completing laboratory exercises and course projects.

Prerequisite: CPSC $374^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 464 - Principles of Concurrent Programming and Operating

 SystemsAn introduction to operating systems with emphasis on fundamental principles. These include store management, processor management, file systems, and input/output. Laboratory exercises are assigned using a language that supports concurrency. Distributed and "real time illustrations are used, as well as standard operating system illustrations.

Prerequisites: CPSC $370^{\mathrm{D}}$ and CPSC $374^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 466 - Compiler Design and Implementation

This is an introduction to language translation. Topics include specification of languages and its relation to automata, lexical analysis, finite state machines, context free languages, LL and LR parsing methods, syntax directed translation, error recovery, code generation, and portability.

Prerequisites: CPSC $370^{\mathrm{D}}$ and CPSC $374^{\mathrm{D}}$ and CPSC $376^{\mathrm{D}}$ and CPSC $378^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 474 - Advanced Architecture \& Parallel Computing

This course will investigate the architecture and software models involved in parallel computing. We will explore both shared-memory and distributed-memory systems, along with the algorithms and languages involved in those systems.

Prerequisites: CPSC $370^{\mathrm{D}}$ and CPSC $374^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 476 - Artificial Intelligence

A survey of artificial intelligence topics including heuristic programming, search techniques, knowledge representation, expert systems, vision and speech in automators, pattern recognition, and robotics.

Prerequisite: CPSC $374^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 478 - Analysis of Algorithms

An advanced study of algorithms and data structures. Analysis of algorithms, space and time complexity, and the NP classes will be considered. Significant illustrative individual or group programming projects are required. Examples may be drawn from heuristic programming, encipherment, natural language processing, object code generation, combinatorial analysis, graphics, robotics, relational databases, or other algorithmic issues of current importance.

Prerequisite: CPSC $374^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 480 - Topics in Computer Science: Machine Learning

This course provides an overview of concepts, techniques, algorithms and applications in machine learning, including supervised learning (e.g.: classification and regression), unsupervised learning (e.g.: clustering and dimensionality reduction), and learning theory (e.g.: bias/variance; regularization and feature selection). Moreover, the course will include research projects that will require writing computer code, conduction experiments, and writing papers. If the student takes CPSC 480 for the undergraduate program, he/she can take CPSC 680 for additional credits.

Prerequisite: CPSC $374^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 485 - Big Data Analytics

This is a project driven course designed to provide techniques for acquiring, managing and analyzing massive unstructured data. Consideration will be given to both batch mode processing and real time analytics. Specific topics include the MapReduce parallel computing paradigm, distributed file systems, the Hadoop Ecosystem and its components such as Pig, Hive, HBase, Oozie, Yarn and Mahout, NoSQL databases, cloud computing, techniques for clustering and visualizing big data, Web analytics, machine learning in a big data setting and data setting and data security issues. Applications in business, engineering, health care and social networks will also be covered. If the student takes CPSC 485 for the undergraduate program, he/she can take CPSC 685 for additional credits.

Prerequisite: CPSC $405^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 488 - Software Engineering

The course is the study of software engineering principles and design. The course will emphasize requirement analysis, design, testing, debugging and implementation of a semester long project. Students will work in groups for the project to be implemented. There will be multiple phases for the design and implementation of the project. The project will be implemented using a standard programming environment.

Prerequisite: CPSC 374 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 490 - Independent Study

Supervised study in a special interest area. Prerequisites: Two computer science courses selected from 370 or above, permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CPSC 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Corporate Security (CSS)

## CSS 100 - Modern Security

This course will explore the ever-changing security environment confronting domestic governments in securing its homeland, for-profit and non-profit organizations, and individuals. This course will discuss the history of security, the sub-topics of security, and whether insecurities can be eliminated, prevented, or merely managed. Students will apply risk assessment procedures, devise solutions to complex security issues, and weigh the strengths and weaknesses of those solutions. The student will be able to assess the complexity of solving modern day security problems when confronting economic limitations, policy and legal implications, and the feasibility of providing security to diverse populations.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## CSS 120 - Introduction to Private Security

This course will provide an overview of the private security field and the numerous complexities within it. Topics include but are not limited to an overview of private security, the basic goals and responsibilities of the industry, the challenges facing security, and various security systems for infrastructure, institutional and commercial organizations.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## CSS 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## CSS 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
CSS 195 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. The course outline will be determined by the instructor based on key developments, trends or specialized content within homeland security. Permission of instructor

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## CSS 198-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CSS 210 - Physical Security

This course discusses the methods, processes, and policies surrounding the security protection of the workplace. Students will study the historical roots of physical protection of assets, cultural contexts and interpretations of security efforts, as well as the way modern technology is changing the methods and focus of protection programs.
The important elements of physical barriers, electronic controls and surveillance, and procedural efforts to secure assets will be examined. The role of the Security Manager in regulated workspaces will be discussed.

Prerequisite: CSS $120^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms

## CSS 240 - Security Management

This course will examine the security department's role and function within an organization and the activities associated with operating and managing the department. This course will also look at how to manage various relationships security professionals encounter both internally and externally.

Prerequisite: CSS $120^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms

## CSS 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## CSS 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. The course outline will be determined by the instructor based on key developments, trends or specialized content within homeland security. Permission of instructor.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## CSS 298-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CSS 300 - Personnel Security

This course discusses the structures, processes, and regulations surrounding the security protection of people in the workplace. Students will study and weigh the advantages and legal restrictions of background checks as a condition of employment. Protection of workers in general, as well as programs to safeguard executives, workers in controversial industries/fields, and the design of policies and programs providing protection for workers with special issues outside the workplace will be examined. Defining, preventing and reacting to workplace violence will be explored.

Prerequisites: CSS $120^{\mathrm{D}}$ or HSS $120^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CSS 320 - Security Risk and Emergency Management

This course will provide guidance how to conduct risk assessments, handle emergencies and develop and implement business contingency and disaster recovery plans. students will learn how to develop and use risk surveys and other information gathering techniques, and design and implement controls by understanding cost/benefit analysis, crime prediction, response planning and business impact analysis.

Prerequisite: CSS $240^{C}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.
CSS 351 - Fraud
Approximately 5\% of U.S. organizations annual revenues are lost to fraud each year. This course explores the historical and social problems created by fraud, the ethical and legal issues fraud presents to organizations and our economy; and the principles of fraud detection, examination, and prevention organizations employ to combat fraud in order to minimize both economic losses and a loss of jobs.

Credits: 3
Term(s) Typically Offered: Offered Fall, Winter, \& Summer
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CSS 352 - Law \& Ethics in the Workplace

This course explores the historical, legal, ethical and practical implications of legal rights of workers in organizational relationships. This course will provide the historical evolution of protective legislation for workers and the continual refinement of common law to workers" rights. Ethical issues not addressed by the law will be explored as well as $t$ he importance of diversity in order to provide maximum growth for society and all individuals.

Credits: 3
Term(s) Typically Offered: Offered Winter, Spring\&Summer Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

CSS 354 - Risk Assessment and Fraud Prevention
Every level of today's organizations must make ethics and organizational integrity a priority. Controlling for risk and preventing fraud are critical skills leaders in every organization will be called upon to exercise. Focus must be placed on fraud prevention, internal controls, compliance with regulations and other risk exposure. Students will apply course concepts to their own disciplines.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CSS 360-Specialized Fraud Schemes

This course will examine specialized frauds such as identity theft, financial institution fraud, payment fraud, insurance fraud, healthcare fraud, contract and procurement fraud, tax fraud, and bankruptcy fraud. A thorough analysis of money laundering and its place in specialized fraud schemes will be reviewed. For each type of specialized fraud, we will explore the various types of fraud schemes within these specialized frauds and the controls that can be implemented to prevent or detect them.

Prerequisites: CSS $351^{\mathrm{D}}$ and ACCT 209 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in CERT - Fraud, Fraud or Organizational Security.

## CSS 370 - Fraud Law and Report Writing

This course will examine both domestic and international laws surrounding fraud. We will discuss the special non-governmental agencies assisting in the fight against fraud domestically and worldwide and their recommended compliance guidelines. In this class we will also discuss how to write an effective fraud report for various audiences. Ethical responsibilities of a fraud examiner will also be examined

Prerequisite: CSS 351 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Fraud.

## CSS 390-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CSS 395-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. The course outline will be determined by the instructor based on key developments, trends or specialized content within homeland security. Permission of instructor.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CSS 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CSS 420 - Fraud Examination

This course will expose the student to an in-depth analysis of the fraud schemes perpetrated by those within and external to organizations. the elements of fraud schemes, the red flags associated with each scheme and how the scheme can be prevented and detected will be analyzed. This course will also emphasize financial statement fraud, and external fraud schemes from customers, vendors and unrelated third parties. Corporate espionage will also be covered.

Prerequisite: CSS $351^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Corporate Security.
CSS 430 - Corporate Security Law
This course will cover the pertinent security laws surrounding an investigation and developing a case for prosecution. It will also cover the various laws security professionals can breach while conducting security investigations.

Prerequisite: CSS $351^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Corporate Security, Fraud or Organizational Security.

## CSS 440 - Corporate Security Investigation

This course will provide the fundamentals of corporate security investigations, the methods used in an investigation, how to build a case, apply investigative strategies, use investigative technology and write an effective report. The course will also emphasize the ethics, values and laws one must consider when conducting an effective investigation.

Prerequisite: CSS $351^{C}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Corporate Security, Fraud or Organizational Security.

## CSS 450 - Internship

Supervised placement and research in selected public and private agencies.

Credits: 3-9
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CSS 460 - Corporate Security Capstone

Student will apply and demonstrate prior knowledge, skills and abilities to a major project which will be communicated both in written and oral forms. This course will cover current topics in corporate security and current global issues challenging security. A discussion of professional ethics, proper etiquette and interviewing skills, negotiation and conflict resolution skills will also be discussed.

Prerequisites: CSS $440^{\circ}$ and CSS $430^{\circ}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Corporate Security.

## CSS 490 - Independent Study

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. students work on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CSS 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. The course outline will be determined by the instructor based on key developments, trends or specialized content within homeland security. Permission of instructor.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CSS 498-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Counseling \& Development (CDEV)

## CDEV 139-University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## CDEV 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
CDEV 195 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## CDEV 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CDEV 201 - Interpersonal and Group Dynamics

Interpersonal behavior in small groups, with attention to group structure, individual factors, communication, and techniques. Treatment of leadership, group pressures, the effect of the group on personality, and group aims.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## CDEV 248 - Human Development and Education

A study of the various stages of physical, intellectual, and emotional development, from pre-school age through adolescence, with reference to the effects upon the learning and educational process.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): 21 st Century Healthcare, Education, Fighting
Social Problems, Healthy Body, Mind \& Environment, Transfer Thread
Completion Course, Well-Being of Children and Youth, Who Do We Think We Are

## CDEV 249 - Child Development

A study of the various stages of development from conception to adolescence. Attention is directed to the physical, emotional, intellectual and social development of the child.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## CDEV 250 - Adolescent Psychology

A study of the physical, mental and emotional development during the changes from childhood and the influence on attitudes and behavior of the age group in relation to the theories. Psychological principles are applied to the problems of family, community and school adjustment, as well as to the development of the persons.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## CDEV 251 - Mental Health in America

What is mental health? How does American society view mental illness? What systems are there to support people who struggle with mental health concerns? Do these systems work? How and why does someone get diagnosed? This course will explore all these questions and more as students will explore mental health in the context of American society past and present with implications for the future. Current issues and trends in mental health and wellness will be explored including the current mental health system in America, advocacy for mental health issues and treatment, stigma in society related to mental health, how issues of diversity impact mental health and treatment, and how the topic of mental health impacts individuals and society.

## Credits: 3

Thematic Thread(s): 21 st Century Healthcare, Building a Healthy Society, Body and Self, Demystifying Crime \& Justice, Education, Gender and Diversity, Transfer Thread Completion Course, Well-Being of Children and Youth

## CDEV 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CDEV 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## CDEV 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CDEV 390-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CDEV 395 - Undergraduate Workshops

Special topics of interest to undergraduates and selected community members. A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CDEV 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CDEV 490 - Independent Study

A program of independent work con-ducted by a student who has demonstrated academic proficiency. Prerequisite: Permission of the instructor, advisor, departmental chairperson, and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings.Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CDEV 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CDEV 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Criminology \& Criminal Justice (CRIM)

## CRIM 105 - Human Diversity

An orientation to living and working with diverse populations within modern American society, including examination of the strengths and stresses associated with diversities.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): 21 st Century Healthcare, Transfer Thread Completion Course

CRIM 110-Introduction to Criminology \& Criminal Justice Systems This course covers the basic principles of the criminal justice system and criminological theory. Students will be introduced to policing, corrections, the criminal court process, legal procedures, and criminological theories, among other fundamentals of the criminology discipline.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Comparative Perspectives of Justice \& Society, Demystifying Crime \& Justice, Fighting Social Problems, Transfer Thread Completion Course

## CRIM 115 - Proseminar

This is a writing intensive course that prepares criminology/criminal justice students for standard academic and professional expectations for the field. This class encompasses writing requirements and style for criminal justice and basic library research skills.

Credits: 1
Term(s) Typically Offered: Offered Spring Terms
Enrollment is limited to students with a program in Criminology \&
Criminal Justice or Criminology.
CRIM 120 - Crime: Why Do We Do It?
This course examines different theoretical explanations of criminal behavior and how to test them using social science research methods. Further, the course explores how to translate these theories into public policy and draws attention to the interdisciplinary nature of the field of criminology.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Enrollment limited to students with the ROCK STUDIES STUDENT
attribute.

## CRIM 139-University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## CRIM 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
CRIM 195 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## CRIM 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CRIM 253 - American Policing

This course covers the introductory elements of US policing and law enforcement. Topics of study include operations, legal aspects, ethics, diversity and other key issues.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## CRIM 263 - Introduction to Criminal Procedure

This course covers the processes of criminal procedure. It includes landmark legal cases, search and seizure requirements, use of force, arrest, interrogation and court structures.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## CRIM 273 - American Corrections

Examines the legally sanctioned methods of dealing with lawbreakers. The correctional methods studied will include institutional and community corrections, and the newer dispositions such as community service, restitution, and electronic monitoring. Current issues examined will include prison gangs, the problem of AIDS, women in prison, and prison privatization.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment is limited to students with a program in Criminology \&
Criminal Justice or Criminology.

## CRIM 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CRIM 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## CRIM 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CRIM 301 - Theoretical Criminology

A critical review of pure and applied theory within the field of criminology, including coverage of classical, biological, psychological, sociological, economic, political, and integrated theories of the causes of crime.

Prerequisite: CRIM $110^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Criminology \& Criminal Justice.

## RIM 302 - Sexual Violence

This course will explore multiple aspects of sexual violence including typologies and legal classifications of sex crimes, the motivations of offenders, victimology/trauma, studies of convicted rapists, social/ cultural/media effects and context, and the criminal investigation of sex offenses.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Transfer Thread Completion Course, Violence
Enrollment limited to students with a semester level of Junior 1, Junior 2,
Senior 1 or Senior 2.

CRIM 317 - Statistical Methods in Criminology and Criminal Justice
This course is designed to introduce students to basic principles of probability theory, data analysis and data interpretation. Using SPSS, students will engage in basic data analysis, including descriptive and inferential statistics. More specifically, this course will cover univariate and bivariate measures, analyses of cross classified data, correlation, ttests, analysis of variance, regression and related measures. Emphasis will be placed on how to use, interpret and understand some of the basic techniques used by criminal justice researchers and practitioners.

Prerequisite: CRIM $110^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Criminology \& Criminal Justice.

## CRIM 318-Research Methods in Criminology and Criminal Justice

This course is an introduction to criminological research that is intended to develop the student's research and analytical skills. Specifically, the course will focus on the theory of inquiry, research design, data gathering methods (surveys, secondary data and unobtrusive methods, field observation), evaluation research analysis, sampling and research reporting. Students will also learn how to use library resources as well as electronic resources.

Prerequisite: CRIM $110^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Criminology \& Criminal Justice.

CRIM 321 - Criminal Justice interventions 1
A review of basic theories, philosophies, methods, and skills that underlie successful community and correctional-based interventions with individuals serviced by the federal, state, and/or local criminal justice systems. Coverage will include the overrepresentation of minorities within the American correctional system and service provision to culturally diverse populations.

Prerequisites: CRIM $110^{\text {D }}$ and CRIM $273^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Criminology \& Criminal Justice.

## CRIM 322 - Criminal Justice Interventions 2

A review of basic theories, philosophies, methods, and skills that underlie successful community and correctional-based interventions with an emphasis on groups and families serviced by the federal, state, and/or local criminal justice systems. Topic coverage also includes examining the overrepresentation of minorities under correctional supervision and service provision to culturally diverse populations.

Prerequisites: CRIM $110^{\mathrm{D}}$ and CRIM $273^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CRIM 326 - Victimology

This course will present the student with a detailed understanding of the scope of victimology and the extent of criminal victimization by examining specific crimes types, the impact of crime on victims and society, the role of victims within the criminal justice system, specific remedies, and victim rights and services.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Demystifying Crime \& Justice, Transfer Thread Completion Course, Violence
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
CRIM 327 - Criminal Justice and the Multicultural Community
This course will examine current issues and social problems relating to the administration of justice in a culturally diverse society. The focus of the course will be on the changing ethnicity of communities and related changes in social and institutional public policy.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Comparative Perspectives of Justice \& Society, Transfer Thread Completion Course, Violence
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CRIM 328- Transnational Crime \& Justice

This course focuses on the historical development and current status of various forms of transnational crime from the perspective of the international criminal justice community. This course explores the roots and operations of organized crime and how globalization has facilitated the emergence of transnational organized crime in the U.S. and in various regions throughout the world. Particular emphasis is given to issues of drug trafficking, illegal arms trade, money laundering, human trafficking and sex trafficking. This course also examines the current strategies for the containment and control of such activities.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): International Business, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CRIM 333 - Crime, Justice and Society

An exploration of the major theories of crime with an emphasis of those contemporary theories that explore the relationship of race, gender, and crime. Topics may include prostitution, rape, hate crimes, and crimes against the gay community.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Building a Healthy Society, Comparative
Perspectives of Justice \& Society, Demystifying Crime \& Justice, Fighting Social Problems, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CRIM 343 - Criminal Investigations

This course provides an introduction to criminal evidence and investigations. The topics include how evidence is collected and developed, the different types of evidence, the role of evidence in investigation, and basic investigative principles.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CRIM 345 - Juvenile Delinquency

The behaviors of adolescents in modern societies have resulted in the need for society to exert various methods of social control. The reasons for these formal and informal control strategies are examined from a sociological view of institutional changes.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Transfer Thread Completion Course, Well-Being of Children and Youth
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CRIM 360 - Police and Society

This class examines the role of law enforcement and policing in contemporary society.This course also covers the history of policing, policing theory, police culture, different law enforcement agencies, and the social role of modern police agencies.

Prerequisite: CRIM $110^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Criminology \&
Criminal Justice or Criminology.

## CRIM 368 - Comparative Criminal Justice Abroad

This course examines similarities and differences between the United States' criminal justice system and another country's criminal justice system. The course requires a travel abroad activity that will include experiential learning regarding criminal justice components, such as police, courts, and corrections programs.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2 or Sophomore 2.

## CRIM 370 - Inside Out Views of Criminal Justice Issues

This course creates a partnership between institutions of higher learning and correctional systems in order to deepen the conversation about criminal justice issues and transform our approaches to understanding crime, society's response to it, justice, inequality, and other issues of social concerns. This semester-long class brings together college students and incarcerated men or women to study as peers behind prison walls.

Prerequisite: CRIM $110^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Criminology \& Criminal Justice.

## CRIM 380 - Women \& the Criminal Justice System

This course will focus on theoretical and contemporary issues involving female practitioners, victims and offenders in the criminal justice system. Students will have the opportunity to become acquainted with and evaluate the political, legal and social issues of crime relating to women. This course will also examine diversity issues. More specifically, this course will examine how gender, race/ethnicity and class are related to the way they are treated in the criminal justice system in the U.S.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Gender and Diversity, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CRIM 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CRIM 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## CRIM 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisite: CRIM $110^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CRIM 402 - Forensic Behavior:Crime and the Individual

This course explores aspects of mental illness, cognitions, psychopathology, mental disorders and other psychological aspects of criminal behavior and their relation to theories of crime. This is a crosslisted course that will fulfill either graduate or undergraduate credit.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## CRIM 404 - Applied Criminal Procedures

This course addresses the history, legalities, trends and controversies in law adjudication as it pertains to issues of crime and justice. Students will examine the topics of criminal law, landmark cases, prosecution, defense, court procedures and decision-making and their interaction with our society.

Prerequisite: CRIM $110^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CRIM 405 - White Collar Crime

This course explores the complex issues surrounding white collar crime. In terms of white collar crime, the topics addressed may include: the complexities of defining it, theoretical explanations for it, the economical, physical and social costs that result from these types of crimes, and the issues the criminal justice system faces in trying to control it.

Prerequisite: CRIM $110^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CRIM 408 - Capstone: Ethics and Criminal Justice

This course examines the traditional schools of ethical thought and how they are applicable to the field of criminology, crime, and justice. Students will study formal works in ethics and morality and develop understanding of their role in the criminal justice professions as well as issues of crime, law, and society. This course is designed as a writing intensive course.

Prerequisite: CRIM $115^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$. Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2, Junior 1,
Junior 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students with department of Criminology \& Criminal Justice.

## CRIM 414 - Criminal Justice Policy

This course explores the contemporary criminal justice system, major systems of social control and their policies and practices; as well as policies related to courts, victimology, juvenile justice and comparative criminal justice. These policies will be studied through the lenses of individual liberties, collective formalized controls, multicultural factors and issues related to race, gender and diversity.

Prerequisite: CRIM $110^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Criminology \& Criminal Justice.

## CRIM 416 - Community Corrections

The course explores the origins of community corrections and its role in the American criminal justice system. Starting with pre-arrest diversion, the course covers the major issues and topics associated with community correction programs. Students are required to complete a service learning component.

Prerequisites: CRIM $110^{\text {D }}$ and CRIM $273^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CRIM 422 - The Death Penalty

An examination of the problems and issues related to the death penalty in the United States, including the history of capital punishment, important Supreme court decisions, how the various jurisdictions deal with capital cases, the comparative costs of incarceration and executions, miscarriages of justices in capital cases, the impact of minority status and how the criminal justice responds to these issues.

Prerequisite: CRIM $110^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## CRIM 450 - Internship

Supervised placement in selected professional agencies.
Credits: 1-12
Term(s) Typically Offered: Offered Every Term
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CRIM 468-Crime \& Media

This course will examine images of crime and criminal justice as portrayed and presented by the mass media including popular media (fictional television show, music, novels, etc.) as well as "news" programming and print media. More specifically, the course will analyze how crime and criminals, and criminal justice systems (police, courts and corrections) are portrayed by the mass media. This course will analyze the media's relationship to criminological theories as well as to criminal justice policies and practices. This course will also examine how gender, race and class are related to the way crime is depicted in the mass media.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Demystifying Crime \& Justice, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CRIM 490 - Independent Study

Independent research under the guidance of a faculty member. Prerequisite: Permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. (repeatable up to 6 credits) Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CRIM 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## CRIM 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisite: CRIM $110^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## Cybersecurity (CYBR)

## CYBR 101-Cybersecurity in the Era of Evolving Technology

This course covers the fundamental concepts and design principles behind cybersecurity. This course will provide the students with the awareness, knowledge, opportunity and resources to develop the cybersecurity skills required for full participation as informed, responsible, ethical and productive citizens. Through research-oriented discussions and projects, the course will focus on security design, principles, ethics and models that all students should know and be able to apply independently when using technology, computing systems, digital media and information technology, including the internet.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Demystifying Crime \& Justice, The Future, International Business, Transfer Thread Completion Course

## CYBR 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## CYBR 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CYBR 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## CYBR 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CYBR 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CYBR 295-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## CYBR 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## CYBR 301 - Secure Programming

This class will present the basic topics in computer security and their relationship to secure programming. A broad array of topics in secure software development will be covered such as the following: Security models, threats, design principles and secure coding practices. The course will cover programming language features and semantics to evaluate and to facilitate implementation of programs that are free from vulnerabilities. Additionally, different types of systems including webbased systems and some internals of OS kernel software testing and exploitation will be explored. Moreover, the software design patterns to built-in security during the architectural phase of the lifecycle will also be covered in detail.

Prerequisite: CPSC $246^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with a semester level of Junior 1, Junior 2,
Post Baccalaureate, Senior 1 or Senior 2.
Enrollment limited to students in a Bachelor of Science degree.
CYBR 353 - Software Assurance
This class will present a detailed description of software assurance practices, methods, and tools required throughout the software development life-cycle. The students will apply the development life-cycle processes and methodologies to explore common programming errors and to evaluate the common software testing tools.

Prerequisite: CPSC $246^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1 or Senior 2.
Enrollment limited to students in a Bachelor of Science degree.
CYBR 390 - Experimental
A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1, Freshman 2 or Sophomore 1.

## CYBR 395-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CYBR 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CYBR 401 - Software Security Analysis

This course presents the tools and methods for analyzing software security. This course will focus on software penetration testing and will stress the critical aspects of software security testing in all phases of the software development life cycle with special emphasis on applications that are about to be deployed. An in-depth discussion on various security testing methods and tool vulnerabilities will be taught with hands-on demo of concepts during the class. Students will learn how to perform penetration testing in a practical way using well-established tools. The course will cover a wide range of topics such as web architecture, application infrastructure, reconnaissance, discovery, mapping, and exploitation.

Prerequisite: CYBR $353^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with a semester level of Junior 1, Junior 2,
Post Baccalaureate, Senior 1 or Senior 2.
Enrollment limited to students in a Bachelor of Science degree.

## CYBR 471 - Malware Analysis

This course covers foundational knowledge of discovering software vulnerabilities. The topics of reverse engineering and malware investigation will be presented in detail through the study of various cases and hand-on analysis of malware samples. It covers fundamental techniques that are used to analyze both source and binary code to equip the students with enough background knowledge for examining current threats and discussing the actions needed to prevent attackers from taking advantage of both known and unknown vulnerabilities.

Prerequisite: CYBR $401{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1 or Senior 2.
Enrollment limited to students in a Bachelor of Science degree.

## CYBR 490 - Independent Study

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CYBR 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## CYBR 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Dance (DANC)

## DANC 100 - Dance: Art and Culture

This course will include a comprehensive overview of dance as an art form, entertainment, and social activity. A broad historic overview of dance will be presented, as well as information on the role of the dancer, choreographer, and audience. Specific dance genres such as ballet, modern, jazz, and world dance will also be the focus of this course. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## DANC 101 - Wellness for Dancers

The first component of this course will cover body conditioning methods, injury prevention and basic concepts of anatomy and kinesiology. Additionally this course may include, but not be limited to, nutrition, weight management, fitness and strength practices specific to the needs of the dancer. The second component of this course will cover time/ stress management, study skills and an introductory approach to writing techniques and research methodologies. Students may be required to attend on-campus dance events and some may require a fee.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Dance.

## DANC 125 - Experiencing Dance: Techniques and Styles

DANC 125 is an introduction to dance and movement techniques. It will focus on establishing a basic foundation in dance with emphasis on correct alignment, technique, and the unique stylistic components of a variety of dance genres. In this course, students will develop the ability to demonstrate and synthesize technical corrections, understand the elements of dance (space, time and energy), and perceive dance as an art form. This course may include dance genres such as Modern Dance, Jazz, Ballet, Improvisation, African-Based Dance, Social Dance, and dance-related practices such as Yoga and Pilates. In addition to the technical component of the course, students will examine the historic, cultural and social contexts in which these dance styles have been developed. DANC 125 is a blended course. The dance technique component takes place in the dance studio; the lecture/research/ reading/writing component takes place online. This course may be repeated up to nine credits. Prerequisites and Notes: Students may be required to attend dance events and some may require a fee.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Being
American, Body and Self, Creating Art, Healthy Body, Mind \& Environment, Political Arts, Transfer Thread Completion Course

## DANC 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## DANC 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## DANC 195-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## DANC 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## DANC 199-LMA/Performance Techniques

This course will focus on the theoretical and practical application of Laban Movement Analysis and dance performance skills. Students will be encouraged to explore the relationship between research, concept development and personal style through the performance of original solo choreography. Students may be required to attend on and off campus dance events; some may require of fee.

Prerequisites: DANC $200^{\text {D }}$ and DANC $224^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment is limited to students with a program in Dance, Dance

- Performance, Dance- Business Administration, Dance or Dance: Performance.


## DANC 200 - Dance Composition I

This course will be an introduction to the elements of dance (space, time, and energy) and to the practice, theory, and art of dance composition. Experiences in solo and ensemble compositions will focus on improvisation, and lead to understanding content, aesthetics, creating, structuring, and ultimately choreography. Students will be required to attend certain dance events for this course; some may require a fee.

Prerequisite: DANC $224^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Enrollment limited to students with department of Dance.

## DANC 216 - Principles of Dance Production

This course provides knowledge and practical hands-On experience in the many aspects of dance production and performance. A broad range of topics will prepare students for producing their work and collaborating with other artists and disciplines. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment is limited to students with a program in Dance, Dance

- Performance, Dance- Business Administration, Dance or Dance: Performance.


## DANC 220 - Modern Dance Technique: Level II

This second level course is a furthering and continuation of setting the foundation established in DANC 125, providing students with the information and the tools needed to extend technique, skills and performance quality. Course may be repeated for a maximum of 6 credits. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Dance.

## DANC 221 - Ballet II

This course advances students' technical and performance foundation and will allow students to expand their knowledge of ballet technique and vocabulary. Students will examine, analyze and apply technical and performance concepts relative to classical ballet and its history. This course may be repeated for a maximum of 6 credits. Course content will be different each semester. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Dance.

## DANC 222-Jazz Dance II

This course advances students' foundational knowledge of jazz dance by improving and refining their skills in performance, technique, and stylistic approaches to the genre. In addition to experiencing several jazz dance movement styles, students will identify, define, and analyze key concepts of jazz dance. This course may be repeated for a total of 6 credits. Course content will be different each semester. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with department of Dance.

## DANC 223 - Creative Dance for Children

The intellectual and artistic impact of Creative Dance for Children, in both academic and studio settings serves as the primary focus of this course. Laban-based movement principles will be explored through creative and improvisational experiences leading to lesson and unit plans in dance addressing a variety of academic areas suitable for use by classroom teachers and dance specialists. Students will gain an appreciation for dance as an art form and an understanding of how dance can address several academic disciplines most appropriate for inclusion in a grade K-5 curriculum. State and national dance standards will be addressed with additional experiences in lesson planning, pedagogy and peer teaching. Additionally, basic knowledge in anatomy and body mechanics, nutrition and wellness, and an awareness of safe/unsafe practices in the home, school and community will be provided. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Education, Transfer Thread Completion Course, Well-
Being of Children and Youth
DANC 224-Improvisation
This course provides the student opportunities to explore the processes of discovering, creating and performing movement spontaneously through experimental practice, creative research, and writing. Course content will vary each semester. Students will be required to attend certain dance events for this course; some may require a fee. The course may be repeated for a maximum of 6 credits.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with department of Dance.

## DANC 271 - Dance Technology

This hands-on course will explore the interactive possibilities between the live dancer and the projected image, as well as thetemporal and spatial possibilities of dance on film. Students will direct, shoot and edit original video compositions using current technology, as well as perform in a multi-media work.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment is limited to students with a program in Dance, Dance

- Performance, Dance- Business Administration, Dance or Dance: Performance.


## DANC 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## DANC 295-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## DANC 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-3
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with department of Dance.

## DANC 299 - Dance Rehearsal and Production

This course provides dance majors and minors the opportunity to receive credit for the numerous hours spent in rehearsals and performances. Students will select specific activities and then develop a contract for completion of responsibilities and evaluation. Tasks may include choreographer, rehearsal assistant, rehearsal and performance as a dancer, publicity or as member of the technical support staff during performance (stage manager, running crew, usher, lighting). This course requires an audition and/or permission of the faculty member of record. Both 299 and 499 may be repeated up to 4 credits.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment is limited to students with a program in Dance, Dance

- Performance, Dance- Business Administration, Dance or Dance:

Performance.

## DANC 300 - Dance Composition II

This second level of dance composition will include creating choreography based on specific forms of movement and music, emotion oriented and movement oriented dances, dances utilizing props and sets, and site-specific dance. Students will be required to attend certain dance events for this course; some may require a fee.

Prerequisite: DANC $200^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Enrollment is limited to students with a program in Dance, Dance

- Performance, Dance- Business Administration, Dance or Dance: Performance.


## DANC 305-Society and Social Dance

This course will examine the relationship between social dance and the social, political and cultural climate of the society in which the specific dance forms were created and performed. Emphasis will be placed on 20th century American social dance forms and styles. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Building a Healthy Society, Body and Self, Creating Art, Transfer Thread Completion Course

## DANC 318 - Dance in the Political World

Through various critical lenses, this course analyzes the choreographic production of influential dance makers in a variety of geographic areas through the present day. This course is anchored on the term choreography and its multiple meanings, ranging from orchestrated movement performed on a proscenium stage to organized movements and actions of bodies in everyday life. This course is structured to permit the student to view dance through a variety of theoretical lenses. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Political Arts, Transfer
Thread Completion Course, Transnational Culture

## DANC 320 - Modern Dance Technique: Level III

This third level course requires the student with an established foundation in modern dance to extend their knowledge and acquire additional understanding of technical material and performance quality. Course may be repeated for a maximum of 6 credits. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1 may not enroll.
Enrollment limited to students with department of Dance.

## DANC 321 - Ballet III

This course advances the competencies gained in DANC 221; movements and combinations increase in complexity and difficulty to further extend technique and performance ability. In addition to classical ballet, contemporary ballet vocabulary and aesthetics will be introduced, along with examining theories of classical and contemporary ballet. This course may be repeated for a maximum of 6 credits. Course content will be different each semester. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1 may not enroll.
Enrollment limited to students with department of Dance.

## DANC 322- Jazz Dance III

This course advances the competencies gained in DANC 222; movements combinations build in complexity and difficulty through experiencing a broad range of jazz dance periods and styles. Students will analyze the technique and choreography of key jazz dance figures and aesthetics within the larger jazz dance continuum. This course may be repeated for a total of 6 credits. Course content will be different each semester. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1 may not enroll.
Enrollment limited to students with department of Dance.

## DANC 323 - Teaching of Dance

This course is designed to introduce students to the theory and practice of sound dance teaching and ethical teaching practices. Information on critical thinking, teaching and learning styles, imagery, diversity, and assessment will be explored. Students' abilities and strengths as teachers will be assessed and evaluated throughout the semester. This course must be taken with Field Experience, DANC 350, which allows the students to have practical teaching experiences. Students will be required to attend certain dance events for this course; some may require a fee.

Prerequisites: DANC $223^{\mathrm{D}}$ and DANC $350^{* \mathrm{D}}$ and DANC $326^{\mathrm{D}}$ (may be taken concurrently).
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students with department of Dance.

## DANC 324 - Music for Dance

This course is designed to provide students with information regarding music for dance performance, production, and accompaniment. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1 or Freshman 2 may not enroll.
Enrollment is limited to students with a program in Dance, Dance

- Performance, Dance- Business Administration, Dance or Dance: Performance.


## DANC 326 - Dance Kinesiology

This course includes the study of human movement specific to dance, with emphasis on the anatomical principles and the laws of physics as they apply to dance technique and performance. The course includes structural and neuromuscular analyses including individual analysis of alignment, muscular imbalances, body types, conditioning needs and movement behavior. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Dance.

## DANC 350 - Field Experience in Dance Technique

Field Experience provides the opportunity for students to teach in private studios, recreation centers and/or the public/private school systems. To be taken concurrently with DANC 323 . Students will be required to attend certain dance events for this course; some may require a fee.

Prerequisites: DANC $223^{\mathrm{D}}$ and DANC $323^{* D}$ and DANC $326^{\mathrm{D}}$ (may be taken concurrently).
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students with department of Dance.

## DANC 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## DANC 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## DANC 398-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.
Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## DANC 399 - Repertory

This course provides students with an in-depth experience in an aspect of scholarly research, performance experience and/or creative process. This course may be repeated for a total of 6 credits. Course content will vary each semester the course is offered. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment is limited to students with a program in Dance, Dance

- Performance, Dance- Business Administration, Dance or Dance: Performance.


## DANC 419 - Dance in Contemporary Times

This course examines specific genres and historical developments in dance in the 20th and 21 st centuries. The aesthetics and philosophies of leading dance artists will be explored. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Dance, Dance

- Performance, Dance- Business Administration, Dance or Dance: Performance.


## DANC 420 - Modern Dance Technique: Level IV

This fourth level course is for the student who demonstrates a strong technical foundation, and accurately performs dance movements and combinations consistently. Course may be repeated for a maximum of 6 credits. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Dance.
DANC 421 - Ballet IV
This fourth level pre-professional course advances the competencies gained in DANC 321 and is for the student who demonstrates a strong technical foundation and accurately performs both classical and contemporary ballet material with consistency while implementing artistic choices. Students will connect and evaluate their understanding of the history of ballet to contemporary issues. This course may be repeated for a maximum of 6 credits. Course content will be different each semester. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Dance.

DANC 422 - Jazz Dance IV
This fourth level pre-professional course advances the competencies gained in DANC 322 and is for the student who demonstrates a strong technical foundation and accurately performs a broad range of jazz dance styles and repertory with consistency, personal style, and implementing artistic choices. Students will analyze the political and social undercurrent of jazz dance in America. This course may be repeated for a total of 6 credits. Course content will be different each semester. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1 or Freshman 2 may not enroll.
Enrollment limited to students with department of Dance.

## DANC 424 - Contemporary Partnering

This course investigates the techniques of Contact Improvisation to develop contemporary partnering. Students will be required to attend certain dance events for this course; some may require a fee.

Prerequisite: DANC $224^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 2
Term(s) Typically Offered: Offered Fall Terms Even
Students with a semester level of Freshman 1 or Freshman 2 may not enroll.
Enrollment is limited to students with a program in Dance, Dance - Performance, Dance- Business Administration, Dance or Dance: Performance.

## DANC 425 - Senior Capstone I: Dance Research

Advanced level research, writing, and discussions will lead to the development and presentation of the student's senior project. Readings and discussions on dance philosophy, aesthetics, leadership, and arts advocacy will be the basis of this course. Practical experiences in resume and grant writing, graduate school applications, interviews, and career planning will be covered.

Prerequisite: DANC $326^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2, Junior 1, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students in the BA 5153, BFA 5353, BFA 5354 or
BFA 5355 programs.

DANC 426 - Modern Dance Technique: Level V
This fifth level course is for students who can demonstrate total integration of technique and performance, including sensitivity to aesthetic concepts. Students will focus on the following: a continual refinement and advancement in the level and knowledge of technique, quality of performance, and aesthetic concepts; a clear understanding of dance as a profession and demonstrated professionalism and maturity. Course may be repeated for a maximum of 6 credits. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Dance.

## DANC 428 - Modern Dance Technique: Level VI

This sixth level modern dance course is for the student who can execute technique and performance at an advanced level and knows, understands, and can demonstrate dance theory and concepts. This course is for the dancer who is at the pre-professional level. Course may be repeated for a maximum of 6 credits. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students with department of Dance.

## DANC 430 - BFA Capstone II: Performance, Choreography, and Entrepreneurship

This BFA capstone course will include advanced-level research, writing, and discussions, and will lead to the development, production, and presentation of the student's senior project. The course will include practical, theoretical, philosophical, and artistic resources applicable to a professional career in dance or related field, and include an emphasis on the University's Student Learning Outcomes.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment limited to students in the BFA 5353, BFA 5354 or BFA 5355 programs.

## DANC 450 - Dance Internship

Supervised placement and research in an appropriate agency. For further information, contact the Department of Dance. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-9
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.
Enrollment is limited to students with a program in Dance, Dance

- Performance, Dance- Business Administration, Dance or Dance:

Performance.

## DANC 490 - Independent Study

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## DANC 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## DANC 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.
Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Dance, Dance

- Performance, Dance- Business Administration, Dance or Dance: Performance.


## DANC 499 - Dance Rehearsal and Production

This course provides dance majors and minors the opportunity to receive credit for the numerous hours spent in rehearsals and performances. Students will select specific activities and then develop a contract for completion of responsibilities and evaluation. Tasks may include choreographer, rehearsal assistant, rehearsal and performance as a dancer, publicity or as member of the technical support staff during performance (stage manager, running crew, usher, lighting). This course requires an audition and/or permission of the faculty member of record. Both 299 and 499 may be repeated up to 4 credits.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students with department of Dance.

## Economics (ECON)

## ECON 105-Economics of Social Issues

As an introductory course, it is intended to provide an understanding of how our economic system works. It examines the forces that determine what, how much and who obtains the outputs of the economy, and explains the issues behind current economic problems. A framework of building blocks from micro, macro, and international economics is developed to enable students to comprehend the differences among alternative solutions and to understand the implications of policy issues constantly confronting a mixed dynamic economy.

Credits: 3
Term(s) Typically Offered: Offered Winter, Spring\&Summer
Thematic Thread(s): Transfer Thread Completion Course
ECON 139 - University Seminar
University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## ECON 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
ECON 195-Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## ECON 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ECON 201 - Principles of Macroeconomics

Definition of economics; concepts and institutions; demand, supply and the price system; national income; employment and fiscal policy; monetary policy; economic stability and growth.

Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): Transfer Thread Completion Course

## ECON 202 - Principles of Microeconomics

Economics of the firm; resource allocation; price and output determination; market structure; current economic problems; international economics.

Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): Transfer Thread Completion Course

## ECON 211 - Real Estate Finance

The study of nature and scope of real estate, factors affecting demand and supply, property rights, title, deeds and title closing, sources of financing, real estate valuation, taxes, leveraged buy-outs, and real estate investment decision.

Credits: 3
Term(s) Typically Offered: Offered as Needed
ECON 219 - Business Analytics I
Probability and statistics in a business environment encompassing descriptive statistics, probability theory, hypothesis testing, linear regression and correlation. Prerequisites: Algebraic proficiency and microcomputer proficiency. Cross-listed as MGMT 219.

Credits: 3
Term(s) Typically Offered: Offered Every Term

## ECON 290-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## ECON 295-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## ECON 298-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ECON 301 - Macroeconomic Analysis

Determination of national income and employment. National income accounts as measures of aggregate economic behavior. Analysis of income stability, unemployment, inflation and growth.

Prerequisites: ECON $201^{\text {D }}$ and ECON $202^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ECON 302 - Microeconomic Analysis

Intermediate price theory including theories of demand, supply, production, resource allocation, market structure, general equilibrium and risk analysis.

Prerequisites: ECON $201^{\text {D }}$ and ECON $202{ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

ECON 304 - Money and Banking
Emphasis is upon monetary policy, how it is implemented, the theories on which it is based, and the implication of this policy on our economy.

Prerequisite: ECON $201^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ECON 312 - Critical Choices in Health Care Policy

This course analyzes the health care sector. It presents reasons for the growth in health care expenses, assesses how and why they are likely to grow, and details policy options that confront health care administrators, consumers, employers, and government officials.

Prerequisite: ECON 202 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): 21 st Century Healthcare, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ECON 315 - Economics of Sustainable Development

Economic causes and effects of pollution are discussed along with the issue of sustainable economic development. government policy with respect to the environment and renewable energy will be surveyed. The framework connection between sustainability and the core functions of business for profit in the global economy will be presented.

Prerequisite: ECON 202 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Sustainable International Development,
Sustainability, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ECON 318 - Intermediate Statistical Analysis

Statistical analysis encompassing multiple regression and correlation, ANOVA (simple and multivariate), goodness of fit, statistical decision analysis, and advanced forecasting techniques.

Prerequisites: ECON $219^{\text {D }}$ or MGMT $219^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ECON 319- Business Analytics II

This course introduces various methods on how to analyze large sets of business data in order to uncover potential business opportunities. Students will learn both predictive analytics and prescriptive analytics. The predictive analytics include trend analysis, forecasting techniques, data mining, and spreadsheet modeling. Prescriptive analytics covers linear optimization and decision analysis. Business software such as productivity software, data visualization, and business intelligence software will be heavily used as a main focus of learning.
Prerequisites: (ECON $219^{\mathrm{D}}$ or MGMT $219^{\mathrm{D}}$ or STAT $152^{\mathrm{D}}$ ) and (MATH $113^{\mathrm{D}}$ or MATH $115^{\mathrm{D}}$ or MATH $117^{\mathrm{D}}$ or MATH $118^{\mathrm{D}}$ or MATH $122^{\mathrm{D}}$ or MATH $123^{\mathrm{D}}$ or MATH $125^{\mathrm{D}}$ or MATH $131^{\mathrm{D}}$ or MATH $210^{\mathrm{D}}$ or MATH $225^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Every Term
Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.

## ECON 324 - Game Theory, Behavioral and Experimental Economics

This is an upper division undergraduate course, focused on Behavioral Economics, Game Theory and Experimental Economics. Behavioral economics and experimental economics are relatively new fields in which decision making is examined in a controlled laboratory/field setting. The data from these experiments are used to evaluate theories as well as to test and fine tune policies that could not be easily tested with naturally occurring data. The range of applications for experimental research is broad (and growing) and includes fields such as behavioral economics, public economics, industrial organization and regulation, environmental economics, game theory, and bargaining. This course surveys research in many of these fields and provides a basic framework for designing and conducting experiments. In this sense the course fulfills two objectives: to encourage students to think about the empirical and policy implications of the economic theories taught in other classes and to teach skills that may be used to conduct empirical analysis (using laboratory and field experiments data).

Prerequisite: ECON $202{ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.

## ECON 326 - International Economics

Alternative exchange rate systems, commercial trade policies, balance of payments, adjustment mechanisms and the role of international financial organizations.

Prerequisites: ECON $201^{\text {D }}$ and ECON 202 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): International Business, Sustainable International Development, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ECON 360 - Labor Economics

An investigation of labor markets and the effect of institutional forces on employment, wage determination, stability, and the availability of labor.

Prerequisite: ECON 202 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ECON 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ECON 395-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ECON 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ECON 450 - Internship

Supervised placement and research in selected public and private agencies at appropriate institutions. Course can be taken for 1-12 credits, 3 credits are recommended.
Prerequisites: ECON $201{ }^{\text {D }}$ and ECON 202 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-12
Term(s) Typically Offered: Offered Fall, Spring, \& Summer
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ECON 490 - Independent Study

In-depth reading and/or research in an area of particular interest to the student, with the guidance of a faculty member. Prerequisites: 12 hours of major courses, application, and permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ECON 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ECON 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Elementary Education/Early Childhood (ELEC)

ELEC 100 - Early Childhood Education Theory \& Practice
This course is designed to introduce students to early childhood education with emphasis on historical and contemporary perspectives, theories, practice and current trends and developments. Early childhood environments for children from birth through nine years of age will be studies and various curricula materials will be reviewed. Examination of the student's personal qualities in relationship to expectations of the field is addressed throughout the course (COE assessment of dispositions). Students will be exposed to children within a variety of early childhood settings via videotaped observations of children and classrooms.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Education, Transfer Thread Completion Course

## ELEC 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness.
This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## ELEC 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
ELEC 195 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## ELEC 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ELEC 200 - Child Development Typical

This course will provide a critical overview of key aspects of child development (physical, psychosocial, and cognitive) from theories and research that span conception to the early school years (birth to age 9). Important contexts that shape children's development will also be a major focus of this course, such as family, school, community, socioeconomic, and policy influences.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Transfer Thread Completion Course, Well-Being of Children and Youth

## ELEC 230-Field-Based Child Development Typical

Candidates will connect theory to practice in this course. Both typical and atypical child development will be studied in-depth through observations in a variety of education and education-related settings for children birth through grade four.

Prerequisites: ELEC $100^{\circ}$ and ELEC $200^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Corequisite(s): ELEC 237 and ELEC 281
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1 or Freshman 2 may not enroll.
Enrollment limited to students in the College of Education college.
ELEC 237 - ELL Strategies and Practice for Early Childhood Education This course will focus on the development of competencies and skills needed to effectively teach students whose first language is not English so that teacher candidates can accommodate and adapt instruction and assessments for Pre-K through Grade 4 English Language Learners (ELLs) In addition, this course is designed to provide pre-service early childhood educators with the scientific study of psycholinguistic phenomena in the study of language acquisition, to understand development of typical and atypical oral language in young children from birth to age 9, and to understand cultural and familial influences on language and literacy.

Prerequisites: ELEC $100^{\mathrm{D}}$ and ELEC $200^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Corequisite(s): ELEC 230 and ELEC 281
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1 or Freshman 2 may not enroll.

## ELEC 238 - Literacy Practices for the Emergent Learner, PK-1

Through a blend of theory and practice, this course explores researchbased instruction for the emergent literacy learner (PreK-grade 1), including the relationship between language development and literacy, instructional activities to help children become competent users of oral language, reading and writing processes, creation of a literate environment, and cultural and familial influences on language and literacy.

Prerequisites: ELEC $100^{\mathrm{D}}$ and ELEC $200^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Corequisite(s): ELEC 285
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## ELEC 281 - Family and Community Diversity and Partnerships

This course is designed to acquaint the teacher candidate in early childhood education to the theories, practices, skills, and knowledge of home, school, and community relationships, building towards home and school partnerships. The focus of this course is developing a thorough understanding of diverse contexts and ethnicities that helps educators of young children strengthen the bonds between home, school and community.

Prerequisites: ELEC $100^{\mathrm{D}}$ and ELEC $200^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Corequisite(s): ELEC 230 and ELEC 237
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## ELEC 285 - Integrating Creative Expression through the Arts

This course will identify basic elements, principals, related concepts, and vocabulary of the creative and performing arts. The creative arts exist as vehicles through which we can communicate the very essence of expressive language. Students will be introduced to various media, lesson planning, and ways of integrating the arts into planning academic and multicultural curricula for PreK-4 classrooms. This course will serve as a foundation for integrating arts across the curriculum.

Prerequisites: ELEC $100^{\mathrm{D}}$ and ELEC $200^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Corequisite(s): ELEC 238
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## ELEC 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## ELEC 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## ELEC 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
ELEC 301 - Math/Science Teaching Lab
Provides students with a myriad of opportunities to: identify and develop basic teaching skills, design and implement math and science lessons for peers and school-aged children, and reflect/analyze lessons in light of science and math education research findings. Throughout the course, candidates will have the opportunity to actually experience classroom teaching when possible.

Prerequisites: ELEC $281^{\text {D }}$ and (ELEC $288^{\text {D }}$ or ELEC $304^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$.
Corequisite(s): ELEC 342
Credits: 1
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## ELEC 306 - Early Childhood Education I

Research, history, philosophy, current trends and observations with emphasis on the nature and nurture of the young child from birth through third grade.

Prerequisites: ELEC 200 (may be taken concurrently) ${ }^{\text {D }}$ and ELEC $248^{* D}$ and CDEV 342 (may be taken concurrently) ${ }^{\text {D }}$ (may be taken concurrently).
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ELEC 308 - Folk Literature and Storytelling

Combines a study of traditional literature with practice in the best methods of presenting it orally. Oral presentations include a preschool story hour, folk tale, and myth or literary fairy tale. The course also emphasizes the importance of puppetry in education and recreation.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

ELEC 311 - Mathematics \& Literacy Teaching Lab Pre K - 4
This course provides teacher education candidates with an opportunity to observe, assist, and teach mathematics and literacy lessons in a pre-school or early childhood grade level setting. Through this lab, candidates identify and develop basic teaching skills, design and implement mathematics and literacy lessons for PK-Grade 4 children, and reflect and analyze on lessons taught, based on assessment data, research and philosophies examined concurrently in the mathematics and literacy methods courses. Candidates will also develop an appreciation for the many tasks teachers perform daily.

Corequisite(s): ELEC 316
Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## ELEC 316 - Developmental Formal and Informal Assessments

A study of assessment for children from birth to Grade 4. Both formal and informal instruments will be discussed with the emphasis on tools that can be used by teachers of young children to inform developmentally appropriate instruction and practices on a daily basis. Considerations in choosing, administering, and reporting results of assessments will also be addressed.

Corequisite(s): ELEC 330
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER
CANDIDACY attribute.

ELEC 317 - Child and Family Development in Early Childhood
This course is a theoretical, in-depth examination of physical, intellectual, social-emotional, language and family development from birth through age 8, which builds upon previous Human Development courses.
Development is viewed as occurring within a family and a culture, not in isolation. Emphasis is placed upon the connections between the theoretical and the practical.

Prerequisites: CDEV $248^{\mathrm{D}}$ and ELEC $306^{\mathrm{D}}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ELEC 320 - Elementary Field Experience

Candidates enroll as part of the Professional Block in Elementary Education. This course involves an in-depth teaching experience in an elementary classroom in which opportunities are provided for the application of content knowledge, pedagogical skills, and the assessment of children's learning. Grading P/NC/Fail.

Prerequisites: ELEC $301^{\mathrm{P}}$ and ELEC $342^{\mathrm{D}}$ and ELEC $362^{\mathrm{D}}$
${ }^{P}$ Requires minimum grade of $P$.
${ }^{D}$ Requires minimum grade of $D$.
Corequisite(s): ELEC 332
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## ELEC 324 - Methods for Teaching English as a Second Language and Bilingual Education

A course designed to acquaint the prospective teacher at any level with the methodology used to teach English to native speakers of other languages and to acquaint students with the specialized procedures used when teaching in bilingual classrooms (any two languages) on any level.

Prerequisites: ELEC $200^{\mathrm{D}}$ and (CDEV $248^{\mathrm{D}}$ or CDEV $342^{\mathrm{D}}$ )
${ }^{\mathrm{D}}$ Requires minimum grade of D . Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ELEC 325 - Children's Literature

This course introduces the children's literature: the history, the authors and illustrators, and the readers. A major focus is on diversity in books for children and how different cultures, experiences, time periods and characters are represented, or excluded. Emphasis is placed on critical analysis and discussion of books and illustrations, with a focus on elements of literature and art. Children as readers is also a focus, exploring ways that literature is used in classrooms and families.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Early Childhood Ed (PK-4), Early Child/Spec Ed(PK-4)PK-8) or Early Childhood Education.

ELEC 327-Social/Cultural Studies in Early Childhood Education
This course is a multi-dimensional methods course which integrates background knowledge from the social sciences, natural sciences, and the humanities and fine arts. It focuses on an experiential approach to facilitating young children's growth and development, with an emphasis on human relationships. A multi-cultural perspective is fostered.

Prerequisites: (ELEC $306^{\mathrm{D}}$ or ELEC $396^{\mathrm{D}}$ ) and CDEV $248^{\mathrm{D}}$ and ELEC $200^{\mathrm{D}}$ and SEFE $342^{D}$
${ }^{D}$ Requires minimum grade of $D$.
Corequisite(s): ELEC 397
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ELEC 328 - Curriculum and Assessment in ESL Education

This course prepares students seeking Pennsylvania certification in English as a second language ( $K-12$ ) with key concepts related to curriculum development and assessment for students learning English as a second language. Topics include meeting ESL curriculum standards, novel and accurate assessment procedures, culturally biased testing, assessment suitability criteria, and culturally appropriate testing situations. The course investigates assessment within the context of ESL curriculum design, implementation, and program evaluation. Finally, students will come to terms with the process of evaluating language minority students in relation to diagnosis, placement, formal and informal assessment, exiting, and monitoring of student progress.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
ELEC 330-Literacy Practices for the Developing Learner, Grades 2-4 Candidates will acquire a thorough understanding of literacy development (ages 5-9) as revealed in learning and motivation theories. Candidates will be prepared to use a variety of instructional strategies and materials selectively, appropriately, and flexibly. Candidates will be prepared to use multiple strategies for developing students" word/ concept knowledge and word analysis skills in addition to understanding how word meaning and fluency support comprehension. Candidates will be able to teach multiple comprehension strategies that support readers in constructing meaning from text, both literary and informational, and in monitoring their comprehension. Candidates will gain strategies for infusing writing and the conventions of writing into literacy learning. Candidates will acquire appropriate assessment techniques to support responsive instructional decision making and reflection. Competencies and skills needed to effectively support students whose first language is not English will be central to this course.

Corequisite(s): ELEC 340
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER
CANDIDACY attribute.

## ELEC 332 - The Teaching of Elementary Reading

Candidates will be introduced, through theory and practice, to a variety of strategies for teaching elementary reading. Candidates will become aware of ways to assess reading progress and ways to support children as they develop as readers. Candidates will also become familiar with materials used in the classroom to support literacy.

Prerequisites: ELEC $301^{P}$ and ELEC $342^{\mathrm{D}}$ and ELEC $362^{\mathrm{D}}$
${ }^{P}$ Requires minimum grade of $P$.
${ }^{D}$ Requires minimum grade of $D$.
Corequisite(s): ELEC 320
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## ELEC 340 - Mathematics Methods and Strategies for PRE K - 4 Teachers

This course is designed to provide pre-service teachers with the pedagogy and materials necessary for teaching early childhood mathematics. This course addresses development and instruction in play-based and problem-based mathematics in pre-K to grade 4 settings. Included are methods, materials, and research findings related to teaching of mathematics. Questions that provide the structure for this course are: What is the nature of mathematics (what is mathematics and what does it mean to do mathematics)? How do children learn mathematics? How do we as teachers help children learn mathematics?

Corequisite(s): SPED 350
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.
Enrollment limited to students in the College of Education college.

## ELEC 342 - The Teaching of Elementary Mathematics

The various processes and operations needed to effectively teach mathematics in the elementary school are carefully analyzed. Candidates recognize and can address the mathematical concepts and the potential misconceptions and misunderstandings of these concepts by schoolaged children.

Prerequisites: MATH $210^{\mathrm{D}}$ and MATH $310^{\mathrm{D}}$ and SEFE 270 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Corequisite(s): ELEC 362
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER
CANDIDACY attribute.

## ELEC 347 - Modern Primary Programs

A survey of philosophy, techniques and methodology used in educating children through continuous progress in an ungraded primary school.

Prerequisites: ELEC $306^{\text {D }}$ or ELEC $396^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ELEC 348 - Leadership, Advocacy \& Program Development

This course will focus on leadership, advocacy and program development for teacher candidates preparing to work with children Pre-K to Grade
4. Focus will be on the design, development, and evaluation of early childhood programs, including theory, paradigms and models, policy in the program development process, and the use of technology in program development. In addition, this course will include theory, research and practice in early childhood as a foundation for leadership in the field and advocacy on behalf of young children, families, communities, and the early childhood profession. An examination of current issues in the field and strategies for articulating positions and for working toward change will also be addressed.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER
CANDIDACY attribute
ELEC 352 - The Teaching of Language Arts
Candidates will be introduced, through theory and practice, to a variety of strategies for teaching elementary language arts. They will become familiar with the six components of language arts: reading, writing, speaking, listening, visually representing, and viewing. Candidates will learn strategies for teaching these components and integrating them into the classroom curriculum. Candidates will also become familiar with assessment tools for language arts.

Prerequisites: ELEC $301^{\mathrm{P}}$ and ELEC $342^{\mathrm{D}}$ and ELEC $362^{\mathrm{D}}$
${ }^{P}$ Requires minimum grade of $P$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## ELEC 362 - The Teaching of Elementary Science

Candidates will learn numerous strategies which engage students in the science inquiry process by connecting scientific understanding and contemporary teaching and assessment practices. Locating and adapting appropriate activity-based science lessons are important components of this course.

Corequisite(s): ELEC 301
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER
CANDIDACY attribute.

## ELEC 372 - The Teaching of Elementary Social Studies

Candidates in this course will explore the social studies curriculum, including its organization; analyze methods of teaching, objectives, and materials: and discuss evaluation/assessment techniques. Study focuses on best practice classroom applications and the relationship between instruction and student learning outcome. Field experiences included.

Prerequisites: ELEC $301^{\mathrm{P}}$ and ELEC $342^{\mathrm{D}}$ and ELEC $362^{\mathrm{D}}$
${ }^{P}$ Requires minimum grade of $P$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## ELEC 382 - Literacy Assessment

A study of literacy assessment techniques designed to support the elementary teacher in designing a supportive literacy environment and effective literacy instruction for all students.

Prerequisites: ELEC $332^{\mathrm{D}}$ and SEFE $200^{\mathrm{D}}$ and CDEV $248^{\mathrm{D}}$ and CDEV $342^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ELEC 385 - Creativity

An interdisciplinary approach to child-centered teaching through creative instructional materials, drama, music, and a variety of art media.

Prerequisites: SEFE 200 (may be taken concurrently) ${ }^{\text {D }}$ and (SEFE 248
(may be taken concurrently) ${ }^{\text {D }}$ or CDEV $248^{\text {D }}$ ) and (SEFE 342 (may be
taken concurrently) ${ }^{\mathrm{D}}$ or CDEV $342^{\mathrm{D}}$ )
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ELEC 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## ELEC 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ELEC 397 - Early Childhood Education II

Curriculum, materials, audio-visual and other aids and their implementation in various early childhood learning situations with full articulation of such programs with the primary grades.

Prerequisites: (ELEC $306^{\mathrm{D}}$ or ELEC $396^{\mathrm{D}}$ ) and CDEV $248^{\mathrm{D}}$ and SEFE $342^{\mathrm{D}}$ and SEFE $200^{\circ}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Corequisite(s): ELEC 327
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## ELEC 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ELEC 405-Overview of Global Education \& Issues

The course focuses on international education and developing awareness and skills needed to teach in a culturally responsive classroom.
Educational systems from various countries will be compared and contrasted. The Programme for International Student Assessment (PISA) will be explored to determine the possible pros and cons of this assessment approach.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): Education, Transfer Thread Completion Course Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students in a B.S. in Education, Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Music or Bachelor of Science degrees.

## ELEC 407 - Math and Science in Early Childhood Learning

Students will apply theories of child development to the implementation of math and science in the early childhood curriculum. Using a constructivist approach, students will plan and implement activities designed to enhance cognitive development in these areas. Students will become aware of available materials for teaching and assessment.

Prerequisites: (ELEC $327^{\mathrm{D}}$ or ELEC $278^{\mathrm{D}}$ ) and (ELEC $337^{\mathrm{D}}$ )
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ELEC 410-Culture and Politics of American Education

Public education (Pre-K-12) in the United States is one of the most important civic debates in our society. Everyone has attended school and everyone seems to have an opinion about what counts as a quality education. The problem of how to provide an education to the youth of this country requires thoughtful decisions-informed by scholarly research, multiple viewpoints and ethical perspectives. This course will provide students the opportunity to explore the cultural, political and legal issues facing public education today.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Education, Transfer Thread Completion Course Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## ELEC 415 - Early Science and Math

Students will apply theories of child development to the implementation of math and sciencein the early childhood curriculum. Using a constructivist approach, students will plan and implement activities designed to enhance cognitive development in these areas. Students will become aware of available materials for teaching and assessment.

## Credits: 4

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

## ELEC 420 - Early Childhood Field Experience

Candidates enroll as part of the Professional Block in Early childhood Education. This course involves an in-depth teaching experience in an early childhood setting in which opportunities are provided for the application of content knowledge, pedagogical skills, and the assessment of children's learning.

Prerequisites: ELEC $330^{\mathrm{D}}$ and ELEC $340^{\mathrm{D}}$ and ELEC $311^{\mathrm{P}}$ and ELEC $316^{\mathrm{D}}$ and (SPED $325^{\mathrm{D}}$ or SPED $350^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
${ }^{P}$ Requires minimum grade of $P$.
Corequisite(s): ELEC 480
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER
CANDIDACY attribute.

## ELEC 427 - Early Intervention

This course will examine atypical development from birth through age eight. Legal rights of children and families will be explored. Student will study the interventions necessary to assist the young child and their families adjust and adapt to development difficulties. A field component is included.

Prerequisites: ELEC $327^{\mathrm{D}}$ and (ELEC $337^{\mathrm{D}}$ or ELEC $278^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## ELEC 437 - Assessment in Early Childhood

This course is an overview of the role of assessment at the preschool and primary grade levels as integral to curriculum and instructional decision-making. Content will focus on informal assessment measures recommended for early childhood classroom teachers. A field experience gives students the opportunity to apply a variety of assessment measures with young children.

Prerequisites: ELEC $427^{\mathrm{D}}$ and (ELEC $447^{\mathrm{D}}$ or ELEC $420^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ELEC 440 - ECE Curriculum Integration: Theory into Practice

Development and implementation of an integrated program of all content areas across the learning standards Pre-K through Grade 4, through the integration of play-based, experience-based, and project-based teaching. Selection and development of materials and resources based on assessment data that meet the needs of culturally and linguistically diverse learners is stressed.

Prerequisites: ELEC $311^{\mathrm{D}}$ and ELEC $330^{\mathrm{D}}$ and ELEC $340^{\mathrm{D}}$ and ELEC $316^{\mathrm{D}}$ and SPED $325^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## ELEC 445 - Administration of Child Care Programs

Students are introduced in a practical manner to the procedures required to organize, license, and administer a child care program (including preschool and elementary aged children). This course involves a field experience of 5 hours.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ELEC 450 - Internship: Early Childhood

This course is a supervised off-campus, full-time work experience in a certified Early Childhood Education program. Students attend seminars and complete additional assignments made by supervisors. Open only to Elementary Education: Early Learning and Development students.

Prerequisites: ELEC $447^{\mathrm{D}}$ or ELEC $420^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$
Credits: 1-12
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ELEC 455 - Student Teaching: Early Childhood

Under the guidance of a cooperating teacher and university supervisor, candidates engage in teaching assignments on a full-time basis in specified school districts and/or early childhood agencies and attend scheduled seminars. Student teaching requires a partnership between the university and cooperating school districts and agencies. It is considered the culminating experience and the most beneficial teacher preparation course. It is a transition between pre-service and in-service teaching. Must meet all requirements to enroll in student teaching including, but not limited to, required Praxis exams, grade point average, clearances, required courses and field experiences.

Credits: 1-12
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute

ELEC 460 - Instructional Strategies for Science and Technology
This course is designed to introduce the teaching techniques and strategies used by science educators to make science teaching, meaningful, motivating, and plausible for PK-4 students. In addition, the most common curriculum units and supplements are introduced, explored, and examined for their appropriateness in the early childhood environment and the relationship to the PDE science standards. Emphasis is placed on how to collect and learn about scientific concepts in order to develop the skills necessary to teach coherent centers and/ or lessons and choose instructional techniques that will most effectively help children learn. Lastly, confidence in teaching science is established as participants devise, employ, and assess science lessons presented to peers and young children.

Prerequisites: ELEC $311^{\mathrm{D}}$ and ELEC $330^{\mathrm{D}}$ and ELEC $340^{\mathrm{D}}$ and ELEC $316^{\mathrm{D}}$ and (SPED $325^{\mathrm{D}}$ or SPED $350^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
Corequisite(s): ELEC 470
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## ELEC 470 - Social Studies \& Citizenship

Teacher candidates in this course will explore the social studies curriculum, including its organization; analyze methods of teaching, objectives, and materials; discuss evaluation/assessment techniques and citizenship development for PK-4 learners. Study focuses on best practice classroom applications and the relationship between instruction and student learning outcome.

Prerequisites: ELEC $311^{\mathrm{D}}$ and ELEC $330^{\mathrm{D}}$ and ELEC $340^{\mathrm{D}}$ and ELEC $316^{\mathrm{D}}$ and (SPED $325^{\mathrm{D}}$ or SPED $350^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
Corequisite(s): SPED 360
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER
CANDIDACY attribute.

ELEC 475 - International Student Teaching: Early Childhood Under the guidance of a cooperating teacher and university supervisor, candidates engage in teaching assignments on a full-time basis in specified school districts and/or early childhood agencies and attend scheduled seminars. Student teaching requires a partnership between the university and cooperating school districts and agencies. It is considered the culminating experience and the most beneficial teacher preparation course. It is a transition between pre-service and inservice teaching. This course is specially designed for those students participating in the international student teaching experience.

Credits: 1-12
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment limited to students in a B.S. in Education degree.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.
Enrollment limited to students in the College of Education college.
ELEC 480-Assessment for Differentiation of Literacy Instruction
The purpose of this course is to provide teacher candidates with information and experiences that will enable them to utilize formal and informal methods for assessing children"s reading ability and materials for improving decoding, fluency, vocabulary, comprehension and motivation. $\tilde{A}, \hat{A}$ This course we explore the various roles of assessment in education and will look at a variety of data sets to draw conclusions about how they might impact class- or school-level decision making. $\tilde{A}, \hat{A}$ This course will also provide teacher candidates with information to differentiate their teaching to meet the needs of all learners.

Prerequisites: ELEC $238^{\mathrm{D}}$ and ELEC $330^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Corequisite(s): ELEC 460
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## ELEC 490 - Independent Study

A program of independent work conducted by a student who has demonstrated academic proficiency, with prior approval of the student's advisor and departmental chairperson. Prerequisite: Permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ELEC 495-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ELEC 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisites: SEFE $200^{\mathrm{D}}$ and CDEV $248^{\mathrm{D}}$ and CDEV $342^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Engineering (ENGR)

## ENGR 110- Introduction to Engineering

The first in a two semester course sequence aiming to provide students with an introduction to engineering, design process, and tools needed in the engineering professions. This course introduces students to the different disciplines of engineering, professional and ethical aspects of engineering, teamwork, engineering design process and problem solving, and various computer applications.

Credits: 2
Term(s) Typically Offered: Offered Fall Terms

## ENGR 120 - Engineering Design Tools

This is the second in a two-semester course sequence aiming to provide students with an introduction to engineering, design process, and tools needed in the engineering professions. This course focuses on the design process, introduction to engineering computing tools, engineering graphics using a Computer Aided Design (CAD) software platform, and 3D printing. Students will learn the basic tools and techniques used in engineering design and problem solving.

## Credits: 2

Term(s) Typically Offered: Offered Spring Terms

## ENGR 130 - Engineering Computing Tools

This course provides students with computing skills required in engineering. Course content includes structured programming, engineering problems and open-ended design projects, which are solved in teams with results professionally presented.

## Credits: 2

Term(s) Typically Offered: Offered Fall \& Spring Terms

## ENGR 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## ENGR 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
ENGR 195 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## ENGR 198- Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
ENGR 210-Statics
Includes the application of equilibrium conditions to structures, trusses, frames and machines, and beams with concentrated and distributed loads.

Prerequisites: PHYS $216^{\text {D }}$ and MATH 230 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms

## ENGR 220 - Engineering Materials

This course covers the properties and uses of typical materials used in various engineering professions, their manufacturing processes, and an introduction to mechanical testing methods.

Prerequisite: CHEM $107^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms

## ENGR 230 - Mechanics of Materials

This course provides a review of the basic mechanical properties of the solids with lab. Topics covered will include deformation and failure of solid bodies under the action of forces, stress• strain, Mohr's circle, generalized Hooke's Law, axial bending and buckling.

Prerequisites: ENGR $210^{\text {D }}$ or PHYS $314^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
ENGR 231 - Mechanics of Materials Lab
A laboratory course to accompany ENGR 230 Mechanics of Materials. Laboratory experiments are designed to introduce experimental techniques common to structural engineering, interpretation of experimental data, comparison of measurements to numerical/analytical predictions, and formal, engineering report writing.

Prerequisite: ENGR 230 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Spring Terms

ENGR 240 - Dynamics
Integrates the subject content of kinematics and kinetics that deal respectively with the description of motion of bodies and the causes for their motion.

Prerequisites: PHYS $314^{\text {D }}$ or ENGR $210^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Spring Terms

## ENGR 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
ENGR 295 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## ENGR 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ENGR 301 - Fluid Mechanics

This course provides an overview of fluid statics and dynamics concepts. Topics covered will include fluid statics, laminar and turbulent flow of compressible and incompressible fluids, flow measurements, open channel flow and kinetics of fluids.

Prerequisites: ENGR $210^{\mathrm{D}}$ and MATH $230^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$. Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGR 310-Introduction to Electrical Engineering

This course provides a review of the basic concepts in electrical engineering. Topics covered will include electrical engineering units, circuit elements, circuit laws, measurement principles, mesh and node equations, network theorems, operational amplifier circuits, energy storage elements, sinusoids and phasors, sinusoidal steady state analysis, average and RMS values, complex power.

Prerequisites: PHYS $212^{\text {D }}$ or PHYS $217^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with a semester level of Freshman 1,
Freshman 2 or Sophomore 1.

## ENGR 320 - Thermodynamics

This course provides a detailed review of the basic thermodynamic principles. Topics covered will include properties of ideal gases and vapors; first and second laws of thermodynamics; basic gas and vapor cycles; basic refrigeration.

Prerequisite: PHYS $217^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGR 340 - Engineering Economics

This course covers the concepts of cash flow, cash flow equivalence, cash flow before taxes, depreciation and depletion, cash flows after taxes, profits, evaluation of alternatives, financial statements and multidisciplinary team project.

Prerequisite: MATH $225^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGR 390-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Graduate.

## ENGR 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGR 398- Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGR 490 - Independent Study

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGR 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGR 498- Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## English (ENGL)

## ENGL 101 - Introduction to College Writing

In this course, students will investigate the purposes, both academic and non-academic, for writing and reading. Students will learn to identify meaning and draw inferences from context cues. They will develop increased writing fluency, clarity, and coherence; a fuller understanding if rhetorical principles, including invention, organization, and audience; improved strategies for revising and editing their prose, emphasizing the standards of edited American English; and an understanding of writing and reading as tools for learning and communication. Students should take this course before taking 102 by advisement, by their own choice, of if any one of the following applies to them: if the SAT Verbal score is 399 or less. if the SAT Writing score is 399 or less, or if the ACT Writing score is 11 or less.

## Credits: 3

## ENGL 102 - Critical Writing

Students will develop an understanding of rhetorical principles, including invention, organization, and audience, along with strategies for revising and editing their prose that emphasize clarity, coherence, and support. They will learn to develop positions on selected issues and questions and compose strongly supported and reasoned arguments regarding those issues and questions. Finally, they will learn basic information literacy skills, which will include how to locate, evaluate, and incorporate a variety of sources into their writing. They will use these to conduct independent research and integrate it into a written essay.

## Credits: 3

## ENGL 103 - College Writing II

In this course, students will learn to read academic and persuasive discourse in an active, critical manner; develop deliberated positions on selected issues and questions; compose strongly supported and reasoned arguments regarding those issues and questions; acquire information literacy skills, learning efficient and productive strategies for research from both print and online sources; and complete documented essays which effectively integrate source materials into a persuasive whole.

Prerequisite: ENGL $101^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3

## ENGL 104-Critical Reading

Students will refine and extend understanding of the rhetorical principles introduced in Critical Writing, applying them through the critical reading and analysis of complex texts. The texts to be considered will be drawn from a variety of media, genres, historical periods and diverse cultures. Students will examine the methods authors use in developing and expressing ideas to meet the needs of particular audiences and historical moments. They will practice extracting implied meanings, analyzing purpose, tone and style, and assessing casual factors and rhetorical effects to critical reading. As a reading, intensive course, English 104 will reinforce and refine compositional skills introduced in Critical Writing.

Prerequisites: ENGL $102^{\text {C }}$ or ENGL $103^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3

## ENGL 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## ENGL 150 - Writing to Discover

An intensive writers' workshop where participants and facilitators work individually and in small groups to fine-tune the craft of their writing. Course may be repeated up to 4 credits.

Credits: 1

## ENGL 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
ENGL 195 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## ENGL 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

ENGL 204-Composition and Rhetoric
Students will study rhetorical theory and its application in expository and persuasive forms of writing.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{C}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {C }}$ or ENGL $220^{\text {C }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms

## ENGL 205 - Introduction to Professional Writing

This course will introduce students to a variety of documents typically produced by writers in professional workplace. It will build essential skills for communicating with varied audiences with whom one interacts in a professional capacity. Students will develop collaborative skills, learn effective rhetorical strategies for document design, and refine writing for clarity, conciseness, and usage. The concept of organizational communities of practice will be introduced, as well as ethical considerations and responsibilities that accompany professional discourse.

Prerequisites: (ENGL $102^{\mathrm{C}}$ or ENGL $103^{\mathrm{C}}$ ) and (ENGL $104^{\mathrm{C}}$ or ENGL $210^{\mathrm{D}}$ or ENGL $220^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Environmental Problems Toolkit, Innovation, Entrepreneurship, and Positive Change, Transfer Thread Completion Course

## ENGL 214 - Introduction to Film Analysis

This course surveys contemporary and classic films, and introduces the practices of film analysis.

Prerequisites: ENGL $102^{\text {D }}$ and ENGL $104^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Transfer Thread Completion Course

## ENGL 220 - Introduction to Literary and Cultural Studies

Students will read and write critically about literary texts (written and visual), cultural theory, and avenues of inquiry that theoretical approaches open for interpretation. Students will also learn how to locate and evaluate the resources that literary, historical, philosophical, and cultural studies depend on, and how to use disciplinary-specific methods of presenting and documenting work.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{\text {C }}$ )
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Transfer Thread Completion Course

ENGL 225 - Introduction to Creative Writing
Introduction to Creative Writing offers students the opportunity to develop their abilities to write poetry, fiction, and creative nonfiction. Original student work is read and discussed in class and in conferences with the instructor. Reading of classic and contemporary literature supplements the study of one's own writing.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{C}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
ENGL 230 - Introduction to Linguistics and Grammar
Students will study language structure, including grammar (consisting of phonology, morphology, syntax and semantics) within psycholinguistic and sociohistorical linguistic approaches.
Prerequisites: ENGL $102^{\text {C }}$ and (ENGL $210^{\text {D }}$ or ENGL $104^{\text {D }}$ or ENGL $220^{\text {D }}$ or minimum score of 1 in 'English Major')
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## ENGL 235 - Writing for Non-Print Media

This course gives students the opportunity to explore how to write for non-print text like digital and social media, blogs, and film. Students will examine the use of audience, tone and purpose in these types of communication and its application in classrooms as well as in virtual communities.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{C}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\circ}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
ENGL 242 - African-American Literature
Students will be introduced to literature written by black Americans as it pertains to the American experience.
Prerequisites: (ENGL $103^{\text {C }}$ or ENGL $102^{\text {C }}$ ) and (ENGL $210^{\text {D }}$ or ENGL $104^{\text {C }}$ or ENGL $220^{\text {D }}$ or ENGL $025^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Thematic Thread(s): African-American Studies, Becoming America, Art \& Society, Being American, Political Arts, Transfer Thread Completion Course

## ENGL 243 - Literature of the Women's Movement

Students will be introduced to literature written by women authors from various periods who offer multidimensional perspective on the world. Prerequisite: ENGL 101 and 210 or English Major status.
Prerequisites: (ENGL $103^{\text {C }}$ or ENGL $102^{\text {C }}$ ) and (ENGL $210^{\text {D }}$ or ENGL $104^{\text {C }}$ or ENGL $220^{\text {D }}$ or ENGL $025^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Thematic Thread(s): Art \& Society, Being American, Gender and Diversity, Political Arts, Transfer Thread Completion Course, Violence

## ENGL 244 - Native American Literature

Students will be introduced to literature written by Native Americans as it pertains to the American experience.

Prerequisites: (ENGL $103^{\text {C }}$ or ENGL $102^{\text {C }}$ ) and (ENGL $210^{\text {D }}$ or ENGL $104^{\text {C }}$ or ENGL $220^{\mathrm{D}}$ or ENGL $025^{\mathrm{D}}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Thematic Thread(s): Becoming America, Art \& Society, Political Arts, Transfer Thread Completion Course, Violence

## ENGL 246 - U.S. Latino/a Literatures

Students will be introduced to literature written in English by Latino Americans as it pertains to the American experience.

Prerequisites: (ENGL $103^{\mathrm{C}}$ or ENGL $102^{\mathrm{C}}$ ) and (ENGL $210^{\mathrm{D}}$ or ENGL $104^{\mathrm{C}}$ or ENGL $220^{\text {D }}$ or ENGL $025^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd
Thematic Thread(s): Art \& Society, Being American, Political Arts, Transfer Thread Completion Course

## ENGL 248 - Asian Literature

Students will study of such standard works as the Bhagavad-Gita, the writings of Confucius, and the Bible, in addition to contemporary works from India, China, Japan, and additional regions in Asia.

Prerequisites: (ENGL $103^{\text {C }}$ or ENGL $102^{\mathrm{C}}$ ) and (ENGL $210^{\mathrm{D}}$ or ENGL $104^{\mathrm{C}}$ or ENGL $220^{\text {D }}$ or ENGL $025^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even
Thematic Thread(s): Art \& Society, Transfer Thread Completion Course, Transnational Culture

## ENGL 249 - Life/Lit/Service

Life/Lit/Service will explore selected literary and linguistic concernse.g. representations of place, class, ethnicity and/or dialectal variationthrough a service learning experience, in this case, an intensive week-long trip/service project at an off-campus location (e.g. San Francisco). This course may be repeated for up to three credits.

Credits: 1

## ENGL 260 - Elementary College Latin I

This course introduces students to the Latin language, concentrating on the study of basic forms, grammar, and introductory readings.

Credits: 3
ENGL 261 - Elementary College Latin II
This course provides students further study of the Latin language, concentrating on the study of advanced grammar and more complex readings.

Prerequisite: ENGL 260 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
ENGL 288 - Classic Theatre Tour
The study of classic drama, climaxed by a trip to the Stratford Shakespeare Festival in Ontario, Canada; the Shaw Festival Theater; or other appropriate theaters in Toronto. Offered in the summer. Travel fee required.

Prerequisites: (ENGL $103^{\mathrm{C}}$ or ENGL $102^{\mathrm{C}}$ ) and (ENGL $210^{\mathrm{D}}$ or ENGL $104^{\mathrm{C}}$ or ENGL $220^{\text {D }}$ or ENGL $025^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3

## ENGL 290-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## ENGL 295-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## ENGL 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.
Prerequisites: (ENGL $102^{\mathrm{C}}$ or ENGL $103^{\mathrm{C}}$ ) and (ENGL $210^{\mathrm{D}}$ or ENGL $104^{\mathrm{C}}$ or ENGL $220^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-3
Term(s) Typically Offered: Offered Fall Terms

## ENGL 300- Queer Literature and Film

Queer Literature and Film is a survey of LGBT+ texts highlighting "queer" as both a term of identity and as a practice of analysis and critique. Students will read, watch, discuss, and analyze a variety of media produced by and about diverse queer writers, filmmakers, and activists from pre-Stonewall to current creators employing an intersectional understanding of how differences in race, class, and ability also impact experiences of gender and sexuality.

Prerequisites: ENGL $102^{\mathrm{D}}$ and ENGL $104^{\mathrm{D}}$ and ENGL $220^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1, Senior 2 or Sophomore 2.

## ENGL 305 - Practicum: Teaching Writing

Students will learn to develop, respond to, evaluate, and grade student writing and related tasks. They will also be introduced to concepts important in the tutoring of student writers, as well as introductory theory used in the teaching of writing. Required for certification to teach English in the secondary schools.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{C}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$. Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students in the BSED1224 program.
ENGL 307 - Writing About Electronic Media and Film
This course develops writing and theoretical skills in an examination of issues in electronic and digital media studies. Students analyze issues and individual examples relating to such topics as the Internet, texting, television, film, video games, print and visual journalism, media convergence, and mass media economics.

Prerequisites: (ENGL $102^{\mathrm{C}}$ or ENGL $103^{\mathrm{C}}$ ) and (ENGL $104^{\mathrm{C}}$ or ENGL $210^{\mathrm{D}}$ or ENGL $220^{\mathrm{D}}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
D Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 308 - Advertising Copywriting

Work in the writing and production of advertising copy.
Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{C}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

ENGL 311 - Chaucer and Medieval Culture
Students will study works by Chaucer and his contemporaries within the context of later medieval culture.

Prerequisites: (ENGL $103^{\mathrm{C}}$ or ENGL $102^{\mathrm{C}}$ ) and (ENGL $025^{\mathrm{D}}$ or ENGL $104^{\mathrm{C}}$ or ENGL $210^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 312 - Introduction to Shakespeare

Students will study selected comedies, tragedies and histories within their literary and historical contexts.

Prerequisites: (ENGL $103^{\mathrm{C}}$ or ENGL $102^{\mathrm{C}}$ ) and (ENGL $210^{\mathrm{D}}$ or ENGL $104^{\mathrm{C}}$ or ENGL $025^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Revolutions, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 314 - European Film

Students will critically analyze films from countries in the European Union with particular emphasis on those with high annual film productivity such as France, United Kingdom, Italy, Spain, and Germany. The emphasis in on contemporary films, with optional contrast to historical trend-setting films.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{C}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {C }}$ or ENGL $220^{\text {C }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 315 - The Cinematic Review: Historical and Critical Writing

This course surveys significant motion pictures with emphasis upon the techniques of film making and film reviewing.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{C}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 316 - Asian Film

Students will critically analyze films from India and East Asia, with emphasis is on contemporary films from China and Japan. Also meets requirements for the Asian Studies Minor.
Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{\text {C }}$ ) and (ENGL $104^{\text {C }}$ or ENGL $025^{\text {D }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Odd
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 317-British Literature I

This course provides a comprehensive study of authors and literary works from the Old English period through Milton.

Prerequisites: (ENGL $104^{\text {C }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\text {D }}$ or minimum score of 1 in 'English Major')
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 318 - British Literature II

This course provides a comprehensive survey of authors and literary works from the Civil War and Restoration through the early 20th century.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{C}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\mathrm{D}}$ )
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 319-American Literature I

This course provides a comprehensive survey of American literature from Puritan times through Melville.

Prerequisites: (ENGL $103^{\mathrm{C}}$ or ENGL $102^{\mathrm{C}}$ ) and (ENGL $210^{\mathrm{D}}$ or ENGL $104^{\mathrm{C}}$ or ENGL $220^{\text {D }}$ or ENGL $025^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

ENGL 320 - American Literature II
This course provides a comprehensive survey of American literature from Whitman through modern times.

Prerequisites: (ENGL $103^{\text {C }}$ or ENGL $102^{\text {C }}$ ) and (ENGL $210^{\text {D }}$ or ENGL $104^{\text {C }}$ or ENGL $220^{\text {D }}$ or ENGL $025^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 327 - Healthcare Writing

Students will develop the advanced literacy and research skills needed for writing successfully in the healthcare field. Working individually and in teams typical of medical practice, students will explore strategies for effective written and spoken interaction with both patients and colleagues. Coursework relies heavily on learning to use medical databases and provide students with the theories and additional tools necessary to translate medical information into presentations for both medical professionals and the general public.

Prerequisite: ENGL $102^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): 21 st Century Healthcare, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 328 - Young Adult Literature

This course surveys literature for adolescents and young adults and is intended to cultivate book appreciation, improve book knowledge, and provide curriculum enrichment in intermediate, junior and senior high school libraries.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{\text {C }}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Transfer Thread Completion Course, Well-Being of Children and Youth
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 330 - Literary Publications \& Design

This course offers students a deeper understanding of print and production practices for students with critical and creative writing backgrounds. Students will study theories and models - both historical and contemporary - for print design, layout, typography and production environment, while applying such theory to the practice of publishing literary artifacts.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{\text {C }}$ ) and (ENGL $210^{\text {D }}$ or ENGL $104^{\text {C }}$ or ENGL $220^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in English, English Literature, Engl Lit-Language \& Literature, Engl Lit-Literary\&Cult Studies, English Writing, English Writing-Professional or English Writing-Creative.

## ENGL 331 - Historical Development of the English Language

Students will examine each historical period to discover the structure of the language, its spelling, vocabulary, syntax, and the influences of social conditions upon it.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{\text {C }}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\text {D }}$ or minimum score of 1 in 'English Major')
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 332 - Modern English Grammar and Syntax

This course provides a brief history of the English language and thorough study of traditional and transformational grammar with emphasis on syntax. Differences between prescriptive and descriptive grammar and problems of current usage are also considered.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{\circ}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\text {D }}$ or minimum score of 1 in 'English Major')
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 334 - Writing Community Stories

The course will prepare students to research and engage local communities as well as write a range of professional writing genres to engage those communities, particularly professional writing narratives. Students will learn research methods for studying their local communities. They will learn to study the community's discourse, collective issues, social norms, and larger narratives. Students will then learn to research, draft, and revise a range of writing genres and narratives that enable the students to engage and/or support their local communities.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.

## ENGL 335 - Writing for Video Games

In this course, students will learn to create the two types of writing essential to contemporary video games: storytelling and technical writing. Students will learn the essential skills of plot, character, and dialogue writing, enabling them to create the stories that players experience in video games. Students will also learn the skills of usability, plain language, and explanation writing, which they will use to create instructions and documentation for video games. By the end of the course, students will have produced a video-game narrative, an introductory setup for a video game, and instructions on how to modify the video game using the platform used to create the game.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.

## ENGL 336 - Second Language Acquisition

This course acquaints the prospective teacher with theories of second language acquisition (SLA). SLA surveys the processes of acquiring/ learning language including the following issues: sound systemphonemic inventory; words-lexicon; semantics; syntax; critical period for second language learning; linguistic creativity, competence and performance.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{\mathrm{C}}$ ) and (ENGL $104^{\mathrm{C}}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\text {D }}$ or minimum score of 1 in 'English Major')
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 338 - Creative Writing: Creative Nonfiction

This writing workshop provides the opportunity for students to develop their abilities in writing creative nonfiction. Original student work is read and discussed in class and in conferences with the instructor. Students will also read and analyze classic and contemporary creative nonfiction. This course may be repeated for up to six credits.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{\text {C }}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\text {D }}$ or minimum score of 1 in 'English Major') and ENGL $225^{\text {D }}$
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Food, Wellness \& Environment Across Cultures, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 339-Creative Writing: Fiction

This writing workshop provides the opportunity for students to develop their abilities in writing fiction. Original student work is read and discussed in class and in conferences with the instructor. Students will also read and analyze classic and contemporary fiction. This course may be repeated for up to six credits.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{C}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\text {D }}$ or minimum score of 1 in 'English Major') and ENGL $225^{\text {D }}$
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 340 - Creative Writing: Poetry

This writing workshop provides the opportunity for students to develop their abilities in writing poetry. Original student work is read and discussed in class and in conferences with the instructor. Students will also read and classic and contemporary poetry is assigned. This course may be repeated for up to six credits.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{\text {C }}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\text {D }}$ or minimum score of 1 in 'English Major') and ENGL $225^{\text {D }}$
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 346 - Writing the Graphic Novel

This creative writing workshop provides an opportunity for students to develop their abilities in creating graphic novels. Original student work is read and discussed in class as well as critiqued in conference with the instructor. Students will also read and analyze historic and contemporary graphic novels. This course may be repeated for up to six (6) credits.

Prerequisites: ENGL $102^{\mathrm{D}}$ and (ENGL $104^{\mathrm{D}}$ or ENGL $220^{\mathrm{D}}$ ) and ENGL $225^{\mathrm{D}}$ and (ART $105^{\mathrm{D}}$ or ART $205^{\mathrm{D}}$ or ART $305^{\mathrm{D}}$ or ART $106^{\mathrm{D}}$ or ART $206^{\mathrm{D}}$ or ART $306^{\mathrm{D}}$ or ART $107^{\mathrm{D}}$ or ART $207^{\mathrm{D}}$ or ART $307^{\mathrm{D}}$ or ART $108^{\mathrm{D}}$ or ART $208^{\mathrm{D}}$ or ART $308^{D}$ or ART $114^{D}$ or ART $214^{D}$ or ART $314^{D}$ or ART $213^{D}$ or ART $313^{\text {D }}$ or ART $413^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 349-Creative Writing:Screenplay

Students enrolled in Creative Writing:Screenplay will learn how to write the Hollywood narrative screenplay. Students will develop a workable story and characters that show growth. They will then write a screenplay and develop a marketing plan to sell it.
Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{C}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{D}$ or ENGL $220^{\text {D }}$ or minimum score of 1 in 'English Major') and ENGL $225^{\text {D }}$
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

## ENGL 360 - Latin Language and Literature

This course focuses on classical and medieval Latin verse and prose, with a continuing review of grammar as necessary.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{C}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{D}$ or ENGL $220^{\text {D }}$ or minimum score of 1 in 'English Major') and ENGL $260^{\text {D }}$ and ENGL $261^{\text {D }}$
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 365 - Writing for the World Wide Web

This course examines the structure, form and rhetoric or writing for web environments.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{C}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\text {D }}$ or minimum score of 1 in 'English Major')
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 389-Stratford Shakespeare Tour

Students will study of the works and time of Shakespeare in cultural context. The trip concludes with travel to the Stratford Shakespeare Festival in Stratford, Ontario, Canada. Offered in the summer only. Trave fee required.

Prerequisites: (ENGL $103^{\mathrm{C}}$ or ENGL $102^{\mathrm{C}}$ ) and (ENGL $210^{\mathrm{D}}$ or ENGL $104^{\mathrm{D}}$ or ENGL $220^{\mathrm{D}}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 398- Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## ENGL 402 - World Literature

Students will critically read and analyze selected works by global writers beyond the U.S. and Britain.

Prerequisites: (ENGL $103^{\text {C }}$ or ENGL $102^{\text {C }}$ ) and (ENGL $210^{\text {D }}$ or ENGL $104^{\text {D }}$ or ENGL $220^{\mathrm{D}}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Art \& Society, Revolutions, Transfer Thread
Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 403 - Literary and Cultural Theory

Students will study select literary and cultural theory from Plato to the present day, with application to critical analysis of the literary arts.

Prerequisites: (ENGL $103^{\text {C }}$ or ENGL $102^{\text {C }}$ ) and (ENGL $210^{\text {D }}$ or ENGL $104^{\text {C }}$ or ENGL $220^{\mathrm{D}}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 409 - Professional English

ENGL 409 instructs upper-level English majors in the goals, audiences, sources, and methods for professionalization. In this course, students reflect on and define their individual undergraduate experiences and create a personal narrative from their experiences. Students will then identify and define a career field. By the end of the course, students will develop strategies for connecting their individual narrative to their specific desires for possible career fields.

Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{\text {C }}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\mathrm{D}}$ or minimum score of 1 in 'English Major')
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 410 - Literature of the Environment

This course encourages those interested in the rhetoric of science, nature writing, and environmentalism to pose informed questions regarding the language, rhetoric, images, and ideas found in significant poetry and prose, fiction and nonfiction, that concern the environment.

Prerequisites: (ENGL $103^{\mathrm{C}}$ or ENGL $102^{\mathrm{C}}$ ) and (ENGL $210^{\mathrm{D}}$ or ENGL $104^{\mathrm{C}}$ or ENGL $220^{\text {D }}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Thematic Thread(s): Sustainability, Transfer Thread Completion Course Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 411 - Science Fiction

Science Fiction situates the genre as a form of critique of the concept of the future. The course provides a literary and historical path for comprehending the genre's evolution. It engages students in cross-disciplinary conversations about scientific and technological advancements that inform narratives as well as establishes how metaphors of the alien drive science fiction's forecasts. The course highlights how science fiction shapes particular ways of seeing and enacts such modes through the study of diverse texts and application of concepts in projects about our future lives.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): The Future, Transfer Thread Completion Course Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.
ENGL 429 - Grant and Proposal Writing
Students will review the research and rhetoric associated with writing successful grants and proposals.
Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{C}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\text {D }}$ or minimum score of 1 in 'English Major')
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd
Thematic Thread(s): Innovation, Entrepreneurship, and Positive Change, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 450 - Internship

Students will gain applied writing experience at a venue outside of the classroom.

Prerequisites: (ENGL $102{ }^{\text {C }}$ or ENGL $103^{\circ}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\circ}$ or minimum score of 1 in 'English Major')
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-12
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 480 - Literature Seminar

The seminar focuses on a major author or pair of authors, a single literary genre, or a specific literary period.

Prerequisites: (ENGL $103^{\text {C }}$ or ENGL $102^{\text {C }}$ ) and (ENGL $210^{\text {D }}$ or ENGL $104^{\text {C }}$ or ENGL $220^{\circ}$ ) or minimum score of 1 in 'English Major'
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 490 - Independent Study

A program of supervised independent study. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.
Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{C}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\circ}$ or minimum score of 1 in 'English Major')
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 491-Senior Writing Project

Creative or expository writing projects.
Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{\text {C }}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\text {D }}$ or minimum score of 1 in 'English Major')
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$. Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENGL 498-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.
Prerequisites: (ENGL $102^{\text {C }}$ or ENGL $103^{\circ}$ ) and (ENGL $104^{\text {C }}$ or ENGL $210^{\text {D }}$ or ENGL $220^{\text {D }}$ or minimum score of 1 in 'English Major')
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## English as a Second Language (ESL)

ESL 001 - Start ESL Reading

This course is not for native speakers of English. This is a beginning ESL reading course in which students focus on understanding the meaning of written English by reading a variety of texts. students develop skills to read and understand English to make a transition from word-by-word translation to reading comprehension.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 002 - Basic ESL Reading

This course is not for native speakers of English. This is a basic ESL reading course in which students read various types of written texts in order to improve reading skills. Topics relate to academic and everyday life. Emphasis is placed on building vocabulary, developing reading strategies and critical thinking skills.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 003 - Intermediate ESL Reading

This course is not for native speakers of English. Students learn to read English as a second language fluently by reading interesting stories with a variety of topics, controlled for proficiency with appropriate difficulty. The course focuses on developing reading skills including pre-reading, skimming and scanning as well as building and developing a working English vocabulary. Students also write responses to the stories they read and share their reflections with their classmates.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 004 - High Intermediate ESL Reading

This course is not for native speakers of English. This course uses a variety of authentic, meaningful and stimulating ESL readings. The course focuses on developing critical reading strategies, skimming and scanning abilities, increadsing reading speed, building academic vocabulary power, drawing inferences, previewing, predicting and finding the main idea. Students will build successful reading strategies to comprehend language and concepts presented in college textbooks.

Credits: 0
Term(s) Typically Offered: Offered as Needed
ESL 005 - Advanced ESL Reading
This course is not for native speakers of English. In this course, students read a variety of authentic, meaningful and stimulating texts in order to help students develop ciritical reading strategies, increase reading speed and build academic vocabulary. The goal of this class is to prepare students with successful ESL reading strategies to compehend language and concepts that students will encounter in university level textbooks through a variety of disciplines as is required by a liberal studies curriculum.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 011 - Start ESL Listening

This course is not for native speakers of English. This course helps students with basic ESL listening needs in daily life situations. Students develop their listening and speaking skills in order to interact with others. Emphasis is also placed on recognizing different sounds in American English.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 012 - Basic ESL Listening

This course is not for native speakers of English. This course helps students with basic ESL listening needs in daily life and basic academic situations. Focus is on listening comprehension, with students developing their listening and speaking skills in order to interact with others.

Credits: 0
Term(s) Typically Offered: Offered as Needed
ESL 013 - Intermediate ESL Listening I
This course is not for native speakers of English. This course helps students with basic ESL listening needs in daily life and basic academic situations. Focus is on interpersonal communication skills in spoken American English. The course focuses on a variety of listening comprehension skills and strategies in order for students to become more effective listeners in a variety of settings.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 014 - High Intermediate ESL Listening

This course is not for native speakers of English. This course prepares students for the demands of college-level academic listening tasks. The course aims to enhance students' ESL listening skills and to provide strategies and practice for listening to instructors and classmates who use a variety of speech patterns and vocabulary in class lectures and discussion.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 015 - Advanced ESL Listening

This course is not for native speakers of English. This course prepares students for the demands of college-level academic listening tasks. The course aims to enhance students' ESL listening skills and to provide strategies and practice for listening to instructors and classmates who use a variety of speech patterns and vocabulary in class lectures and discussion. Students will practice listening to lectures from a variety of academic disciplines and will analyze the material that they hear. Students will also practice strategies for active participation in lectures and class discussion.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 021 - Start ESL Writing

This course is not for native speakers of English. This course provides basic ESL writing instruction for beginning level English language learners. Students will work on sentence and short-paragraphy length writing to express their ideas in English.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 022-Basic ESL Writing

This course is not for native speakers of English. This course helps ESL students learn how to generate topics and write paragraph length discourse. There is also an emphasis on reading to understand writing styles and organization strategies. Students develop writing fluency by keeping a journal of American English essays throughout the semester.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 023 - Intermediate ESL Writing

This course is not for native speakers of English. This course helps students learn to generate topics and write paragraph length ESL discourse. Sentence structure and writing conventions of academic American English are also explored. Students will study application of vocabulary and grammar skills for writing and practice reading to understand writing better.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 024 - High Intermediate ESL Writing

This course is not for native speakers of English. This course prepares students to write academic papers by exploring elements of academic writing and its process. Students generate topics, write cohesive paragraphs, use organizational strategies and learn to consider audience. Students also explore self-expression and writing identity through ESL journal writing.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 025 - Advanced ESL Writing

This course is not for native speakers of English. In this course, students learn to write for a variety of purposes considering their audience. Lessons include developing appropriate writing styles and applying organizational strategies for different styles of texts. Students practice the writing process and practice prewriting, revision and editing. Students also learn about the U.S. academic expectations of writers, including appropriate citation practices and the importance of avoiding plagiarism. Students also learn strategies to improve their writing through self and peer review.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 031 - Start ESL Speaking

This course is not for native speakers of English. This course emphasizes interpersonal ESL communication at a beginning level. Class meetings center around speaking activities that encourage fluency. Some attention will also be given to cultural considerations, pronunciation and conversation strategies.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 032 - Basic ESL Speaking

This course is not for native speakers of English. This course emphasizes interpersonal ESL communication with some focus on academic speech. Class meetings center around speaking activities that encourage fluency and comprehensibility. The class will help students set realistic goals for their pronunciation practices and learning strategies to improve their comprehensibility and confidence in speaking English.

## ESL 033 - Intermediate ESL Speaking

This course is not for native speakers of English. This course is designed to help students develop their own identity as an ESL speaker and user. In this course, students draw on their background knowledge of conversation skills from their primary language while they explore standard conventions in American English. The class will help students set realistic goals for their pronunciation studies and learn strategies to improve their comprehensibility and confidence in speaking English.

Credits: 0
Term(s) Typically Offered: Offered as Needed
ESL 034 - High Intermediate ESL Speaking
This course is not for native speakers of English. This course helps students explore the dynamic of ESL communication between different cultures. It provides students with strategies to communicate with people from different cultures and provides opportunities for students to interact with speakers from different cultural backgrounds. The emphasis of the class is oral communication, but students also learn about nonverbal communication and develop reading and writing skills.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 035 - Advanced ESL Speaking

This course is not for native speakers of English. This course is designed to enhance students' academic language skills to help them be successful in U.S. college courses. Students will learn to participate effectively in a variety of academic situations, such as discussions, lectures, study groups, team-projects and debates. The students will acquire a number of study skills including note-taking, brainstorming, problem-solving and pragmatic strategies for participating in class discussions.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 041 - Introduction to American English Grammar

This course is not for native speakers of English. This course presents the basics of American English grammar with an emphasis on conversational strategies.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 042 - Basic American Grammar

This course is not for native speakers of English. This course presents the basics of American English grammar with an emphasis on the sources from authentic written texts.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 043 - Intermediate American English Grammar

This course is not for native speakers of English. This course is designed to reinforce and refine knowledge of common grammatical structures. Students will increase their familiarity with and use of standard grammatical structures. Emphasis will be placed on grammatical structures common to academic speech and writing.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 044 - High Intermediate American English Grammar

This course is not for native speakers of English. This course is designed to reinforce and refine knowledge of common grammatical structures. Students will increase their familiarity with and use of standard grammatical structures. Emphasis will be placed on grammatical structures common to academic speech and writing.

Credits: 0
Term(s) Typically Offered: Offered as Needed
ESL 045 - Advanced American English Grammar
This course is not for native speakers of English. This course is designed to develop the abilities needed to use a variety of grammatical structures effectively and efficiently. The emphasis is on academic English in oral and written communication.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 051 - Introduction to American Culture

This course is not for native speakers of English. In this course, students learn about U.S. culture and explore resources available in the community of Slippery Rock, PA. students study pragmatic strategies to help them have successful interactions with others in the Slippery Rock community.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 052 - Exploring American Culture I

This course is not for native speakers of English. In this course, students learn about American life on campus and in the town and region.
Students will learn to use the resources available at SRU and in Slippery Rock and Pittsburgh area. The aim of the course is to help students adjust more quickly and completely to living and studying in America and at SRU.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 053 - Exploring American Culture II

This course is not for native speakers of English. In this course, students learn about American life on campus and in the town of Slippery Rock and the Pittsburgh region. Students will compare culutural perspectives from around the world. In addition, students will explore academic culture at SRU and learn to use the resources available at SRU.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 054 - Understanding American Culture

This course is not for native speakers of English. In this course, students learn about American life on campus and in the town and region. Students will compare cultural perspectives from around the world. In addition, students will explore academic culture at SRU and learn to use the resources available at SRU. By exploring culture through a variety of activities, both in and outside of the classroom, students develop a repertoire of listening, speaking, reading and writing strategies for effective interactions in the U.S.

## Credits: 0

Term(s) Typically Offered: Offered as Needed

## ESL 055 - Living in America

This course is not for native speakers of English. This course exposes students to a combination of American history and culture. Students will explore a variety of cultural topics and historical events. A multimedia approach will be used to develop cultural awareness. The class will encourage students to engage in open communication concerning their understandings and assumptions about life in the U.S. Students will participate in group projects in which they present cultural and historical backgrounds about important U.S. events or practices. Students will also explore the implication of U.S. history and culture for university life.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 061 - ESL Tutorial I

This course is not for native speakers of English. This course is a required tutorial. ESL tutoring provides inidividualized attention for students' language learning needs by pairing them with SRU students for small group instruction and interactions.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 062 - ESL Tutorial II

This course is not for native speakers of English. This course is a required tutorial. ESL tutoring provides individualized attention for students' language learning needs by pairing them with SRU students for small group instruction.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 063 - ESL Tutorial III

This course is not for native speakers of English. This course is a required tutorial. ESL tutoring provides individualized attention for students' language learning needs by pairing them with SRU students for small group instruction.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 064 - ESL Tutorial IV

This course is not for native speakers of English. This course is a required tutorial. ESL tutoring provides individualized attention for students' language learning needs by pairing them with SRU students for small group instruction.

## Credits: 0

Term(s) Typically Offered: Offered as Needed

## ESL 065 - Independent Seminar

This course is not for native speakers of English. This course is a selfdriven, student-oriented academic ESL practice session. In the beginning of a semester, each student meets with the director about their study plan in an American university and the director assigns a semester-long task. In the middle and at the end of a semester, the student must report the progress and the outcome of the study to the director.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## Environmental Geoscience (EGEO)

## EGEO 100-Environmental Geology

The course examines problems of mineral, energy and water resources, waste disposal, soils and health, geologic hazards, and land use. Resources are the common property of all people. Sustainable use of resources is poised by equitable distribution of cost and benefits among diverse peoples.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Becoming America, Environmental Problems Toolkit, Sustainable International Development, Sustainability, Transfer Thread Completion Course, Transnational Culture

## EGEO 101 - Physical Geology

Emphasis is placed upon those processes acting to create earth materials, landforms, and structures in and on the earth.

Credits: 3
Term(s) Typically Offered: Offered as Needed
EGEO 110 - Environmental Geology Lab
Complement to EGEO 100; laboratory study of geologic hazards and geologic resources with a focus on local environmental issues. Course may require a weekend field trip.

Prerequisite: EGEO 100 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
EGEO 111 - Physical Geology Lab
Complement to EGEO 101; laboratory studies of minerals and rocks
illustrate the concepts of EGEO 101.
Prerequisite: EGEO 101 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered as Needed
EGEO 121 - Meteorology/Lab
Introduction to principles controlling weather and their effect on people and the environment. Includes lab.

Credits: 4
Term(s) Typically Offered: Offered Fall \& Spring Terms
EGEO 131 - Oceanography
Introduction to the physical, chemical and biological aspects of the marine environment.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Sustainability, Transfer Thread Completion Course

## EGEO 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## EGEO 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
EGEO 195 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## EGEO 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## EGEO 201 - Earth Materials and Processes/Lab

Overview of the composition and structure of Earth. Introduction to fundamental physical and chemical Earth processes. Identification of rocks and minerals based on observation and study of physical properties. Includes lab.

Credits: 4
Term(s) Typically Offered: Offered Fall Terms
EGEO 202 - Earth History/Lab
The evolutionary history of the earth and its life. Two Saturday field trips required.

Prerequisite: EGEO $201^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 4
Term(s) Typically Offered: Offered Spring Terms

## EGEO 203- Quantitative Methods

Review of mathematical techniques and principles. Training in the application of quantitative methods to the understanding and analysis of geological and environmental problems. Students will apply a variety of mathematical techniques to a range of geological and environmental problems. Emphasis will be placed on practical applications of quantitative methodology and the development and use of spreadsheets to manage, analyze, and present data sets.

Prerequisites: EGEO $202^{\mathrm{D}}$ and (MATH $125^{\mathrm{D}}$ or MATH $225^{\mathrm{D}}$ or MATH $230^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms

## EGEO 221 - Weather and Climate Forecasting

An analysis and use of local and regional computer-collected surface and upper air weather data to forecast weather. A study of past records of climate as clues to future changes. Includes lab.

Prerequisite: EGEO $121^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3

## EGEO 231 - Aerial Photography Interpretation

Introduction to photogrammetry, remote sensing, and interpretation of geologic and cultural imagery.

Prerequisites: EGEO $101^{\mathrm{D}}$ or EGEO $201^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3

## EGEO 251-Aviation Meteorology

This course is a study of weather conditions commonly encountered in aviation. The subject is treated from the viewpoint of the forecaster and the pilot. Includes lab.

Prerequisite: EGEO $121^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
EGEO 271-Geotechniques: Lab
Training in laboratory techniques and instruments for geological,
geophysical and environmental surveys.
Credits: 2
EGEO 272 - Introduction to Georeports/Lab
Training in the grammatical and stylistic conventions of technical writing in environmental, geoscientific and geographical disciplines.

Prerequisite: ENGL $102{ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Spring Terms

## EGEO 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## EGEO 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## EGEO 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## EGEO 303-Paleontology/Lab

An introduction to the fossil record and evolution of life through earth history, including the nature of science, marine and land dwelling organisms and basic theories of evolution and extinction of organisms.

Prerequisites: EGEO $201^{\text {D }}$ and EGEO $202{ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 4
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 323 - Planetary Geology

Systematic study of geological processes that have operated on the planets, natural satellites, and minor bodies in the Solar System. Course will cover solar system formation and evolution, planetary interiors, surficial processes, the structure and history of individual planetary bodies. Quantitative techniques will be used to examine data from current and historic exploration missions.

Prerequisites: EGEO $202^{\text {D }}$ and EGEO $203{ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 327 - Structural Geology

Origin and description of primary and secondary structures of sedimentary, igneous, and metamorphic rocks.

Prerequisites: EGEO $201^{\text {D }}$ and (EGEO $202{ }^{\text {D }}$ or PNGE 201 ${ }^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 4
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## EGEO 328 - Plate Tectonics

Plate tectonics is the study of the motion of the lithosphere and deformation of the earth's crust on a regional scale. The course will evaluate the plate tectonic paradigm in terms of its historical evolution and modern application to understanding earth processes. The course examines a broad range of tectonic phenomena and considers the specific geological and geophysical processes involved. Topics covered include the uplift, deformation and metamorphism of mountain belts, the formation of ocean basins, the subsidence of sedimentary basins, the collision of continents and volcanic arcs, earthquake seismology of plate boundaries, magmatism related to plate processes, and tectonics and landscapes.

Prerequisite: EGEO 202 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 340 - Air Pollution Meteorology

A study of meteorological parameters of air pollution concentration, dispersion, and removal. Includes air pollution forecasting and modeling.

Prerequisite: EGEO $121^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 341 - Geomorphology/Lab

A study of landforms, their origin and relation to geologic processes, structure and climate.

Prerequisites: EGEO $201^{\text {D }}$ or GES $150^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 342-Glacial Geology/Lab

A study of erosional and depositional landforms left by glaciers and their meltwaters. Glacial landforms and soils are examined on maps, air photos and in the field.

Prerequisites: GES $150^{\text {D }}$ or EGEO $202^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 351 - Mineralogy/Lab

Systematic crystallography, crystal chemistry, physics, genesis, occurrence, and identification of minerals.

Prerequisites: EGEO $201^{\text {D }}$ and CHEM $108^{\text {D }}$ and CHEM $112^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 4
Term(s) Typically Offered: Offered Fall Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 352 - Petrology/Lab

Classification, occurrence, and genesis of igneous, sedimentary and metamorphic rocks. Identification using hand specimens and polarizing microscope (thin sections).

Prerequisite: EGEO $351^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 4
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 358 - Introduction to Geophysics/Lab

An introduction to geophysics and geophysical methods and their use in the study of Earth's interior. Emphasis will be placed on illuminating subsurface geological features and applications in fields such as groundwater studies, development of energy resources and environmental studies.

Prerequisites: PHYS $211^{\mathrm{C}}$ and MATH $225^{\mathrm{C}}$ and EGEO $201^{\mathrm{C}}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 360 - Introduction to Hydrology/Lab

A study of the occurrence and movement of water and human's effect on this basic resource.

Prerequisite: EGEO $201^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 362 - Stratigraphy/Lab

Principles of stratigraphy, stratigraphic mapping, and graphic techniques used in stratigraphic interpretation. Two Saturday field trips may be required.

Prerequisites: EGEO $201^{\text {D }}$ and EGEO $202{ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 4
Term(s) Typically Offered: Offered Fall Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## EGEO 368 - Women in Science

This course will explore the issues of women in science. Specifically it will address the issues of gender in relation to the theory and practice of science and technology. The course content will use case studies to explore women that have made significant contributions to science despite barriers limiting their access to education and professional organizations. The content will cover topics including how the development of educational systems and professions affected women over the centuries, how scientific approaches have evolved, and how women meet challenges in today"s scientific community. The case studies will provide students with the opportunity to analyze and synthesize the information presented into an understanding on the evolution of scientific thought and women's roles in science.

Credits: 3
Term(s) Typically Offered: Offered Winter Terms
Thematic Thread(s): Gender and Diversity, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
EGEO 399 - Field Camp
Field Camp is a final requirement and is usually conducted at a field study location.

Credits: 1-9
Term(s) Typically Offered: Offered as Needed

## EGEO 448 - X-ray Spectrometry

Concepts of x-ray production and interaction with crystalline materials. Application of x-ray diffraction methods for identification of minerals, and x-ray fluorescence techniques for chemical analysis. One lecture and one two-hour laboratory per week.

Prerequisites: EGEO $201^{\text {D }}$ and CHEM $107^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 450 - Internship

Supervised placement and research in selected public and private agencies. Permission of chairperson.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 451-Geochemistry/Lab

Basic thermodynamics applied to the geochemistry of natural systems. The course will focus on low temperature inorganic reactions that are important for the environmental fate and transport of contaminants in the environment. The course will require the use of computer spreadsheets and models to solve geochemical problems covered in lecture. Three hours of lecture and one hour of computer lab.

Prerequisites: EGEO $201^{\mathrm{D}}$ and CHEM $108^{\mathrm{D}}$ and CHEM $112^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 4
Term(s) Typically Offered: Offered Fall Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 453-Geotechniques: Geochemistry

Laboratory and field experiments to study the geochemistry of local environmental systems. Field sampling, in-field and laboratory analysis, and construction of experimental systems will be conducted. Field trips for sample collection will occur weekly.

Prerequisite: EGEO 451 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 458- Geophysical Field Methods/Lab

An introduction to seismic field methods and their use in the study of Earth's interior. Emphasis will be placed on the use of seismic methods to characterize subsurface geological features and applications in fields such as groundwater studies, development of energy resources and environmental studies.

Prerequisite: EGEO $358^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 460 - Hydrogeology

A study of the quantitative and qualitative interrelationships of geologic materials and processes with ground water.

Prerequisite: EGEO $360^{\circ}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 469 - Field Investigations in the Geosciences

This course will provide students with the opportunity to practice the nature of fieldwork by observing, interpreting, collecting data and analyzing physical and human landscapes, and the natural, cultural and economic forces that are shaping them.

Credits: 1-3
Term(s) Typically Offered: Offered Summer Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

EGEO 476-Geotechniques: Geophysics
Lab and field techniques.
Prerequisite: EGEO 460 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Corequisite(s): EGEO 327
Credits: 1
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

## EGEO 481-Geologic Map Interpretation

A seminar for advanced undergraduates in whom students and staff participate in map interpretation. One two-hour lab per week. Senior standing or permission of the instructor.

Corequisite(s): EGEO 362
Credits: 1
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

## EGEO 482 - Senior Seminar

A seminar for advanced undergraduates in which students and staff participate in discussions concerning classical and current geological problems. Senior standing or permission of the instructor.

Credits: 1
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 490 - Independent Study

Independent work on a topic in the earth sciences selected by the student with permission and advice of the instructor. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## EGEO 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Environmental Science (ENVS)

## ENVS 139-University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

## ENVS 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ENVS 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## ENVS 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ENVS 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
ENVS 295-Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## ENVS 298-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ENVS 311 - Environmental Monitoring and Sampling

The course will focus on the development and implementation of successful sampling plans for water, soil and sediment. Basic sampling and analysis methods will be presented followed by hands-on field exercises employing these techniques. Field notebook documentation and report preparation will be emphasized. At least one field trip will be scheduled for a Saturday during the semester to give students hands-on experience with collection of environmental sample

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students with department of Chemistry, Geography, Geology \& Environm or Biology.

## ENVS 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENVS 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENVS 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENVS 440 - Science, Technology and the Environment

A scientific study of interactions of global systems in the geosphere and biosphere. Selected global problems, such as waste production and disposal, energy use, atmospheric warming, ozone depletion, and acid deposition are analyzed along with possible alternatives. Four courses completed in the natural sciences and mathematics area of the liberal studies program.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENVS 450 - Environmental Science Internship

Academic credit may be earned through a practicum experience, working for an agency or business. A minimum of 16 credits completed in the major and approval of the agency or business, the program director and the advisor.

Credits: 1-12
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENVS 480 - Environmental Systems Analysis

The student will investigate an environmental problem in conjunction with an appropriate faculty member as a research project. A minimum of 16 credits completed in the major and the approval of the program director and the advisor.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENVS 490 - Independent Study

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENVS 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## Credits: 1-6

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ENVS 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

# Exploratory Studies and Academic Progress (ESAP) 

ESAP 109 - Developmental Mathematics

This course covers basic arithmetic skills necessary for successful completion of basic algebra. Topics include basic operations using whole numbers, fractions and decimals, ratios and proportions, percents, and solving equations. Students not exempted from ACSD 109 must successfully complete this course before enrolling in ACSD 110. Students must pass a standard proficiency exam to pass this course. Course grading: A, B, C, or NC. Credit earned in this course will not count toward the university's 120 credit hour minimum required for graduation.

## Credits: 3

Term(s) Typically Offered: Offered as Needed

## ESAP 110 - Beginning Algebra

An overview of introductory algebra concepts, this course covers topics such as: simplifying variable expressions, solving equations and applications problems, simplifying polynomials, factoring, algebraic fractions, graphing linear equations, solving systems of linear equations, and simplifying radical expressions. Students who are placed into this course are expected to possess certain minimum competencies in arithmetic skills, and they must pass a standard proficiency exam to pass this course. Course grading: A, B, C, or NC. Prerequisite: ACSD 109 or exemption from ACSD 109. Credit earned in this course will not count toward the university's 120 credit hour minimum required for graduation.

## Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, \& Summer

## ESAP 139-University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## ESAP 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## ESAP 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## ESAP 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
ESAP 290 - Experimental
A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ESAP 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## ESAP 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ESAP 390-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

ESAP 395 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1, Freshman 2 or Sophomore 1.
ESAP 398 - Selected Topics
A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## ESAP 490 - Independent Study

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ESAP 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ESAP 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Exploratory Studies and Academic Progress (ESAP)

## ESAP 109- Developmental Mathematics

This course covers basic arithmetic skills necessary for successful completion of basic algebra. Topics include basic operations using whole numbers, fractions and decimals, ratios and proportions, percents, and solving equations. Students not exempted from ACSD 109 must successfully complete this course before enrolling in ACSD 110. Students must pass a standard proficiency exam to pass this course. Course grading: A, B, C, or NC. Credit earned in this course will not count toward the university's 120 credit hour minimum required for graduation

Credits: 3
Term(s) Typically Offered: Offered as Needed

## ESAP 110-Beginning Algebra

An overview of introductory algebra concepts, this course covers topics such as: simplifying variable expressions, solving equations and applications problems, simplifying polynomials, factoring, algebraic fractions, graphing linear equations, solving systems of linear equations, and simplifying radical expressions. Students who are placed into this course are expected to possess certain minimum competencies in arithmetic skills, and they must pass a standard proficiency exam to pass this course. Course grading: A, B, C, or NC. Prerequisite: ACSD 109 or exemption from ACSD 109. Credit earned in this course will not count toward the university's 120 credit hour minimum required for graduation.

Credits: 3
Term(s) Typically Offered: Offered Fall, Spring, \& Summer

## ESAP 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## ESAP 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ESAP 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## ESAP 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ESAP 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ESAP 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## ESAP 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ESAP 390-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ESAP 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1, Freshman 2 or Sophomore 1.

ESAP 398-Selected Topics
A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ESAP 490 - Independent Study

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ESAP 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ESAP 498-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Finance (FIN)

## FIN 100 - Personal Financial Planning

All individuals encounter challenging financial decisions. This course will introduce a wide variety of topics, such as cash and debt management, credit rating, insurance policies, housing decisions, taxes, investments, retirement, and estate planning. In addition, students will apply financial planning principles to diverse populations.

## Credits: 3

Term(s) Typically Offered: Offered Winter, Spring\&Summer
Thematic Thread(s): Innovation, Entrepreneurship, and Positive Change,
Transfer Thread Completion Course
FIN 139 - University Seminar
University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## FIN 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
FIN 195 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## FIN 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## FIN 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## FIN 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## FIN 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
FIN 304 - Money and Banking
Emphasis is upon monetary policy, how it is implemented, the theories on which it is based, and the implication of this policy on our economy.

Prerequisite: ECON $201{ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN 318 - Intermediate Statistical Analysis

Statistical analysis encompassing multiple regression and correlation, ANOVA (simple and multivariate), goodness of fit, statistical decision analysis, and advanced forecasting techniques.
Prerequisites: ECON $219^{\text {D }}$ or MGMT $219^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN 320 - Managerial Finance

Capital budgeting, cost of capital, management of short and long term assets, mergers and financial reorganization.

Prerequisite: ACCT $209^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall, Winter, \& Spring
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN 321 - Investments

Introduction to security markets and their operation; investment alternatives; fundamentals of investment analysis.

Prerequisite: FIN 320 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall, Spring, \& Summer
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## FIN 322 - Bank Financial Management

Principles of bank financial management including sources and uses of funds and the role of the bank in financial markets.

Prerequisite: FIN 320 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN 323 - Financial Markets and Institutions

Introduction to financial markets and institutions and to their role in financing business, consumers and government.

Prerequisite: FIN $320^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall, Winter, \& Spring
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN 326 - Intermediate Corporate Finance

This course provides in-depth analysis of topics addressed in corporate finance and covers additional advanced topics including but not limited to real asset valuation, corporate governance, short-term financial management, and mergers and acquisitions.

Prerequisite: FIN 320 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall, Spring, \& Summer
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN 329 - Principles of Insurance

A study of the basic principles of insurance and risk. Topics include property and liability insurance; the financial structure and organization of insurance business, and the different fields of insurance.

Prerequisite: FIN 320 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN 340 - Real Estate Investment

The study of the nature and scope of real estate investment, investment decision process and investment strategy, financial and risk analysis, tax implications, institutional real estate investment and real estate investment trust funds.

Prerequisite: FIN 320 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN 341 - Entrepreneurial Finance

Entrepreneurial finance is the application and adaptation of financial tools and techniques to the planning, funding, operation, valuation and harvesting of intrepreneurial ventures.
Prerequisite: FIN 320 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Innovation, Entrepreneurship, and Positive Change,
Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN 409 - Retirement and Estate Planning

In-depth study of the tools and techniques available for use in retirement and estate planning from a personal financial planning perspective. Particular emphasis will be given to retirement cash flow analysis and planning as well as the transfer tax system inherent in estate planning and the methods available for estate management.
Prerequisites: FIN $321^{\text {D }}$ and FIN $329^{\text {D }}$ and ACCT $308^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN 410 - Personal Financial Planning Seminar

Synthesize the topics requisite to expertise in personal financial planning as explored principally through case studies. These topics include risk management, investment, insurance and tax planning, and retirement and estate planning.

Prerequisites: FIN $321^{\text {D }}$ and FIN $329^{\text {D }}$ and ACCT $308^{\text {D }}$ and FIN $409^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN 420 - Finance Seminar

Capital budgeting, cost of capital, capital structure, working capital management and long-term financing.

Prerequisite: FIN $320^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN 421 - Portfolio Theory

Advanced treatment of investment concepts. In-depth analysis of Modern Portfolio Theory, Capital Asset Pricing Model (CAPM) and its extensions, options, interest options, future markets and precious metals.

Prerequisite: FIN 320 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN 427 - International Financial Management

International monetary systems, sources of funds, import and export financing; taxation of multinational corporations, foreign investment decisions; political risk; risk of foreign exchange losses; management of working capital.

Prerequisite: FIN $320^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN 430 - International Banking

Internationalization of U.S. and foreign banks to meet the global financial needs of multi-national activities.

Prerequisites: FIN $320^{\text {D }}$ and FIN $323^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN 450 - Internship

Supervised placement and research in selected public and private
agencies at appropriate institutions. Course listed as 1-12 credits, 3 credits are recommended.

Credits: 1-12
Term(s) Typically Offered: Offered Fall, Spring, \& Summer
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## FIN 490 - Independent Study

In-depth reading and/or research in an area of particular interest to the student, done with the guidance of a faculty member. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## FIN 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FIN 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## French (FREN)

## FREN 101 - French Language and Culture I

This course is the first in a three course series which will provide an introduction to the French language.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Being American, Global Citizenship, Food, Wellness \& Environment Across Cultures, International Business, Transfer Thread Completion Course

## FREN 102 - French Language and Culture II

This course is the second in a three course series which will provide an introduction to the French language.

Prerequisites: minimum score of 15 in 'Placement in FREN102' or FREN $101^{\text {D }}$ or minimum score of 233 in 'Placement in FREN102'
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Being American, Global Citizenship, Food, Wellness \& Environment Across Cultures, International Business, Transfer Thread Completion Course

## FREN 103 - French Language and Culture III

This course is the third in a three course series which will provide an introduction to the French language.

Prerequisites: (minimum score of 25 in 'French - SRU Placement Exam' or minimum score of 25 in 'Placement in FREN103') or FREN $102^{\text {D }}$ or minimum score of 318 in 'Placement in FREN103'
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Being American, Global Citizenship, Food, Wellness \& Environment Across Cultures, International Business, Transfer Thread Completion Course

## FREN 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## FREN 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## FREN 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## FREN 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## FREN 201 - French Conversation 1

A functional course in speaking and writing French, stressing everyday vocabulary and sentence structure. Some grammar review.

Prerequisites: FREN $103^{\text {D }}$ or minimum score of 35 in 'Placement in FREN200 level' or minimum score of 386 in 'Placement in FREN200 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
FREN 215 - Topics in French and Francophone Culture
This course provides deeper knowledge of French and Francophone culture by examining selected topics in French and Francophone culture. This course is taught in English.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): Transfer Thread Completion Course

## FREN 220 - Reading in French

An introduction to reading in French at the intermediate level.
Prerequisites: FREN $103^{D}$ or minimum score of 35 in 'Placement in FREN200 level' or minimum score of 386 in 'Placement in FREN200 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
FREN 290 - Experimental
A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## FREN 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## FREN 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## FREN 300 - French Grammar and Composition 1

An intermediate grammar review course emphasizing the basic structure of French.

Prerequisites: minimum score of 45 in 'Placement in FREN300 level' or FREN $201^{\text {D }}$ or FREN $220^{\text {D }}$ or minimum score of 447 in 'Placement in FREN300 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FREN 301 - French Conversation 2

Development of French vocabulary and conversation skills through intensive study of selected theme areas.

Prerequisites: FREN $201^{\text {D }}$ or FREN $220^{\text {D }}$ or minimum score of 45 in 'Placement in FREN300 level' or minimum score of 447 in 'Placement in FREN300 level'
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FREN 303 - Professional French

Designed to acquaint the student with formal registers and formulas of communication used in all professional communication in the Frenchspeaking world.

Prerequisites: FREN $220^{\text {D }}$ or FREN $201^{\text {D }}$ or minimum score of 45 in 'Placement in FREN300 level' or minimum score of 447 in 'Placement in FREN300 level'
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FREN 305 - France through the Ages

An advanced course in the study of the development of French civilization from the earliest times to the end of the 19th century.
Prerequisites: FREN $201^{\text {D }}$ or FREN $220^{\text {D }}$ or minimum score of 45 in 'Placement in FREN300 level' or minimum score of 447 in 'Placement in FREN300 level'
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FREN 306 - France and Francophone Identities Today

An exploration of diverse voices, social groups and societies in francophone literatures through works by francophone writers from all over the world. Designed as an introduction to the literatures and cultures of the francophone world, this course considers issues of social status, history, resistance, representation and identity. Taught in French.

Prerequisites: FREN $220^{\mathrm{D}}$ or FREN $201^{\mathrm{D}}$ or minimum score of 45 in
'Placement in FREN300 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): Transfer Thread Completion Course, Transnational Culture
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FREN 315 - French Study Abroad

This course is designed for students who wish to study French/
Francophone society firsthand. Students will study the culture, literature, history, art, and other issues concerning the country where the program is offered.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FREN 320 - Main Currents in French Literature

An introduction to the study of French literature through prose, drama and poetry.

Prerequisites: FREN $201^{D}$ or FREN $220^{\mathrm{D}}$ or minimum score of 45 in 'Placement in FREN300 level' or minimum score of 447 in 'Placement in FREN300 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FREN 330 - French Literature from the 18th Century to the Present

Representative works and literary movements in French literature from the eighteenth century to the present will be studied.

Prerequisites: FREN $201{ }^{\text {D }}$ or FREN $220^{\text {D }}$ or minimum score of 447 in
'Placement in FREN300 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## FREN 350 - French Linguistics and Phonetics

An introduction to general linguistics and the practical application of phonetics to the study of French. Analysis and practice of the sound system of the foreign language.

Prerequisites: FREN $201^{\text {D }}$ or FREN $220^{\text {D }}$ or minimum score of 45 in
'Placement in FREN300 level' or minimum score of 447 in 'Placement in FREN300 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FREN 390-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## FREN 395 - Workshop

Special topics of interest to undergraduates and selected community members. A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FREN 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FREN 400 - French Grammar and Composition 2

An advanced course in the study of French grammar and usage.
Prerequisite: FREN $300^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FREN 401 - French Conversation 3

This course will provide the opportunity for advanced students to improve their aural comprehension and their conversation abilities in French.

Prerequisites: FREN $301^{D}$ and FREN $300^{D}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FREN 402 - Eighteenth-Century Novel

A study of the Age of Enlightenment as reflected in the novel.
Prerequisites: FREN $301^{\mathrm{D}}$ and (FREN $300^{\mathrm{D}}$ or FREN $303^{\mathrm{D}}$ or FREN $305^{\mathrm{D}}$ or FREN $306^{\mathrm{D}}$ or FREN $320^{\mathrm{D}}$ or FREN $330^{\mathrm{D}}$ or FREN $350^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FREN 403 - Nineteenth-Century French Literature

Readings from the romantic, realistic and naturalistic movements.
Prerequisites: FREN $301^{\mathrm{D}}$ and (FREN $300^{\mathrm{D}}$ or FREN $303^{\mathrm{D}}$ or FREN $305^{\mathrm{D}}$ or FREN $306^{\mathrm{D}}$ or FREN $320^{\mathrm{D}}$ or FREN $330^{\mathrm{D}}$ or FREN $350^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
FREN 404 - Exploring French Culture through Media
A study of various aspects of modern French literature.
Prerequisites: FREN $301^{\mathrm{D}}$ and (FREN $300^{\mathrm{D}}$ or FREN $303^{\mathrm{D}}$ or FREN $305^{\mathrm{D}}$ or FREN $306^{\mathrm{D}}$ or FREN $320^{\mathrm{D}}$ or FREN $330^{\mathrm{D}}$ or FREN $350^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FREN 411 - Literature of the Classical Period

A study of French Classicism, emphasizing the plays of Corneille, Moliere and Racine.

Prerequisites: and (FREN $300^{\mathrm{D}}$ or FREN $303^{\mathrm{D}}$ or FREN $305^{\mathrm{D}}$ or FREN $306^{\mathrm{D}}$ or FREN $320^{\mathrm{D}}$ or FREN $330^{\mathrm{D}}$ or FREN $350^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FREN 430 - French Literature 12th to 17th Century

Representative works and literary movements in French Literature from the 12th through the 17th centuries will be studied.
Prerequisite: FREN $300^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FREN 490 - Independent Study

Students have an opportunity to study selected areas in greater concentration. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FREN 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## FREN 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Gender Studies (GNDR)

## GNDR 115 - Introduction to Gender Studies

Introduction to Gender Studies is an interdisciplinary course that offers a foundation for an intersectional analyses of gender within the context of systems and structures of power and oppression.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Transfer Thread Completion Course
GNDR 120 - Introduction to the Study of Masculinities
This course proposes to introduce and explore the topic of masculinity as a subject for critical study. In the course, students will read about and discuss how masculinities are constructed, presented and reproduced in media and popular culture. This course is meant for and open to everyone interested in taking a critical approach to the study of gender in societies, with specific focus on how (especially american) masculinities shape and are shaped by identity, culture, media, war, politics and economics.

Credits: 3
Term(s) Typically Offered: Offered Summer Terms
Thematic Thread(s): Gender and Diversity, Transfer Thread Completion Course

## GNDR 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2

Enrollment limited to students with the ROCK STUDIES STUDENT attribute

GNDR 190 - Experimental
A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## GNDR 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## GNDR 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## GNDR 280 - Introduction to Disability Studies

An introduction to the field of Disability Studies, which rejects medical paradigms and instead analyzes disability as a social, cultural and ideological phenomenon, with an intersectional and interdisciplinary focus on gender, race and socioeconomic status

Credits: 3

## GNDR 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## GNDR 295-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## GNDR 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
GNDR 340 - Applied Queer Studies
An introduction to the field of queer studies with an applied focus (on gender, race, disability, age, ethnicity, transactional issues) in an intersectional and interdisciplinary context. The course analyzes the historical, cultural, political and discursive production of LGBTQAI+ identities, heteronormativity as a form of control, and LGBTQAI+ activism and advocacy.

Prerequisite: GNDR $115^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$
Credits: 3
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2, Sophomore 1 or Sophomore 2

## GNDR 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

GNDR 395-Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GNDR 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GNDR 400 - Gender Studies and Porn Culture

Integrating feminist, sociological, media, marketing, neurological, and philosophical perspectives, the course analyzes the social implications of porn consumption, porn production and methods of porn distribution, including technological developments (for example, 3D software development and the use of artificial intelligence in sex dolls). While gender organizes the analytic approaches of the course, it considers other embodied and intersectional identities as well.

Prerequisite: GNDR $115^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

## GNDR 415 - Feminist Perspectives in the Disciplines

This course will explore feminist approaches to pedagogy and research in the humanities, social sciences, and natural sciences, highlighting how such approaches reshape and redirect the ways knowledge is constructed as well as the attendant, transformed results.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Gender and Diversity, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GNDR 450 - Gender Studies Internship

Professional experiences, such as working with the Girl Scouts or state National Organization for Women (NOW), or working in a women's center or abuse/sexual assault center, that will allow students to either apply or function within a feminist framework to understand the complexity of women's lives and contribute to women's opportunities.

Credits: 1-12
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GNDR 490 - Independent Study

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GNDR 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GNDR 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Geography/Environmental Studies (GES)

## GES 105 - World Regional Geography

This course provides an introduction to the regional concept, classification of major culture regions throughout the world and a description of the physiocultural character of those regions.

Credits: 3
Term(s) Typically Offered: Offered as Needed
GES 115 - Introduction to Geospatial Technologies
Provides fundamental concepts and basic skills regarding map use and interpretation. Overview of major geospatial technologies, including geographic information systems, global positioning systems, spatial visualization, and remote sensing.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Sustainable International Development, Transfer Thread Completion Course

GES 135 - Introduction to Environmental Problems
An introduction to some of the more crucial environmental problems and alternative solutions that are available.

Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): Environmental Problems Toolkit, Healthy Body, Mind \& Environment, Sustainable International Development, Sustainability, Transfer Thread Completion Course

## GES 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## GES 150 - The Natural Environment

An introduction to interrelationships among the physical elements of the environment, including the study of vegetation, soils and landforms.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Enrollment is limited to students with a program in Geography or Geography.

## GES 170 - Discover Geography

An inquiry course that examines why people live differently in different parts of the world, with respect to political and economic systems, culture, demographics, and relationships with the natural world. This course introduces students to topics and methods of human geography, and enables students to apply them to addressing important global, regional, and local social issues.

Credits: 3
Term(s) Typically Offered: Offered Every Term

## GES 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## GES 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
GES 198 - Selected Topics
A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
GES 201 - Latin America and the Caribbean
Consideration is given to physical, historical, cultural, political, and economic patterns in Latin America and the Caribbean.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## GES 202 - United States and Canada

An introductory course that surveys the patterns, connections, and evolution of environments, cultures, and economies of the U.S. and Canada.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## GES 204 - Post-Soviet Union

Study of the Soviet Union and Soviet-bloc nations with emphasis on economic, physical, political, and cultural aspects.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## GES 205-Cultural Geography

This course serves as an introduction to human, social and cultural geography. Course content will cover cultural landscapes and place identity, discourses and cultural interpretation of the environment, the cultural and spatial impacts of demographic and economic changes, and cultural contestation over space and place.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms Odd

## GES 215 - Planning for Sustainable Communities

An introduction to social and physical planning for rural areas, towns and cities.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Environmental Problems Toolkit, Sustainability, Transfer Thread Completion Course

## GES 220-General Methods of Fieldwork

A survey of how field research is done in geography, including designing a research question, data collection techniques, and qualitative and quantitative data analysis.

Prerequisite: GES 115 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
GES 235 - Conservation
An examination of the earth's complex resource base which places special emphasis on the geographic location of resources and on conservation/preservation practices.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Sustainability, Transfer Thread Completion Course

## GES 242 - Geography of Religion

The distribution and arrangement of world religions, giving consideration to the comparative influence of religion on the cultural landscape and on regional development.

Credits: 3

## GES 245 - Population and Resources

Basic demographic principles and their relationship to regional development.

Credits: 3

## GES 290-Experimenta

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## GES 295-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
GES 298 - Selected Topics
A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## GES 301-Geography of Rural Areas

Analyzes the structure and primary functional patterns of rural areas, with an emphasis on agricultural and industrial land use, problems of rural development, and population shifts.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

GES 303 - Asia
A survey of the major regions of Asia emphasizing their physical, cultural, and political characteristics. Several countries are selected for special emphasis.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Thematic Thread(s): Transfer Thread Completion Course, Transnational Culture
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 305 - Environmental Economic Geography

Environmental economic geography takes a geographical approach to the interface between nature and the economy, with an emphasis on patterns and trends in environmental services and resource management.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 307-Australia

This course will introduce students to the environments and peoples of Australia. Australia's natural environment, Aboriginal and white culture, economy, politics, and major current public issues will be covered.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 308 - Europe

The evolution of nations, the cultural landscape, and the spatial-economic organization of Europe.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.
GES 309-Africa
This course surveys the patterns, connections, and evolution of environments, cultures, nations, and economies of Africa, with an emphasis on maps, regions, and images.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 310 - Urban Geography

The course is designed to provide insights into the nature of cities and smaller urban places

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

GES 315-Cartography I
Basic elements of computer-assisted thematic map design are discussed. Cartographic projects serve as a means of applying major concepts such as map projections, data classification, color theory, and qualitative/quantitative symbology. Includes a lab.

Prerequisite: GES $115^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

GES 321 - Introduction to UAS for Remote Sensing and Monitoring
This course introduces students to Unmanned Aerial Systems and their use in acquisition of remotely sensed data. Course content will cover topics necessary for students to sit for the FAA Part 107 Commercial Remote Pilot Certification examination. Students will also be introduced to basic concepts of remote sensing and aerial imaging, UAS mission planning and spatial data processing.

Prerequisite: GES $115^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1 or Freshman 2 may not enroll.

GES 324 - Environmental Law and Policy
The study of political control of the environment. Focus on the roles played by individuals and groups. Cross-listed with POLS 324.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Being American, Environmental Problems Toolkit,
Sustainability, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## GES 325 - Introduction to Geographic Information Science

This course introduces students to integrated computer tools for the capture, storage, manipulation, analysis, and printout of earth-referenced data. Computers are used to store maps, analyze maps, and produce new maps along with their attributes to address societal issues. Includes a lab.

Prerequisite: GES $115^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Environmental Problems Toolkit, Fighting Social
Problems, Transfer Thread Completion Course
Students with a semester level of Freshman 1 or Freshman 2 may not enroll.

## GES 330 - Political Geography

The effects of politics on geography and the effects of geographic factors on politics.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 331 - Economic Geography

Examines human use and economic organization of the earth.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Thematic Thread(s): Transfer Thread Completion Course, Violence
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 344 - Environmental Justice

This course will teach students to evaluate situations as just or unjust according to well-understood principles of environmental justice. Students will apply this analysis to important environmental justice topics such as unequal distribution of environmental harms and resources, treatment of indigenous people, animal and ecosystem rights and international environmental negotiations.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Thematic Thread(s): African-American Studies, Civil Rights \& Social Movements, Environmental Problems Toolkit, Food, Wellness \&
Environment Across Cultures, Sustainability, Transfer Thread Completion Course, Transnational Culture, Violence
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 345 - Population Analysis

A study of the techniques of population analysis with respect to growth, distribution, fertility, migration, and other demographic characteristics. Some background in algebra or statistics.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 355 - Earth's Changing Climate

This course examines the interrelationship between climate and human activities. We will study the processes that control Earth's climate with a focus on the flow of energy through the Earth system and a study of the interactions between the atmosphere, the ocean, and the land surface. We will investigate climate change on variable time scales with a focus on how climate affects humans and the environment. Further, we will examine which factors influence society's decisions in response to climate change.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Global Citizenship, Healthy Body, Mind \&
Environment, International Business, Revolutions, Sustainability, Transfer
Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 356 - Earth's Changing Climate Laboratory

This course examines Earth's climate changes through an investigation of climate data and climate models. We will investigate climate change on variable time scales and in different geographic regions with a quantitative focus.

Prerequisite: GES 355 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Geography, Geology \& Environm.

## GES 361-Gender and the Environment

Gender and the Environment will explore the ways that human interaction with the natural environment is shaped by gender roles and gender inequality in cultures around the world. Topics covered will include gender differences in resource access, connections between environmental degradation and women's oppression, cultural metaphors that link nature and gender (e.g. "mother earth") and the way that gender shapes environmental movements.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Thematic Thread(s): Gender and Diversity, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 362-Applications in Sustainability

This course explores the history of the sustainability movement, and the current and emerging science and practices of sustainability. Students will also be introduced to the research tools and methods needed to evaluate the sustainability of energy systems, technology, the built environment and environmental regulations and policy.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Environmental Problems Toolkit, Sustainable International Development, Sustainability, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 363 - Energy and Society

Students will develop a working knowledge of energy technologies and policies, and their impacts on both the environment and society. Discussions and case studies will include analysis of current and emerging energy sources and consumption.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## GES 375-Geography of Intolerance

Analyzes cross-culturally the impact on resource allocation and the spatial implications of gender, racial, religious, political and class discrimination.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 398-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 410 - Remote Sensing

Covers the electromagnetic and thermal properties of earth objects, principles and operations of sensors, and the practical applications of remote sensing. Lectures will be supplemented with exercises requiring computer processing of satellite data.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 415 - Cartography II

Advanced issues and theory of cartographic design are discussed.
Cartographic applications include flow maps, bivariate statistical mapping, cartograms, interactive maps, and map animation. Includes a lab.

Prerequisite: GES $315^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 420 - Historical Geography of Anglo-America

A study of settlement patterns, land utilization, and sequent occupancies for selected periods since 1500. A student is expected to have background in geography and American history.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 425 - Advanced Geographic Information Systems

This course investigates and applies advanced Geographic Information Systems (GIS) techniques. Students will learn current techniques for the collection, evaluation, input, analysis, and output of spatial data with various GIS tools. Students will apply these techniques to real world problems in areas such as environmental monitoring, environ-mental modeling, urban planning, and economic location. Includes a lab.

Prerequisites: (GES $325^{\mathrm{D}}$ or GES $410^{\mathrm{D}}$ ) and GES $315^{\mathrm{D}}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 426 - Environmental Modeling

Environmental models quantify processes such as runoff generation, water pollution, erosion, landscape change, and change of biodiversity. In this course, these models will be applied to real-world examples. Includes a lab.

Prerequisite: GES $325^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 435 - Preservation Planning

A study of the American preservation movement as it relates to features of the cultural landscape. The origin and diffusion of building styles and the methods and problems associated with their preservation are emphasized.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 444 - World Environmental Cultures

Students will explore and evaluate geographic and environmental ideas from western and non-western cultures.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Thematic Thread(s): Global Citizenship, Transfer Thread Completion
Course, Transnational Culture
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 445 - Regional Planning

Deals with planning for the future of regions that are larger than any single local government. Consideration is given to economic development, land use, transportation, and other regional planning concerns. Cross-listed with PUBA 445.

Prerequisites: GES $215^{\text {D }}$ or PUBA $215^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 450 - Internship

Supervised placement and field experience in a selected public or private agency.

Credits: 1-12
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 469 - Field Investigations in the Geosciences

This course will provide students with the opportunity to practice the nature of fieldwork by observing, interpreting, collecting data and analyzing physical and human landscapes, and the natural, cultural and economic forces that are shaping them.

Credits: 1-3
Term(s) Typically Offered: Offered Summer Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 489-Applied Geospatial Technologies

This course involves the application of geospatial technologies in humanities, social sciences, and natural and environmental sciences.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 490 - Independent Study

In-depth reading and/or research with the guidance of a faculty member in an area selected by the student. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## GES 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GES 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## German (GERM)

## GERM 101-German Language and Culture I

This course is the first in a three course series which will provide an introduction to the German language.

Credits: 3
Thematic Thread(s): Being American

## GERM 102-German Language and Culture I

This course is the second in a three course series which will provide an introduction to the German language.

Prerequisites: (minimum score of 11 in 'Placement in GERM102' or minimum score of 21 in 'Placement in GERM103') or GERM $101^{\text {D }}$ or minimum score of 264 in 'Placement in GERM102'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Thematic Thread(s): Being American, Transfer Thread Completion Course
GERM 103-German Language and Culture III
This course is a third in a three course series which will provide an introduction to the German language.

Prerequisites: minimum score of 21 in 'Placement in GERM103' or GERM $102^{\text {D }}$ or minimum score of 343 in 'Placement in GERM103'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Thematic Thread(s): Being American, Transfer Thread Completion Course

## GERM 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## GERM 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
GERM 195-Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
GERM 198 - Selected Topics
A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

## GERM 201-Communication in German

A functional course in speaking and writing German, stressing everyday vocabulary and sentence structure.

Prerequisites: GERM $103^{\mathrm{D}}$ or minimum score of 31 in 'Placement in GERM200 level' or (GERM $101^{\mathrm{D}}$ and GERM $102^{\mathrm{D}}$ and GERM $103^{\mathrm{D}}$ )
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
GERM 210-German Literature in Translation
A study of representative German literary works, emphasizing the persons and ideas which have influenced German foreign literatures. The course will be given in English; no knowledge of German required. For non majors.

Credits: 3

## GERM 220 - Reading in German

An introduction reading in German at the intermediate level.
Prerequisites: GERM $103^{\text {D }}$ or minimum score of 35 in 'Placement in GERM200 level' or minimum score of 425 in 'Placement in GERM200 level'
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
GERM 255 - German Civilization I
Course taught by Clarion University of PA faculty via ITV
Credits: 3

## GERM 257-German Immersion

This course, offered in Germany, introduces students first-hand to German culture, including aspects of everyday life in Germany. Course facilitates understanding of Germany's history and civilization through study of important monuments and urban design.

Prerequisites: GERM $103^{\text {D }}$ or minimum score of 35 in 'Placement in GERM200 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
GERM 260-German Short Story
Course taught by Clarion University of PA faculty via ITV
Credits: 3

## GERM 290-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

## GERM 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

## GERM 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## GERM 300-German Grammar Review

An intermediate grammar review course, emphasizing the basic structures of German.

Prerequisites: GERM $201^{\mathrm{D}}$ or GERM $220^{\mathrm{D}}$ or minimum score of 41 in
'Placement in GERM300 level' or minimum score of 512 in 'Placement in GERM300 level'
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GERM 303 - Business German

A study of the German language as related to business and commerce. A consideration of the form and language of the business letter in German.

Prerequisites: GERM $201^{\mathrm{D}}$ or GERM $220^{\mathrm{D}}$ or minimum score of 45 in 'Placement in GERM300 level' or minimum score of 512 in 'Placement in GERM300 level'
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GERM 305-German Civilization

A study of the development of German civilization from its earliest
beginnings to its modern times. Course is for majors and non-majors.
Prerequisites: GERM $201^{\text {D }}$ or GERM $220^{\mathrm{D}}$ or minimum score of 45 in
'Placement in GERM300 level' or minimum score of 512 in 'Placement in GERM300 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GERM 306-Modern German Civilization

A study of the civilization of German-speaking areas in the twentieth century.

Prerequisites: GERM $220^{\mathrm{D}}$ or GERM $201^{\mathrm{D}}$ or minimum score of 45 in 'Placement in GERM300 level' or minimum score of 512 in 'Placement in GERM300 level'
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GERM 307-German Conversation and Composition 1

Course developing student abilities in listening, speaking and writing German. Emphasis is on discussions of student compositions on a variety of issues relating to modern Germany.

Prerequisites: GERM $220^{\text {D }}$ or minimum score of 45 in 'Placement in GERM300 level'
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

Credits: 1-3

## GERM 308 - German Conversation and Composition 2

Course developing student abilities in listening, speaking and writing German. Emphasis is on discussions of student compositions on a variety of issues relating to modern German.
Prerequisite: GERM $307^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GERM 320 - Main Currents in German Literature

An introduction to the study of German literature through prose, drama, and poetry.

Prerequisites: GERM $201^{\text {D }}$ or GERM $220^{\text {D }}$ or minimum score of 45 in 'Placement in GERM300 level' or minimum score of 512 in 'Placement in GERM300 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GERM 350 - German Linguistics and Phonetics

An introduction to general linguistics and the practical application of linguistics to the study of German, ANalysis and practice of the sound system of the foreign language.

Prerequisites: GERM $201^{\text {D }}$ or GERM $220^{\mathrm{D}}$ or minimum score of 45 in
'Placement in GERM300 level' or minimum score of 512 in 'Placement in GERM300 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GERM 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GERM 395-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GERM 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

GERM 400 - Advanced Grammar
An advanced course in the study of German grammar and usage.
Prerequisite: GERM $300^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GERM 411 - Contemporary German Literature

A study of the outstanding authors writing in German in the twentieth century.

Prerequisites: GERM $300^{D}$ and (GERM $303^{D}$ or GERM $305^{D}$ or GERM $306^{D}$ or GERM $307^{\text {D }}$ or GERM $308^{\text {D }}$ or GERM $320^{\text {D }}$ or GERM $350^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GERM 490 - Independent Study

Students have the opportunity to study selected areas in greater concentration. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GERM 495-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GERM 498-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Gerontology (GERO)

GERO 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## GERO 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## GERO 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## Credits: 1-6

Term(s) Typically Offered: Offered as Needed

## GERO 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## GERO 265 - Aging and the Older Person

Introduction to the interdisciplinary study of gerontology as a social, behavioral and biological science. A prerequisite to courses in gerontology and aging. Women and Aging examines the effects of women growing older in a changing society. Social, psychological, physical, economic, cultural, and political implications will be discussed, including health concerns, changing roles, and discrimination.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): 21 st Century Healthcare, Transfer Thread
Completion Course
Students with a semester level of Freshman 1 may not enroll.

## GERO 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1 may not enroll.

## GERO 295 - Workbook

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1 may not enroll.

## GERO 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1 may not enroll.

## GERO 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GERO 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GERO 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GERO 414 - Death and Dying

This course is an introduction to the study of death, dying and bereavement which utilizes a multidisciplinary approach. This course is aimed at sensitizing students to the subject of dying, death and bereavement, aiding students in adjusting to the death of a significant other, helping students examine their feeling and reactions to death and grieving and introducing students to diverse perspectives.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## GERO 425 - Women and Aging

Examines the effects of women growing older in a changing society. Social, psychological, physical, economic, cultural, and political implications will be discussed, including health concerns, changing roles, and discrimination.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Gender and Diversity, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## GERO 450 - Gerontology Internship

Individually designed experiential learning intended to provide the student with an opportunity for observation and participation in a wide range of gerontological activities in an approved institution or agency setting.

Credits: 3-12
Term(s) Typically Offered: Offered Every Term
Students with a semester level of Freshman 1, Freshman 2, Junior 1, Sophomore 1 or Sophomore 2 may not enroll.

## GERO 465 - Seminar in Gerontology

An interdisciplinary investigation of selected facets of gerontology. Course content is drawn from the biological, behavioral, and social sciences, and it will include a consideration of current issues in such areas as mental health, housing, economics, transportation, preventive health program, long-term care, and leisure work activities.

Prerequisite: GERO $265^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## GERO 490 - Independent Study

A rigorous investigation of a topic of relevance to gerontology not covered in detail in existing courses. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## GERO 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## GERO 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1
or Sophomore 2 may not enroll.

## Health Care Administration \& Management (HCAM)

## HCAM 139-University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## HCAM 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
HCAM 195 - Health Care Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format and on a timely topic.

Prerequisite: HCAM $230^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## HCAM 198-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisite: HCAM $230^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## HCAM 230 - US Healthcare Systems

This course offers an overview of the U.S. healthcare delivery system and challenges that confront the industry. It examines legal, technological, economic, political, ethical, and social forces that impact the healthcare industry. Students will learn about the delivery of healthcare services in various settings, as well as the role of government, professional agencies, and other industry related organizations. The allocation of scarce healthcare resources is examined through the lenses of social awareness, civic responsibility, and quasi-market forces. This course also equips students to become informed healthcare consumers and introduces them to healthcare employment opportunities.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms, Offered Summer Terms Odd, Offered Winter Terms Odd
Thematic Thread(s): 21 st Century Healthcare, Being American, Transfer Thread Completion Course

HCAM 250 - Medical Terminology for Healthcare Administrators
This course is designed to provide students with a basic understanding of medical language. Emphasis is placed on basic medical word construction and language derivation related to health care.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): 21 st Century Healthcare, Transfer Thread Completion Course

## HCAM 265 - Managed Care \& Insurance

This course examines Managed Care Organizations, insurance plans, Consumer Directed Health Care plans and Health Care Exchanges. Students will explore the influence of managed health care and the various forms of health care insurance on the organization and delivery of health services in the United States are explored.

Prerequisite: HCAM $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall, Spring, \& Summer, Offered Summer Terms Odd

## HCAM 275 - Health Care Legal \& Ethical Foundations

This course connects theoretical foundations of ethics with practical legal issues facing health care leaders. The course will define the role of the health care provider, payer, consumers, delivery systems, and regulatory bodies in addressing challenges presented by health care law and ethics.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms, Offered Summer Terms Even
Thematic Thread(s): 21 st Century Healthcare, Transfer Thread Completion Course

## HCAM 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## HCAM 295 - Health Care Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format and on a timely topic.

Prerequisite: HCAM $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## HCAM 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisite: HCAM $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-3
Term(s) Typically Offered: Offered as Needed
HCAM 300-Healthcare Systems: Global Perspectives and Analysis This course examines health care systems from other countries in contrast to the United States system of health care. Students will be introduced to larger global perspectives about healthcare systems. Comparisons of healthcare systems' infrastructures, finance systems, level of government involvement, and key metrics of health outcomes will be discussed along with the interconnected socio-political issues across diverse populations.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms, Offered Summer Terms Odd

Thematic Thread(s): 21 st Century Healthcare, Global Citizenship, Fighting Social Problems, International Business, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HCAM 305-Health Care Quality \& Process Improvement

This course examines a systems approach to continuous improvement processes in healthcare settings. Quality and process concepts and theories examined in this course are guided by data and processes at the unit and organization levels that reach beyond regulatory and accreditation compliance.

Prerequisites: HCAM $230^{\text {D }}$ and HCAM $265^{* D}$ (may be taken concurrently).
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms, Offered Winter Terms Even Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HCAM 332 - US Health Care Policy

This course provides an overview of US health care policy in the postwar period. The course will examine the problems of health care costs, access, and quality in depth, consider alternative approaches to health care reform and use a comparative method to examine the health policies of other advanced industrialized countries. In addition, the course aims to introduce students to health policy analysis as an applied social science discipline.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HCAM 335 - Current Topics in Health Care

This course examines current topics in healthcare from the interests of various constituencies and organizations. It is designed to introduce students to the identification and study of current economic, regulatory or operational issues and emerging trends impacting the healthcare industry. Matters of healthcare policy, healthcare reform, current clinical and non-clinical healthcare developments, policy process and advocacy will also be examined.

Credits: 3
Term(s) Typically Offered: Offered Summer Terms Odd, Offered Winter Terms Odd
Thematic Thread(s): 21 st Century Healthcare, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HCAM 360-Healthcare Organizational Dynamics

This course introduces concepts associated with organizational dynamics in the healthcare industry. Students will examine content from individual, team, and organizational perspectives. Organizational dynamics are examined to provide a better understanding of how to deliver value within a competitive and changing healthcare industry.

Prerequisite: HCAM $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms, Offered Summer Terms Even, Offered Winter Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HCAM 390-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HCAM 395 - Health Care Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format and on a timely topic.

Prerequisite: HCAM $230^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## HCAM 398- Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisite: HCAM $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## HCAM 400 - Legal Environment of Healthcare

This course acquaints future healthcare managers with legal issues needed to engage with the government, patients, healthcare employees, and contractors. The course is taught from the manager's perspective, rather than the lawyer's perspective, with an emphasis on a wide variety of legal concepts, terms and common-sense tips for avoiding legal trouble, rather than on attorney-level legal analysis.

Prerequisites: (ACCT $340^{\mathrm{D}}$ or BUSA $340^{\mathrm{D}}$ ) and HCAM $275^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even, Offered Spring Terms, Offered Winter Terms Odd
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## HCAM 410 - Strategic Leadership in Health Care Organizations

This course will examine leadership principles necessary to be effective in a continuously changing health care industry. Concepts covered include cultural competency, patient and family centered care, community outreach, coalition building, teamwork effectiveness, and leading within an environment of change in the US health care system.

Prerequisites: HCAM $230^{\text {D }}$ and (HCAM $360^{\text {D }}$ or MGMT $351^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## HCAM 415 - Marketing for Health Care Organizations

This course covers the application of marketing concepts, tools and techniques to marketing problems, emphasizing strategic thinking and analysis in a healthcare environment. Students will gain a perspective on how a healthcare marketing function links to the overall business system.

Prerequisites: HCAM $230^{\mathrm{D}}$ and (HCAM $360^{\mathrm{D}}$ or MGMT $351^{\mathrm{D}}$ ) and MRKT $330^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HCAM 425 - Long Term Care Management

This course will examine long-term care organizations and care in the United States. Students examine external and internal long-term environments, the organization and delivery of services, administration, management, and leadership of long-term care organizations.

Prerequisites: HCAM $230^{\mathrm{D}}$ and (HCAM $360^{\mathrm{D}}$ or MGMT $351^{\mathrm{D}}$ ) and HCAM $265^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## HCAM 430 - Finance for Healthcare Organizations

This course is designed to build on accounting and financial management strategies used in profit and not-for-profit healthcare organizations. It will expose students to the practical application and theoretical constructs necessary to manage finances in a variety of healthcare organizations.

Prerequisites: HCAM $230^{\text {D }}$ and ACCT 209 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

HCAM 450 - Internship-Health Care Administration \& Management This internship provides students with an opportunity to apply theory to practice and develop competencies through a work-related experience in a profit, or not-for-profit healthcare related organization.

Prerequisites: HCAM $230^{\mathrm{D}}$ and HCAM $360^{\mathrm{D}}$ and HCAM $265^{\mathrm{D}}$ and HCAM $400^{\text {D }}$ and (HCAM 405 (may be taken concurrently) ${ }^{\text {D }}$ or HCAM $305^{*}$ ) (may be taken concurrently).
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-12
Term(s) Typically Offered: Offered Summer \& Winter Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HCAM 470 - Healthcare Practice Management

This course will prepare students with the fundamental knowledge needed to manage various types of health care practices. This includes topics such as differentiating between types of medical practices; accreditation, credentialing and licensing; regulatory compliance, compensation, productivity and provider contracting; billing \& the lifecycle of a claim; patient experience \& referral analysis; quality \& utilization management; coordination of care; and innovation in care, payment and organizational models.

Prerequisite: HCAM 360 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## HCAM 480 - Healthcare Value-Based Reimbursement Systems

This course examines payment reform in the healthcare industry, focusing on the shift to value-based reimbursement systems. Students will gain a basic understanding of data sources, the requirements to prepare data for analysis to develop practical applied insights, and the importance of integrating such into healthcare organizational workflows. Students will be able to apply their understanding of the challenges and requirements of performance metrics and systems information in a healthcare environment and learn methods used to improve value in healthcare services through leveraging data and information.

Prerequisites: HCAM $305^{\text {D }}$ or HCAM $405^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with a semester level of Junior 1, Junior 2,
Senior 1 or Senior 2.

## HCAM 490 - Independent Study

In-depth reading and/or research with the guidance of a faculty member in an area selected by the student. Prerequisites: 12 credits in major courses, application and permission of the instructor, departmental chairperson and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HCAM 495 - Health Care Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format and on a timely basis.

Prerequisite: HCAM $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## HCAM 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisite: HCAM $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-3
Term(s) Typically Offered: Offered as Needed
HCAM 499 - Health Care Theory and Research Capstone Seminar This course examines health care theories that focus on the key concepts of individual and population health, access to health care, cost of health care, quality of health care and health care organization structures and processes. Students will research areas of interest based on these theoretical concepts.

Prerequisites: HCAM $230^{D}$ and HCAM $360^{D}$ and HCAM $400^{* D}$ and (HCAM 405 (may be taken concurrently) ${ }^{\text {D }}$ or HCAM $305^{* D}$ ) (may be taken concurrently).
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2, Junior 1, Junior 2, Sophomore 1 or Sophomore 2 may not enroll.

## Health Science-Public Health (HLTH)

## HLTH 100- Introduction to Health Careers

Provides students with an understanding of various career opportunities in health and safety occupations and the opportunity to determine whether their needs, interests, abilities, and values are suited to careers in theis area.

Credits: 3

## HLTH 101 - Personal Health

Addresses concerns pertaining to college living and life-long health. Emphasizes wellness with its emotional, physical, and social components.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): Body and Self, Transfer Thread Completion Course

## HLTH 102 - Health Appraisal and Promotion

Discusses the role of wellness in health promotion. Identifies major health risks and examines primary prevention strategies utilizing select health appraisal instruments for the promotion of optimal individual and community health. Exposes students to agencies, which serve as resources for health information.

## Credits: 3

## HLTH 103 - Health and Behavior Change

Examines the major health problems and health risks to determine feasible secondary and tertiary intervention strategies to maintain, promote and manage the highest possible level of individual and community health. Explores behaviors and circumstances that are barriers to seeking and/or adhering to medical advice.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Enrollment is limited to students with a program in Public Health, Health Science - Public Health or HIth Sci-P HIth-Pre PT-SRU 3+3.

## HLTH 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## HLTH 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## HLTH 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## HLTH 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
HLTH 203 - Public Health and Physical Activity
This course will focus on introducing public health students to the benefits of physical activity (PA), how to safely engage in PA and how to apply PA to the public health model.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment is limited to students with a program in Public Health or Health Science - Public Health.

## HLTH 210 - Introduction to Public Health

Provides a broad foundation of information related to the structure and functioning of the community health system including the identification and examination of programs, providers, and current problems associated with the delivery of health services.

Credits: 3
Term(s) Typically Offered: Offered Fall, Winter, \& Spring
Enrollment is limited to students with a program in Public Health, Health
Science - Public Health or HIth Sci-P HIth-Pre PT-SRU 3+3.

## HLTH 211 - Women's Health Issues

Examines the role of women as consumers and as both formal and informal providers of health services.

Credits: 3
Term(s) Typically Offered: Offered Summer Terms

## HLTH 262 - Health Foundations

Identifies and examines the major health problems at the individual and community level. Emphasizes health information and resources that can be used to deliver developmentally appropriate primary, secondary and tertiary education and/or interventions among diverse populations.

## Credits: 3

Enrollment is limited to students with a program in Exploratory Physical Educ, School Wellness Education, Health-Physical Educ Teaching, Public Health, Health Science - Public Health or Hlth Sci-P Hlth-Pre PT-SRU 3+3.

## HLTH 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## HLTH 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## HLTH 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
HLTH 301 - Introduction to Health Education
Examines the knowledge and skills necessary to function effectively as a community, school, or worksite health educator. Emphasizes the responsibilities and competencies of the Certified Health Education Specialist.

Prerequisites: HLTH $103^{\text {D }}$ and HLTH $210^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Public Health, Health Science - Public Health or Hlth Sci-P HIth-Pre PT-SRU 3+3.

## HLTH 309 - Introduction to the Study of Disease

Provides a broad foundation of information related to the etiology, pathophysiological mechanisms, signs and symptoms, outcomes and current therapies for selected communicable, genetic, and chronic diseases.

Prerequisite: BIOL $216^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Winter Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Public Health, Health Science - Public Health or Hlth Sci-P HIth-Pre PT-SRU 3+3.

## HLTH 310 - Environmental Health

Explores the ecologic, economic, ethical, toxicologic and epidemiologic bases for environmental health both globally and within the community setting. Emphasizes the relationship between biological, physical and chemical agents and disease/injury causation and the role of government.

Prerequisites: CHEM $104^{\text {D }}$ or CHEM $107^{\text {D }}$ or BIOL $210^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring \& Summer Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Public Health, Health Science - Public Health or Hlth Sci-P Hlth-Pre PT-SRU 3+3.

## HLTH 311 - International Health

Examines significant health problems affecting populations in various areas of the world. Provides opportunities to understand approaches to health from different cultural perspectives and focuses on the integration of disease patterns in peoples within specific geographic areas.
Emphasizes interdisciplinary perspectives on how cultural diversity relates to us and the world community.

Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): 21 st Century Healthcare, Healthy Body, Mind \& Environment, Sustainable International Development, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HLTH 312 - Data Management for Health Science

Explores methods of data collection, manipulation and reporting for health science. Includes computer applications.

Prerequisites: MATH $152^{\text {D }}$ or STAT $152^{\text {D }}$ or MATH $114^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Public Health, Health Science - Public Health or Hlth Sci-P Hlth-Pre PT-SRU 3+3.

## HLTH 313 - Biostatistics

Provides a broad foundation of knowledge related to data analysis in health science. Emphasizes the interpretation of health data and the computer skills for common statistical methods.

Prerequisites: HSAF $312^{\text {D }}$ or HLTH $312^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Public Health, Exercise Science, Exercise Sci- Pre PT-SRU 3+3, Health Science - Public Health or Hlth Sci-P Hlth-Pre PT-SRU 3+3.

## HLTH 314 - Nutrition and Health

Examines basic scientific principles of nutrition, specifically all major nutrient classes in terms of functions, food sources, and adequate intakes along with sensitivity to diverse needs throughout the life cycle. Emphasizes interdisciplinary perspectives on how cultural diversity relates to food choices and how unique ethnic health challenges influence dietary needs.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Winter Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Public Health, Health Science - Public Health or Hlth Sci-P Hlth-Pre PT-SRU 3+3.

## HLTH 316 - Human Sexuality

Surveys a broad range of information about human sexuality
from biological, psychological, sociological, religious, and medical perspectives.

Credits: 3
Term(s) Typically Offered: Offered Every Term
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HLTH 390-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HLTH 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HLTH 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HLTH 406 - Program Planning and Evaluation

Provides basic proficiency in quantitative and qualitative approaches to health education and health promotion program measurement and evaluation. Current trends and issues in community, school and worksite health promotion are brought to bear on the problems of implementing and interpreting the results of formative and summative evaluation.

Prerequisite: HLTH $301^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Public Health, Health Science - Public Health or Hlth Sci-P HIth-Pre PT-SRU 3+3.

## HLTH 408 - Public Health Administration

his course is designed to give an overview of the context, infrastructure and core functions of public health systems and related administration. It focuses on the administrative aspects for carrying out the public health functions, and the legal, ethical, economic, management, leadership, and regulatory dimensions of public health systems. This course also addresses performance measures, strategic planning, information systems, and current issues or trends in public health.

Prerequisite: HLTH $210^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Public Health or Health Science - Public Health.

HLTH 410 - Epidemiology
Introduces the study of population-based research and statistical methods of inquiry regarding distribution and determination of disease in human populations. Emphasizes appropriate study design and investigative techniques and interpretation of findings related to community health. Prerequisites: HLTH 313 Biostatistics or taking HLTH 313 Biostatistics concurrently.

Prerequisite: HLTH 313 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring \& Summer Terms
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Public Health, Health Science - Public Health or Hlth Sci-P Hlth-Pre PT-SRU 3+3.

## HLTH 424 - Nutrition and Exercise

This course provides an understanding of the dietary standards that dictate nutritional requirements for apparently healthy adults. Emphasis is placed on the evaluation of an recommendations for macronutrients, micronutrients, and hydration status for health, physical activity, and human performance.

Prerequisites: (HLTH $314^{\mathrm{D}}$ or ERS $300^{\mathrm{D}}$ ) and ERS $301^{\mathrm{D}}$ and ERS $302^{\mathrm{D}}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Exercise Science, Exercise Sci- Pre PT-SRU 3+3 or Athletic Training.
Enrollment limited to students in the BS 6149 or BS 6204 programs.

## HLTH 440 - Public Health Seminar

This course is designed to provide a critical analysis of the major contemporary public health problems facing persons and communities. Content will also address professionalism and career advancement in the public health professions.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Public Health, Health Science - Public Health or Hlth Sci-P HIth-Pre PT-SRU 3+3.

## HLTH 450 - Internship

Provides opportunity to apply theory and develop competencies through a work-related experience in an appropriate cooperating enterprise.
Summers only.
Credits: 1-12
Term(s) Typically Offered: Offered Fall, Spring, \& Summer
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a major in Health Science - Public Health or Hlth Sci-P HIth-Pre PT-SRU 3+3.

## HLTH 455-Student Teaching - Health Science

Under the guidance of a cooperating teacher and university supervisor, students engage in two, eight week assignments on a full-time basis in specified school districts and attend scheduled seminars. Supervisors assign additional requirements.

Credits: 3-12
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HLTH 490 - Independent Study

Students study under the supervision of a professor on a specific and significant topic. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HLTH 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## Credits: 1-6

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HLTH 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Health Service Administration (HSA)

## HSA 332 - Health Services Planning and Evaluation

Provides knowledge about comprehensive health planning, comparing concepts, models, and approaches.
Prerequisites: (ECON $219^{\mathrm{D}}$ or BUSA $219^{\mathrm{D}}$ or MGMT $219^{\mathrm{D}}$ ) and COMM $231^{\mathrm{D}}$ and HSA $231^{\mathrm{D}}$ and (PROF $251^{\mathrm{D}}$ or MGMT $251^{\mathrm{D}}$ or MGMT $351^{\text {D }}$ ) and MRKT $330^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
HSA 436 - Technology in Health Care
This course is designed to provide an understanding of common computer systems, applications, and the intelligent use of information in healthcare in areas such as: patient care, management, administration, strategic-decision support, and e-health. It presents information on hardware, software, networks, and data management to enable students to become conversant with modern technology and its use in healthcare organizations. Emphasis is placed on strategic planning, decision support, continuous quality improvement, and high-quality patient care.

Prerequisites: (CPSC $210^{\mathrm{D}}$ or MIS $210^{\mathrm{D}}$ ) and HSA $231^{\mathrm{D}}$ and CPSC $323^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HSA 439 - The Accreditation and Survey Process

Focuses on the role, responsibilities, standards, and requirements involved in accrediting and licensing surveys for health care organizations.
Prerequisites: HSA $231^{\mathrm{D}}$ and (MGMT $250^{\mathrm{D}}$ or MGMT $351^{\mathrm{D}}$ or MGMT $251^{\mathrm{D}}$ ) and (MRKT $330^{\mathrm{D}}$ or MRKT $230^{\mathrm{D}}$ ) and ACCT $340^{\mathrm{D}}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## History (HIST)

HIST 051 - Discussion
This is a laboratory experience associated with Ancient and Medieval World HIST 151.

Credits: 0

## HIST 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## HIST 140-Spotlight on the Past

Students take a 360-degree view of a historical moment to consider how people asked questions and sought answers to the challenges of the human condition then and now. Each section of this course focuses on a different topic. Refer to section descriptions when registering.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## HIST 151 - Ancient and Medieval World

Major civilizations of the Western world as they meet and interact with the East. Emphasis is upon cultural achievements and institutional development to 1650.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Global Citizenship, Revolutions, Transfer Thread Completion Course, Transnational Culture, Violence
HIST 152 - Rise of the Modern World
This course surveys major events in world history from the Renaissance to the end of the 19th Century.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Global Citizenship, Revolutions, Transfer Thread Completion Course, Transnational Culture, Violence

## HIST 153 - Contemporary World History

This course is a survey of major events, themes, and individuals in world history from 1900 to the present day. Topics could include the World Wars, the Cold War, and the emergence of new powers.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Global Citizenship, Revolutions, Transfer Thread Completion Course, Transnational Culture, Violence

## HIST 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## HIST 195-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## HIST 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## HIST 201 - Colonial America to 1815

Survey of American History during the period; topics may include the Indigenous cultures that formed America's first permanent societies, the arrival of European colonists, the origins of slavery, the American Revolution, and the founding and expansion of the United States.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Becoming America, Being American, Revolutions,
Transfer Thread Completion Course, Violence
HIST 202 - United States, 1815-1920
Survey of American History during the period; topics may include westward expansion, sectional division over slavery, the Civil War, Reconstruction, industrialization, Progressivism and the increasing influence of the U.S. global affairs.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Becoming America, Being American, Transfer Thread Completion Course, Violence

## HIST 203 - U.S. History Since 1920

Survey of American history during the period; topics may include the changing role of government in domestic life, the Great Depression, World War II, the Cold War, the struggle for equality and civil rights among minority groups, postwar political realignments, and the changing role of the United States in the age of globalization.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Becoming America, Being American, Transfer Thread Completion Course, Violence

## HIST 205 - The Historian's Craft

This course introduces students to the essential skills associated with historical research and writing, as well as a survey of various historical philosophies, historiography, and careers for history majors.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms

## HIST 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## HIST 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## HIST 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## HIST 304 - American Military History

A survey of the development of all branches of the American military spanning the colonial period to present day. The course includes a brief introduction to the development of the western way of war from preHellenistic conflict through the middle ages in Europe. Technological innovation, evolution of tactical through strategic levels of warfare, and the symbiotic relationship between military development, national policy, and societal expectations will be examined.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 305 - Russia to 1855

A social, political and cultural history from ancient times to the death of Nicholas I.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 306 - Russia Since 1855

Continuity and change in Russia from the reign of Alexander II through the Soviet period.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Revolutions, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 313 - U.S. Manhood and Masculinities

An examination of expressions of manhood in American History from the colonial era to the present. Through the use of gender as a category of historical analysis, students will study notions of manhood in social relations, sexuality, the economy and politics.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Being American, Body and Self, Gender and Diversity, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 318 - Gender and Sexuality in European Society

This course examines gender and sexuality in European society with emphasis on the relationship between ideas about gender and sexuality and their social and cultural manifestations.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Body and Self, Gender and Diversity, Transfer Thread Completion Course, Transnational Culture
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

HIST 319 - History of Women to 1750
An analysis of women from the earliest civilizations to 1750 through the examination of the lives of ordinary and outstanding women from different levels of the social order.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 320 - History of Women from 1750 to the Present

This course will examine the role of women in the period 1750 to present from a cross-cultural perspective. Through the use of gender as a category of historical analysis and with particular reference to socioeconomic differences, we will study the participation of women in the emergence of new national-states; the history of women's labor in the household and the work place, the contribution of women in intellectual life, and the participation of women in the social/political reform movements of the modern era.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 323 - African American History to 1876

To investigate, discuss and debate the historical experience of African Americans from their origins in West Africa, through the Middle Passage and the Plantation, to the 15th Amendment and the Sell-Out of 1876.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): African-American Studies, Becoming America, Transfer Thread Completion Course, Violence
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
HIST 324 - African American History Since 1876
The historical experiences of African Americans from the collapse of the Reconstruction and the emergence of Booker T. Washington, through the NAACP, UNIA, and the Harlem Renaissance, to the rise of the Nation of Islam, CORE, SCLC, and the election of 1976.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): African-American Studies, Transfer Thread
Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 326 - The Long Civil Rights Movement

Examines Black social movements, organizations, and civil rights court decisions in the United States from 1900 to the present.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): African-American Studies, Being American, Civil
Rights \& Social Movements, Gender and Diversity, Revolutions, Transfer
Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 331 - England to 1689

Celts, Anglo-Saxons, Danes, and Normans in the formation of a nation, the medieval period, and the Tudor and Stuart centuries.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 332 - Britain Since 1689

This course investigates key events and individuals in British history since the Glorious Revolution.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 333 - Medieval Church

This course examines the medieval church and society with particular emphasis on the ways in which medieval men, women and institutions defined and applied the concepts of sanctity and heresy.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

HIST 335-Outstanding Americans
A biographical approach to the study of American history. A study is made of the lives of those Americans who have made a contribution to society outside of politics.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 336 - American Economic History

American economic development with an emphasis on commerce, industry, labor, finance and governmental participation.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

HIST 337 - Native American History
Histories and cultures of Indigenous peoples of North American from the pre-contact period to the present.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Being American, Civil Rights \& Social Movements, Transfer Thread Completion Course, Violence
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 343 - Public History

This course is intended to introduce students to the practices and theory of public history. Students will gain an understanding of museums, historic preservation, archives, documentary film, and many other methods of preserving and presenting historical content outside the classroom.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 344 - The American City

This course explores the history of American cities from the colonial period through the present day, with particular emphasis on the late 19th and 20th centuries. Examines the formation and evolution of the physical urban environment; the city as a site of race, class, and ethnic interactions; urban political, economic, and cultural evolution; transportation and suburbanization; and the consequences of the "urban crisis" of the post-World War II era.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): African-American Studies, Being American, Civil Rights \& Social Movements, Political Arts, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 346 - Rise of Imperial Britain

This course is a study of key events, people and trends that shaped British history from the Act of Union that brought England, Scotland, Wales and Ireland together into a single nation, until the eve of WWI. This course will use literature, film, art and primary source documents, as well as textbooks to examine Britain's rise to be the largest and most powerful empire in the world.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Becoming America, Revolutions, Transfer Thread
Completion Course, Transnational Culture
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 347 - Twentieth Century British Culture

This course is a study of key events, people and trends that shaped British culture throughout the Twentieth Century. The course will focus on such moments as the two world wars, decolonization and the rise of a multi-racial populace. It will provide the historical narrative and then analyze the cultural impact through the use of film, television, art, theater, photography and music.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Arts \& Popular Culture, Transfer Thread Completion Course, Transnational Culture
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 350 - The American Civil War

An examination of the causes, conduct, and consequences of the
American Civil War with emphasis given to its political, constitutional, economic, military, and social ramifications.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 351 - Latin America to 1830

Political, economic, and social development of the Spanish and Portuguese colonies in America, culminating in the winning of national independence.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 352 - Latin America Since 1830

Developing countries of Latin America, their internal problems, international relations and historic evolution to the present.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Revolutions, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 353 - History of the Americas

A study of the American republics and their interactions from the colonial era to the present. Students will begin their study by examining the rise and decline of the Spanish, Portuguese, Dutch, French and British empires in the New World. Having considered many of the legacies bequeathed to the new American republics by their colonial heritage, students can then examine how those legacies have affected interAmerican relations for the last two centuries.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Becoming America, Transfer Thread Completion Course, Transnational Culture
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 358 - American Popular Culture, 1865 to the Present

An interdisciplinary course, involving American literature, philosophy, the fine and performing arts, sports and politics, which examines characteristics and patterns in American popular culture and institutions. Studies will focus on how the creative life of selected Americans and their institutions inform the nature of the evolving cultures in different eras in American history and how they continue to shape the nation and its diverse peoples, values and mores.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Arts \& Popular Culture, Being American, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 362 - Africa North of the Zambezi

Language groups, migrations of peoples, external influences, colonialism, and the emergence of independent states.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 363 - Southern Africa

The Republic of South Africa and the High Commission Territories of Bechuanaland, Swaziland, and Basutoland, including colonialism, imperialism, war, and reconstruction in the 19th and 20th centuries.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 364 - History of Medicine

This course will trace the history of medical philosophy and practices. It will examine the vast variety of efforts to amend human suffering and extend life through human intervention. The course is concerned with medicinal approaches throughout the span of human development and across the globe.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): 21st Century Healthcare, Transfer Thread
Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 370 - History and the Bible

The history of the eastern Mediterranean area from 1800 B.C.-100 A.D. with a study of the Old and New Testaments in order to evaluate their historical validity.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## HIST 371 - History of Jews

A course surveying Jewish life and thought from early Roman times to the present. Four thousand years of Jewish participation in most world civilizations are examined, and religious, philosophical, and literary contributions are analyzed.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 376 - Modern Japan

This course investigates the history of the Japanese people from the beginning of the nineteenth century to the present.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## HIST 380 - Egyptology

A study of the history and culture of ancient Egypt from the old kingdom through the new kingdom. The methods and disciplines utilized in the study of an ancient culture will be analyzed and evaluated.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 381 - East Asian Military Traditions

This course examines the factors that have distinguished East Asian military practices from the fifth century BCE to modern times.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 382 - Modern Asian Pacific Rim

This course examines the political, social, economic, technological and cultural factors that have affected the Asian Pacific Rim's evolution into the most economically dynamic region of the world today.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 386 - Modern China

In this course we investigate the history of modern China, the major factors that influenced its course, the values that operate in Chinese society today as well as its fast ascent to major international importance.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 390-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## HIST 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 404 - Violence in Post-45 Europe

This course focuses on three case studies of violence in Europe in the post-WWII era: 1. Displaced Persons and the refugee crisis as a result of the collapse of governments at the end of the war; 2. The sectarian violence in Northern Ireland between 1968 and 2000; and 3. The wars in the Balkans in the 1990s.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Transfer Thread Completion Course, Violence Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 406 - Mass Killing and Genocide in the Modern World

In this course, we will explore through readings, films, discussion and internet the troubling and complex topics of mass killing (massacre) and genocide in the modern world, both vexing issues that continue to plague us into the twenty-first century and that no doubt we will face into the foreseeable future. We will examine definitions of terms and the longterm historical context(s) for mass killing/genocide, then we will consider specific cases of mass killing and genocide worldwide.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Transfer Thread Completion Course, Violence
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## HIST 411 - Digital History

This course will explore the ways in which digital technologies are changing how historians think about, research and present the past; topics may include digital publishing, visualizations, geospatial mapping, text mining and digitization of historical documents and artifacts.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## HIST 422 - Ancient Greece

This course examines the history of ancient Greece, from the rise of its city-states to the Hellenistic world created by Alexander the Great's conquests. In addition to surveying major events, significant persons, and intellectual achievements, additional emphasis will be given to examining contributions to modern concepts of participatory government and intellectual constructs.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 423-Ancient Rome

This course examines the history of Ancient Rome, from its origins ca. 800 BCE to its "fall" traditionally dated ca. 476 CE. In addition to surveying major events and significant persons during its Regnal, Republican and Imperial Periods, emphasis will be given to examining Roman culture and political development as antecedents to modern institutions.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 424 - The Middle Ages

This course investigates the major political, social, and intellectual developments of Western Europe during the Middle Ages, 500 to 1500.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 426 - French Revolution and Napoleon

French political, social, and economic affairs in the 18th century, the French Enlightenment, the Revolution, and the Napoleonic period.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Revolutions, Transfer Thread Completion Course Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 427 - Nineteenth Century Europe

From the Congress of Vienna to the outbreak of World War I, examining nationalism, liberalism, the response to industrialism, imperialism, the rise of the alliance system, and the breakdown of nineteenth century order.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Transfer Thread Completion Course, Transnational Culture
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 435 - Pennsylvania

The founding and growth of Pennsylvania to the present.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 437 - The American West

This course examines the history of diverse groups that have resided in the American West since the sixteenth century--Native Americans, Spanish, Mexicans, and citizens of the United States. Topics include the role of the United States government in the conquest, economic development, and administration of the West; the legacy of that conquest for native and immigrant peoples; the formation of distinctive Western communities; contests for access to natural resources and wealth; and the idea of the mythic frontier in American culture.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 445 - Americans and the Environment

This course surveys the environmental history of North America from precolumbian societies until the present, exploring how the environment has influenced America's social, political, economic and cultural development, as well as how human activity and ideas have shaped nature.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Sustainability, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 450 - History Internship

Supervised placement and research in selected public and private agencies at appropriate institutions.

Credits: 1-12
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

HIST 453 - American Constitutional History and Law
Federal constitution by the Supreme Court, including the growth of constitutional law and political, social, economic, and technological changes.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Becoming America, Leadership Development, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 454 - Research and Writing Seminar

This class is designed to provide advanced history students with the opportunity to develop the research and writing skills of the historian. Students will produce a major paper based on research in primary sources.

Prerequisite: HIST 205 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 462 - The Contemporary Middle East

The economic, social, cultural, and political aspects of the Middle East in the perspective of the past.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 463 - Israel-History, State and Society

In this course, we will examine the following topics: the development of Zionism and the circumstances in the Jewish Diaspora that led to the call for a "Jewish" state; the British Mandate for Palestine, 1920-1948; the establishment of Israel; Israeli state and society, 1948 to present; and Israel within the broader context of the modern Middle East.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 464 - The Scientific Revolution of the 17th and 18th Centuries

 The Scientific Revolutions of the 17th and 18th centuries is a survey of the changes and developments in Western science from antiquity to the brink of the Industrial Revolution. The course investigates the origins, transmission and development of scientific ideas and the appearance and impact of new intellectual communities in Western Europe.Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Revolutions, Transfer Thread Completion Course Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 490 - Independent Study

For history majors or advanced students with a background in history. Prerequisites: QPA of 2.750 in history and permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HIST 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Homeland Security (HSS)

## HSS 120 - Introduction to Homeland Security

This course is a general introduction to the foundations of homeland security, counter-terrorism, infrastructure protection, intelligence operations and other mechanics of the homeland defense field. This course also includes an overview of the legal, sociopolitical and criminal justice aspects of homeland security.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Summer Terms

## HSS 130 - Principles of Emergency Management

This course will introduce the foundations of emergency management and discuss the emergency management cycle. The concept of the whole community approach will be emphasized along with the tools and resources used in emergency management situations. An emergency exercise will be assigned and special topics unique to emergencies will be explored.

Credits: 3

## HSS 139- University Semina

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES STUDENT attribute

## HSS 190 - Experimenta

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## HSS 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. The course outline will be determined by the instructor based on key developments, trends or specialized content within homeland security Permission of instructor

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## HSS 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## HSS 210 - Fundamentals of Terrorism

This course will explore the complex issues surrounding terrorism. In terms of terrorism, the topics addressed may include: complexities of defining it, types of terrorists, causes of terrorism, methods used to achieve their goals, environments, funding and support, structure and counter-terrorist measures, and the issues the criminal justice system faces when trying to prevent, detect, and investigate it.

Prerequisites: HSS $120^{\circ}$ or CSS $120^{\text {C }}$
${ }^{\text {C }}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with department of Homeland/Corporate Sec Studies

## HSS 230 - Risk Analysis and Strategic Planning

This course provides an overview of principles of risk analysis and management, including vulnerability and threat identification, assessing risk threats, security survey methodology, emergency management and response strategies.

Prerequisite: HSS $120^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
HSS 250 - Managing Natural, Man-Made and Technological Disasters
This course will discuss the history of natural, technological and manmade (intentional) disasters. (e.g., 1918 Pandemic, Great Flood of 1923, 1994 Northridge Earthquake, Coronavirus 19, September 11th) Students will analyze the complex nature of disasters, identifying overriding themes while examining lessons learned and best practices to handle specific types of disasters.

Credits: 3

## HSS 260-Emergency Management Planning

This course will provide an in-depth analysis of planning methodologies and constructs as well as pitfalls and limiting factors in the development and execution of emergency management plans at the strategic, operational and tactical levels. The origins of emergency management planning, applicable policies and legislation will be reviewed. The course will also examine historical incident review and analysis, contemporary and emerging planning doctrine, and advanced planning concepts.

Prerequisite: HSS $130^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Enrollment limited to students with department of Homeland/Corporate Sec Studies.

## HSS 290-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## HSS 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. The course outline will be determined by the instructor based on key developments, trends or specialized content within homeland security. Permission of instructor.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
HSS 298 - Selected Topics
A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## HSS 300-Terrorist Organizations and Lone Wolves

This course will allow students to study the ideological evolution, the behavioral indicators, recruitment styles, organizational styles, financing methods, and tactics for specific domestic and international terrorist organizations. Issues such as the radicalization and behavioral indicators of both terrorist organization and lone wolves will be discussed as well.

Prerequisite: HSS $210^{\circ}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Homeland/Corporate Sec Studies.

## HSS 310-Weapons of Mass Destruction

This course will examine the threat and use of nuclear, biological, chemical, and radiological weapons and their implications to the Homeland. The course will evaluate means of proliferation and countermeasures overseas and within the Homeland.

Prerequisite: HSS $210^{\circ}$
${ }^{C}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Homeland/Corporate Sec Studies.

## HSS 320-Protecting Infrastructure and Key Assets

This course focuses on the protection of critical infrastructure, including information and telecommunication systems, water supply, energy, first responders, transportation, health/medical and other key assets.

Prerequisite: HSS $230^{\circ}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HSS 330-Intelligence Operations

This course encompasses the development and use of national security and policing intelligence, and includes theoretical and practical models of intelligence in governmental and private security environments.

Prerequisite: HSS $320^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

HSS 340 - Intelligence for Homeland Security
This course will examine intelligence operations for the Homeland Security Enterprise at the state and local level, within the Department of Homeland Security, and within the private sector. The course will utilize intelligence tradecraft to assess current threats, trends, hazards, and vulnerabilities in the Homeland. The course will also prepare students to write intelligence briefs.

Prerequisite: HSS $330^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Homeland Security.

## HSS 350-Securing Virtual Infrastructure

This course will examine the implications of the growing cybersecurity environment. The course will discuss targeted systems, threat adversaries, attack methods, and recovery and mitigation processes.

Prerequisite: HSS $230^{\circ}$
${ }^{C}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Homeland Security.
HSS 360-Social Dimensions of Disaster
This class will analyze how individuals, groups, families, organizations, communities and countries, handle disasters before, during, and after they occur. The vulnerability of various social groups will be explored as well as reactions to disasters the stressors associated with disasters. Methods to reduce vulnerabilities and build local capacity will be covered.

Prerequisites: HSS $250^{\circ}$ or HSS $260^{\circ}$
${ }^{C}$ Requires minimum grade of C .
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in CERT - Emergency Management, Emergency Management, Corporate Security, Homeland Security, Fraud or Organizational Security.

HSS 370-Research in Disasters and Emergency Management
This course will describe in detail how research is conducted in disasters and emergency management how to read and understand scholarly work; and apply related studies from the field of disaster research. Students will be taught how to evaluate open-source data for construction of research projects. The basic foundations of how to conduct qualitative research studies geared towards disaster research will be provided.

Prerequisite: HSS $250^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in CERT - Emergency Management, Emergency Management, Corporate Security, Homeland Security, Fraud or Organizational Security.

## HSS 380-Crisis \& Emergency Risk Communication

Disasters mandate effective communication. This course will analyze communication theory to examine common challenges and best practices encountered in emergency, crisis and risk communication situations by public information officers, public authorities, first responders, and health professionals. It will explore the opportunity to develop strategies and communication solutions in interpersonal, mediated, social media, and public contexts.

Prerequisite: HSS $250^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in CERT - Emergency Management, Emergency Management, Corporate Security, Homeland Security, Fraud or Organizational Security.

## HSS 390-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HSS 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. The course outline will be determined by the instructor based on key developments, trends or specialized content within homeland security. Permission of instructor.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll

## HSS 398-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HSS 441 - Terrorism, Law and National Security

This course will discuss terrorism-its structure, causes, and illegal financing and the evolution of domestic and international laws evolving to deal with terrorism and national security.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HSS 450 - Internship HS

Supervised placement and research in selected public and private agencies. Permission of instructor.

Credits: 3-9
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HSS 460 - Capstone in Homeland Security

The Capstone class applies student professional proficiency, communication skills, ethical understanding, cultural awareness and critical thinking towards the completion of a capstone project that demonstrates competency in multiple aspects of homeland security and defense.

Prerequisite: HSS $340^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Homeland Security.
HSS 490 - Independent Study
Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. students work on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HSS 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. The course outline will be determined by the instructor based on key developments, trends or specialized content within homeland security. Permission of instructor.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HSS 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Honors (HONR)

## HONR 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## HONR 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## HONR 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## HONR 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## HONR 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## HONR 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## HONR 300 - Seminar in Global Learning

Honors Global Learning Seminar is an interdisciplinary course that explores some of the world's most pressing, interesting, and enduring global issues. This course makes use of experiential learning to allow for personal and professional development of skills and knowledge to become informed, self-aware, and responsible global citizens with increased attentiveness to diversity and the interdependence of the world's people and/or environmental systems.

Credits: 3
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2 or Sophomore 2.
Enrollment limited to students with the HONORS PRGM - STUDENT attribute.

HONR 385 - The Great Books
Seminars on selected topics from the classic works of human thought.
Credits: 3
Term(s) Typically Offered: Offered as Needed

## HONR 386 - The Great Books

Seminars on selected topics from the classic works of human thought.
Credits: 3
Term(s) Typically Offered: Offered as Needed

## HONR 387 - The Great Books

Seminars on selected topics from the classic works of human thought.
Credits: 3
Term(s) Typically Offered: Offered as Needed

## HONR 388 - The Great Books

Seminars on selected topics from the classic works of human thought.
Credits: 3
Term(s) Typically Offered: Offered as Needed

## HONR 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
HONR 395 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
HONR 398 - Selected Topics
A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## HONR 492 - Innovation for Positive Change

This course deals with the background knowledge, skills, and dispositions needed to innovate. This includes the ability to develop new ideas, recognize opportunities, analyze risks, create teams of motivated helpers, foster positive communication within the team, lead the team effectively to bring about change, assess progress from an idea to a change, and to pivot along the way. This course serves as the capstone course for the Innovation and Entrepreneurship Rock Studies Thread.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Innovation, Entrepreneurship, and Positive Change, Transfer Thread Completion Course
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

## HONR 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## HONR 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## Hospitality, Event Management \& Tourism (HEMT)

## HEMT 112 - Introduction to HEMT

The purpose of this course is to assist individuals with matching their aspirations with the opportunities within the hospitality and tourism profession. Primary areas related to tourism, recreation and event and hospitality management will be discussed providing a roadmap for students to chart their careers in the profession.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## HEMT 114 - Sustainability in Food and Hospitality

An exploration of the economic, environmental and social sustainability challenges and advancements in the hospitality and food industry. A comprehensive investigation of today's U.S. food system with particular focus on the food system's interrelationships with public health, the environment, equity, and society.

Credits: 3
Thematic Thread(s): Sustainability, Transfer Thread Completion Course

## HEMT 139- University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## HEMT 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## HEMT 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## HEMT 198- Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
HEMT 210 - Contemporary Travel and Tourism
This course provides students with a diverse and contemporary knowledge of the tourism industry, ecotourism, tourist behavior, tourism management, and issues in medical tourism, crisis management, sustainable travel and environmental friendly practice within the overall global tourism sector. Students will have opportunities to investigate real life cases and current events, and to explore the various elements of the travel and tourism industry and how they interrelate. This will enable students to develop an overall knowledge in the field and appreciation of the global travel and tourism experience.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Sustainability, Transfer Thread Completion Course

## HEMT 215 - Public Relations for Hospitality, Event Management \& Tourism

The theory, principles and practices of public relations of value to hospitality and tourism personnel including oral, written and graphic presentations useful in public relations and interpretive efforts.

Prerequisite: HEMT $112^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms

## HEMT 222 - Programming and Leadership for HEMT

This course is designed to provide a sound basis of learning and practical methods in the realm of recreation programming and leadership. It includes practical approaches to program design, sequencing program experiences, processing experiences, assessment and evaluation and examines the needs of leaders as well as participants in terms of communication skills and preferred learning styles. Participant behaviors and the iimprotant traits of a positive leader will also be examined.

Prerequisite: HEMT $112^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms

## HEMT 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## HEMT 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## HEMT 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
HEMT 311 - Principles of Commercial Recreation/Tourism
A study of the various forms of commercial recreation, business and facilities providing recreational opportunities.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HEMT 312 - Commercial Recreational Feasibility Studies

This course is a study of financial, marketing, and operations
management concepts that go into a feasibility study of a commercial recreation business.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HEMT 314 - Sustainable Planning for Tourism

This course is designed to develop an understanding of how sustainable planning can reduce the negative impacts and maximize the benefits of the tourism industry. Students will research and evaluate the social, environmental and economic impacts of a variety of tourist destinations. Anaylses of the sites will be followed by formulating proposals to address key issues.

Prerequisite: HEMT 210 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HEMT 316 - Management of Hospitality \& Tourism Facilities

A study of the design, operation and maintenance of selected hospitality, event management and tourism facilities.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HEMT 318 - Administration for Hospitality, Event Management \&

## Tourism

The organization and administration of hospitality, event management and tourism services, including organizational management, personnel practices and labor relations, financial and business procedures and legal aspects.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HEMT 320 - Hospitality and Tourism Marketing

Course will examine service marketing concepts and practices as they relate to all areas of hospitality, tourism, and event management, and apply those principles to formulating marketing strategy

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.
Enrollment limited to students in a Bachelor of Science degree

## HEMT 322 - Food and Beverage Operations

Food and Beverage Operations is a survey of the food service industry to include: History and global economic impact, Menu engineering, Food sourcing with sustainable emphasis, Food Safety, Food Handling, Beverage Management, and exploration of commercial applications.

Prerequisite: HEMT $112^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

HEMT 324-Legal Issues in Hospitality and Tourism Management
Course will examine legal issues affecting the contemporary Hospitality Industry, with an emphasis on a preventative approach to management Extensive use of case studies will provide students with an awareness and understanding of the legal considerations necessary for sound policy and decision making.

## Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2 or Sophomore 2.

## HEMT 326 - Introduction to Meetings and Event Management

An introductory course for Event Management focusing on meetings, conferences, convention and trade shows with an emphasis on industry standards, language, and professional associations.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HEMT 351 - Practicum in HEMT

Observation and participation in hospitality, event management and tourism activities. Cross listed as HEMT352

Credits: 3
Term(s) Typically Offered: Offered Summer Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HEMT 352 - Practicum in HEMT

Observation and participation in hospitality, event management and tourism activities. Cross listed as HEMT351.

Credits: 3
Term(s) Typically Offered: Offered Summer Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HEMT 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HEMT 395-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HEMT 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HEMT 415 - Challenges and Trends in Hospitality, Event Management \& Tourism

An integrative course for detailed study of current issues in hospitality, event management and tourism with emphasis on unique and imaginative solutions to the challenges facing the hospitality and tourism profession. Must be a senior to enroll.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2, Junior 1, Junior 2, Sophomore 1 or Sophomore 2 may not enroll.

## HEMT 416 - Resort Recreation Programming

This course examines the planning, organization, pricing, and evaluation of recreation programs, activities, and special events at various four season resorts, municipal recreation departments and residential camps and camping facilities. This course will also analyze the planning, developing, marketing, administration, and implementation of group recreation and special events.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HEMT 417- Hotel/Lodging \& Hospitality Management

This course is a study of the management and operation of a variety of departments/divisions of a hotel/resort.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HEMT 420 - Event Production and Coordination

This course will explore the many aspects of event management, as well as identify and develop the skills necessary to design and develop a special event. Emphasis on the understanding of the genre, developmental steps in processing, and practical applications of execution in special event management. A HIP course, If feasible students will coordinate a live community event.

Prerequisite: HEMT $326^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HEMT 450 - Internship in HEMT

A supervised off-campus work experience in an appropriate aspect of hospitality, event management, resort or municipal recreation or tourism work. Open only to HEMT majors with advanced standing.

Credits: 1-12
Term(s) Typically Offered: Offered Summer Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Hospitality \& Tourism Manage.

## HEMT 490 - Independent Study

A special study opportunity for students to investigate in-depth, approved topics in hospitality, event management and tourism. Topic and credit established by student and supervising instructor. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HEMT 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## HEMT 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

# Industrial \& Systems Engineering (ISE) 

ISE 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## ISE 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ISE 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ISE 290-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ISE 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
ISE 311 - Introduction to Operations Research
Topics include deterministic methods in operations research. Linear programming, duality, integer programming, dynamic programming, nonlinear programming, inventory theory, transportation and assignment and network theory.

Prerequisites: MATH $231^{\text {C }}$ or MATH $240^{\text {C }}$ or (MATH $122^{\text {C }}$ and MATH $230^{\circ}$ )
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ISE 330-Six Sigma Methodology

Statistical methods of Six Sigma used for efficient new product development as well as methods for process improvement. The math and methodology of six Sigma including DMAIC and DMADV processes. Topics will include measurement and analysis mathematical techniques. Design of experiment will be introduced. Case studies will be used to illustrate advanced concepts of Six Sigma.

Prerequisite: STAT $350^{D}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ISE 362 - Lean Systems

The design and delivery of services. Topics include how to design and improve service offerings for sustained excellence, how to identify and overcome challenges in service delivery. Both traditional services as well as e-commerce service will be studies for both the private and public sector.

Prerequisite: ISE 330 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ISE 370 - Design of Industrial Systems and Processes

This course covers advanced topics in Applied Engineering Statistics. It includes the introduction to linear regression analysis, simple linear models, multiple linear models, residual analysis, indicator variables, variable selection process, ANOVA, introduction to design of Industrial systems and processes, basic designs, factorial designs, fractional factoral designs, blocking, Taguchi designs, and response surface methodology. Extensive use of statistical software will be introduced throughout the course.

Prerequisite: STAT $350^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ISE 372 - Manufacturing Systems Design and Analysis

Contemporary techniques used to design and analyze manufacturing systems for economic manufacture of products. Design of manufacturing systems (human and automated) to satisfy differing types of product demand will be explored.
Prerequisite: ENGR $340^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ISE 373-Quality Engineering

A comprehensive coverage of modern quality control techniques including the design of statistical process control systems, acceptance sampling and process improvement.
Prerequisites: MATH $230^{\mathrm{D}}$ and (STAT $252^{\mathrm{D}}$ or STAT $350^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ISE 382 - Sustainable Processes

Exploration of the scientific and legal progress in sustainability. Students will learn both the theory of sustainability as well as how sustainable processes can be implemented throughout an organization.

Prerequisites: PHYS $217^{\mathrm{D}}$ and MATH $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ISE 390-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ISE 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ISE 402 - Work Design

Introductory tools required for analyzing and designing both the job and the worksite in a cost-effective manner, as well as measuring the resulting output. These tools incllude human information processing, basic auditory and visual displays, anthropometry and musculoskeletal principles, cumulative trauma disorders, work measurement and stopwatch time study. Students taking this course should be familiar with the basic concepts of cost.

Prerequisite: ISE 372 (may be taken concurrently) ${ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ISE 410 - Engineering Project Management

This course is an introduction to the concepts and practices of project management. It provides students with a basic exposure to the tasks and challenges facing today's engineering projects and in particular, those of the project manager. This course also provides students with the quantitative tools for the successful management of engineering projects. The problems of selecting projects, initiating projects, and operating and controlling projects will be discussed in this course.
Prerequisite: ENGR $340^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ISE 420-Simulation of Industrial Systems

In this course, the student will develop an understanding and need for discrete event simulation in practice. The course will focus on basic and advanced concepts in simulation modeling including analyzing simulation results, and successfully developing simulation models useful in production/manufacturing, supply chains, transportation, and other areas related to industrial and Manufacturing Engineering. Simulation package such as ARENA will be integrated and used throughout.

Prerequisites: (MATH $311^{\mathrm{D}}$ or ISE $311^{\mathrm{D}}$ ) and STAT $350^{\mathrm{D}}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 4
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ISE 421 - Supply Chain \& Logistics Engineering

Overview of key logistics and supply chain management processes, concepts and methodologies. Emphasis is given to the Lean development of supply chain management, the analysis of logistics cost and service trade-offs among inventory transportation and warehousing activities, the strategic role of information technology in supply chains, the use of third-party logistics providers, and the methods of measuring the value of logistics performance. Instruction may include problem-based learning pedagogy.
Prerequisites: ISE 311 (may be taken concurrently) ${ }^{\mathrm{D}}$ and ISE $373^{* D}$ (may be taken concurrently).
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ISE 430 - Production Planning \& Control

This course equips students with knowledge of fundamental issues in production and inventory planning and control while developing the students' modeling and analytical skills. This course emphasizes the application of industrial engineering theory and practice to the area of operations management and production planning/control. This course will cover analysis and understanding of forecasting, aggregate planning, operations strategy, capacity planning, supply-chain management, just-in-time systems, lean manufacturing, agile manufacturing, materials replacement planning, inventory management, and scheduling and sequencing.

Prerequisites: ENGR $340^{\mathrm{D}}$ and ISE $372^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ISE 432 - Productivity Analysis

Techniques for measuring and assessing productivity for output, labor, capital and input. Aggregation of productivity growth will also be discussed.

Prerequisite: MATH $231^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ISE 440 - Health Care Systems Engineering

The course examines the technical structure of the healthcare delivery system and the role that industrial engineering (IE) plays in its design and improvement. Included will be how healthcare systems work in hospitals, medical offices, clinics and other healthcare organizations. Traditional IE methods for improving quality, patient safety, and employee productivity and satisfaction will be present within a systematic application of value chain engineering designed to produce lean processes.

Prerequisites: ISE $311^{\mathrm{D}}$ and ISE $373^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ISE 442 - Human Factors Engineering

An analytic study of human factors that need to be taken into account in the design and engineering of complex workplace systems.
Body mechanics will be used to understand the needs of humans in the workplace under a variety of different constraints: physical demands, environmental conditions, human capability. system design considerations aimed at reducing safety hazards will be studied.

Prerequisite: ISE 402 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ISE 460 - Engineering Risk Analysis

This course is an introduction to risk, risk assessment, and risk management in engineering systems. It focuses on building mathematical models to assess and quantify risk principally by following the methodologies of probabilistic risk analysis. In particular, the course covers concepts of risk analysis, risks in engineered systems; methods of risk analysis, fault trees and event trees; quantification of probabilities, use of data, models, and expert judgments; risks and decisions, interlinking risk analysis with risk management; applications to cybersecurity.

Prerequisite: STAT $350^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

ISE 480 - Industrial and Systems Engineering Undergraduate Research
Research and design problems of limited scope approved on an individual basis intended to promote independent study; results of study presented in writing.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

## ISE 487 - Industrial and Systems Engineering Senior Project I

This course provides a proposal preparation for ISE 488 which includes defining a comprehensive problem in design involving systems in manufacturing, service, and other systems to improve efficiency and quality, and optimize the resources utilization.

Prerequisites: ISE $370^{\mathrm{D}}$ and ISE $420^{\mathrm{D}}$ and ISE $421^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ISE 488 - Senior Project II

Senior project in industrial and systems engineering. Requires students to complete a multi-dimensional project in their area of interest: industry, health-care, etc. The project must be approved by ISE faculty no leater than the end of the fourth week of the start of the course. Students will be invited to propose their own projects of create one in collaboration with ISE faculty.

Prerequisite: ISE $487^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

## ISE 490 - Independent Study

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ISE 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Interdisciplinary Programs (INDP)

## INDP 102-Introduction to Interdisciplinary Studies

Developing a critical lens to engage in cultural studies through interdisciplinary perspectives with a specific focus on cultural diversity.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
INDP 103 - Contemporary Social Problems
An analysis of major social problems confronting modern society.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Building a Healthy Society, Global Citizenship, Comparative Perspectives of Justice \& Society, Demystifying Crime \& Justice, Fighting Social Problems, The Future, Gender and Diversity, Revolutions, Transfer Thread Completion Course

## INDP 106 - Race and Ethnic Diversity in the USA

An introduction to racial and ethnic diversity in the U.S.A., with focus on trends in immigration, demographics, socio-cultural dynamics and issues, past and present.

## Credits: 3

Term(s) Typically Offered: Offered Spring \& Summer Terms Thematic Thread(s): African-American Studies, Being American, Comparative Perspectives of Justice \& Society, Civil Rights \& Social Movements, Transfer Thread Completion Course, Who Do We Think We Are

## INDP 139- University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## INDP 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## INDP 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## INDP 198-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## INDP 201 - Principles of Sociology

Basic concepts of social behavior, group structure and group processes.
Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): Transfer Thread Completion Course
INDP 202 - Introduction to Anthropology
Human beings as cultural and biological entities. Emphasis is on primitive and peasant societies.

Credits: 3
Term(s) Typically Offered: Offered Every Term

## INDP 211 - Biological Anthropology

This course provides an understanding of the place of the human species within the biological system. It stresses the concepts and processes of evolution and emphasizes the study of human and non-human primates as seen in the fossil record as well as through study of genetics and behavior.

Credits: 3
Thematic Thread(s): Body and Self, Transfer Thread Completion Course, Who Do We Think We Are

## INDP 212-Archaeology/World Prehistory

A discussion of culture history around the world based on archaeological evidence. It begins with early signs of culture called the Paleolithic or Old Stone Age of Africa, Asia, Europe and America (where it is named Paleo Indian), and concludes with the rise of complex, stratified cultures based on agriculture in the Middle East, America, and East Asia.

Credits: 3
Thematic Thread(s): Transfer Thread Completion Course, Who Do We Think We Are

## INDP 226 - Population and Society

Sociological/anthropological analysis of selected population trends, problems and controversies in the contemporary world-both literate and non-literate.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even
Thematic Thread(s): Global Citizenship, Revolutions, Sustainable
International Development, Transfer Thread Completion Course

## INDP 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## INDP 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## INDP 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## INDP 304 - Urban Sociology

Sociological aspects of urban life. Includes metropolitan areas and small cities.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 309-Health and Society

An analysis of health services, public policy and institutional relations. Note: This course is taught from either a sociological or anthropological viewpoint. The student should check with the instructor to determine the approach being taken in the current offering.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Building a Healthy Society, Food, Wellness \& Environment Across Cultures, Transfer Thread Completion Course Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 310 - Cultural Area Studies

Anthropology course dealing with sociocultural phenomena of specific cultural areas. Topics to be announced. Course may be repeated one time in a different area.

## Credits: 3

Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): Global Citizenship, Transfer Thread Completion

## Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 312-Archaeology Techniques and Laboratory

A course designed to introduce students to basic techniques in the field and to provide laboratory experience in working with field materials.

Prerequisite: INDP $202{ }^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 317-Statistics for the Social Sciences

An enrichment course that introduces statistical concepts and techniques of data analysis with computer application to analyze contemporary social issues.

Credits: 3
Term(s) Typically Offered: Offered Every Term
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 318 - Research Methods in Interdisciplinary Studies

Major methods and procedures used in interedisciplinary studies,
including anthropology, cultural area studies, gender and diversity
studies, leadership studies, nonprofit management and sociology.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 319 - Anthropology Methods

Data gathering techniques and evaluation of anthropological phenomena from tribal, peasant and industrial societies.
Prerequisites: (SWCJ $202^{\mathrm{D}}$ or INDP $202^{\mathrm{D}}$ or PROF $202^{\mathrm{D}}$ ) and (SWCJ $317^{\mathrm{D}}$ or INDP $317^{\mathrm{D}}$ or SOWK $317^{\mathrm{D}}$ or CRIM $317^{\mathrm{D}}$ or PROF $317^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 321 - Minority Groups

An examination of the minority group concept with special emphasis on women, the poor, behavioral and physical minorities. Note: This course is taught from either a sociological or anthropological viewpoint. The student should check with the instructor to determine the approach being taken in the current offering.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Building a Healthy Society, Comparative
Perspectives of Justice \& Society, Civil Rights \& Social Movements,
Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 322 - Archaeology of the Americas

This course introduces the student to the unique intellectual and cultural achievements of the Native Civilizations of Central and South America prior to the arrival of the Spanish. Two thirds of the course concentrates on Mesoamerica, especially the Aztecs and the Maya. One third on South America, with an emphasis on the civilizations of Peru. The variety of cultural developments, including their great time depth, social, political, economic, and artistic achievements as revealed through archaeological exploration, are explored.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms Odd
Thematic Thread(s): Becoming America, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 323 - Deviant Behavior

The subject and nature of deviance with particular emphasis on its relativity and its relationship to social control and social change.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Thematic Thread(s): Comparative Perspectives of Justice \& Society,
Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 324 - The Family

Comparative perspectives of the family as a universal social institution. Note: This course is taught from either a sociological or anthropological viewpoint. The student should check with the instructor to determine the approach being taken in the current offering.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Transfer Thread Completion Course, Well-Being of Children and Youth
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 326 - Society, Culture and Self

An examination of the relationship between personal characteristics and social environment.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Thematic Thread(s): Being American, Body and Self, Creating Art, Transfer
Thread Completion Course, Who Do We Think We Are
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 327 - Religion and Society

Explores the relationship between religion and society and some of the key issues confronting religion today.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 330-Collective Behavior

An analysis of social movements, publics, crowds, mobs and similar social phenomena.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Thematic Thread(s): Civil Rights \& Social Movements, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 339 - Gender Roles and Society

An examination of gender roles, what they are, how they develop and how they are maintained. An examination of the effects of gender roles on education, occupation, the polity and other institutions as well as the effects of role restrictions of personal relationships. Note: This course is taught from either a sociological or anthropological viewpoint. The student should check with the instructor to determine the approach being taken in the current offering.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms Odd
Thematic Thread(s): Body and Self, Gender and Diversity, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 340-Social Inequality

Examination of the theoretical and practical implications of economic disparity across diverse populations: class, race, ethnicity and gender

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even, Offered Summer Terms
Thematic Thread(s): African-American Studies, Comparative Perspectives of Justice \& Society, Civil Rights \& Social Movements, Demystifying Crime \& Justice, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 342-Sociology of Aging

Social changes, which accompany aging. Emphasis placed upon how social processes influence patterns of aging and social problems of older people.

Credits: 3
Term(s) Typically Offered: Offered Winter Terms
Thematic Thread(s): Body and Self, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 348-Sociology of Organizations

Approaches to the study of the structure and functions of large-scale social organizations.
Prerequisites: INDP $201^{\text {D }}$ or INDP $202^{\text {D }}$ or SWCJ $201^{\text {D }}$ or SWCJ $202^{\text {D }}$ or PROF $201^{\text {D }}$ or PROF $202{ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 360 - Issues in Asia; Women in Asian Societies

Students will have an opportunity to gain an in depth understanding of the issues surrounding the roles and status of women in a rapidly changing Asia; from both a historic and a current context. These issues, which are political, religious, economic, health, social justice and legal, among others are vital for women in Asia, their societies as well as this ever globalizing world.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 401 - Applied Anthropology

Using anthropological concepts and methods, this course explores the role of archaeologists, and physical and cultural anthropologists in understanding and facilitating change in human biological and cultural issues.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 412 - Basic Sociological Theory

Historical and modern development of basic concepts of sociology and cultural anthropology.
Prerequisites: (INDP $201^{\mathrm{D}}$ or INDP $202^{\mathrm{D}}$ or SWCJ $201^{\mathrm{D}}$ or SWCJ $202^{\mathrm{D}}$ or PROF $201^{\mathrm{D}}$ or PROF $202^{\mathrm{D}}$ ) and (SWCJ $318^{\mathrm{D}}$ or SWCJ $320^{\mathrm{D}}$ or INDP $318^{\mathrm{D}}$ or INDP $319^{\mathrm{D}}$ or SOWK $318^{\mathrm{D}}$ or CRIM $318^{\mathrm{D}}$ or PROF $201^{\mathrm{D}}$ or PROF $202^{\mathrm{D}}$ or PROF $318^{\text {D }}$ or PROF $319^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 450 - Internship

Supervised placement in selected professional agencies.
Credits: 1-12
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 490 - Independent Study

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDP 499 - Capstone: Applied Interdisciplinary Studies

This seminar is designed to assist students in developing awareness and skills for entry into the career or graduate studies. Students enrolled will participate in career development activities, reflection on the application of their knowledge for a future career and submit a final portfolio project.

Prerequisites: INDP $102^{\text {C }}$ and INDP $318^{\text {D }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.
Enrollment limited to students with department of Nonprofit Mgt, Empower\&Div Stu or Interdisciplinary Programs.

## Interdisciplinary Studies (INDS)

## INDS 101 - FYRST Seminar

The FYRST Seminar provides students with an opportunity to become integrated into the university's community of learners by exploring the purpose and value of higher education, participating in the teaching/ learning process, addressing academic and social transition issues, utilizing campus programs, services, and technology, and developing academic skills and learning strategies during the student's first semester at Slippery Rock University. This course is a one credit hour course designed to especially and exclusively assist first year students in their adjustment to college life at Slippery Rock University. No prerequisite. Enrollment by advisement. Open to first year students only. The credit earned in this course counts for graduation requirements.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms

## INDS 102 - Learning Strategies

Students will develop effective learning strategies, goals, and decisionmaking skills with a view toward implementing a plan to remove their probationary status and become a student in "good academic standing. This course is primarily for students on academic probation (other students may enroll with the permission of the instructor). Credits earned count for graduation as an elective.

Credits: 1
Term(s) Typically Offered: Offered as Needed

## INDS 103 - Major and Career Exploration

This course will examine various decision making models as they are applied to choosing an academic major and/or career. Through a variety of in-class and out-of-class activities students will integrate selfknowledge and knowledge about majors and the world of work.

Credits: 1
Term(s) Typically Offered: Offered as Needed

INDS 121 - Freshman Research and Mentoring
The FRAME Seminar introduces students to academic research skills. Students will collaborate with faculty mentors, peers and professionals to develop skills in methodologies, analyses and dissemination of scholarly work. The seminar course is intended for second semester freshman.

Prerequisite: INDS $101^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 1
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

## Italian (ITAL)

## ITAL 101 - Italian Language and Culture I

A broad and practical working foundation in the language.
Credits: 3
Thematic Thread(s): Being American, Transfer Thread Completion Course
ITAL 102-Italian Language and Culture II
A broad and practical working foundation in the language.
Prerequisite: ITAL $101^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Thematic Thread(s): Being American, Transfer Thread Completion Course
ITAL 103-Italian Language and Culture III
A broad and practical working foundation in the language.
Prerequisite: ITAL $102^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Thematic Thread(s): Being American, Transfer Thread Completion Course

## ITAL 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## ITAL 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

## ITAL 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

## ITAL 198-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

## ITAL 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
ITAL 295 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

## ITAL 298-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

## ITAL 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ITAL 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## Credits: 1-6

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ITAL 398-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ITAL 490 - Independent Study

Students have an opportunity to study selected areas in greater concentration. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ITAL 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ITAL 498-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Japanese (JAPN)

## JAPN 101 - Japanese Language and Culture I

This course is the first in a three course series which will provide an introduction to the Japanese language.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Being American, Global Citizenship, Food, Wellness
\& Environment Across Cultures, International Business, Transfer Thread Completion Course, Transnational Culture

JAPN 102 - Japanese Language and Culture II
This course is the second in a three course series which will provide an introduction to the Japanese language.

Prerequisite: JAPN $101^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Being American, Global Citizenship, Food, Wellness \& Environment Across Cultures, International Business, Transfer Thread Completion Course, Transnational Culture

## JAPN 103 - Japanese Language and Culture III

This course is the third in a three course series which will provide an introduction to the Japanese language.
Prerequisite: JAPN $102^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Thematic Thread(s): Being American, Global Citizenship, Food, Wellness \& Environment Across Cultures, International Business, Transfer Thread Completion Course, Transnational Culture

## JAPN 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## JAPN 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## JAPN 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## JAPN 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## JAPN 202 - Intermediate Japanese I

Comprehensive review of Japanese language with emphasis on developing the students' abilities for proficient oral and written accomplishments.

Prerequisite: JAPN 103 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms

## JAPN 215 - Topics in Japanese Culture

This course provides deeper knowledge of Japanese culture by examining selected topics in Japanese culture. This course is taught in English.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): Transfer Thread Completion Course

## JAPN 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## JAPN 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## JAPN 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## JAPN 300 - Reading \& Writing Japanese

This course reviews hiragana, kalakana, roma-ji, and kanji characters to develop and enhance Japanese reading and writing skills.

Prerequisite: JAPN 103 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## JAPN 303 - Professional Japanese

This course acquaints the student with formal registers and forms of communication used in all professional communication in Japan. There are no prerequisites for this course.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## JAPN 315 - Japanese Study Abroad

This course is designed for students who wish to study Japan/ Japanese society firsthand. Students will study the culture, literature, history, art, and other socio-political issues concerning the country where the program is offered. There are no prerequisites for this course.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## JAPN 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## JAPN 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## JAPN 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## JAPN 490 - Independent Study

Students have an opportunity to study selected areas in greater concentration. The nature of the topic is selected and its treatment are determined in consultation with the instructor. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## JAPN 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## JAPN 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Korean (KORN)

KORN 101 - Korean Language and Culture I
This course is the first in a three course series which will provide an introduction to the Korean language.

Credits: 3
Thematic Thread(s): Being American, Global Citizenship, Food, Wellness \& Environment Across Cultures, International Business, Transfer Thread Completion Course, Transnational Culture

## KORN 102 - Korean Language and Culture II

This course is the second in a three course series which will provide an introduction to the Korean language.
Prerequisite: KORN 101 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Thematic Thread(s): Being American, Global Citizenship, Food, Wellness \& Environment Across Cultures, International Business, Transfer Thread Completion Course, Transnational Culture

## KORN 103 - Korean Language and Culture III

This course is the third in a three course series which will provide an introduction to the Korean language.

Prerequisite: KORN $102{ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Thematic Thread(s): Being American, Global Citizenship, Food, Wellness \& Environment Across Cultures, International Business, Transfer Thread Completion Course, Transnational Culture

## KORN 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## KORN 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

## KORN 195-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

## KORN 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

## KORN 202 - Intermediate Korean I

Comprehensive review of Korean grammar with emphasis on developing the students' abilities for proficient oral and written accomplishments.

Prerequisite: KORN 103 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$. Credits: 3

## KORN 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

## KORN 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

## KORN 298-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

## KORN 306 - Modern Korean Civilization

Course analyzes the most significant characteristics, foreign influences, and cultural traditions that have comprised Korean culture since 1900.
Course will be taught in English and is open to all interested students.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## KORN 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## KORN 395-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## KORN 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## KORN 490 - Independent Study

Students have an opportunity to study selected areas in greater concentration. The nature of the topic selected and its treatment are determined in consultation with the instructor. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## KORN 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## KORN 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Library Science (LIBR)

## LIBR 110 - Introduction to Library \& Information Resources

An asynchronous course introducing the resources of the university library and use of subject-related library materials as well as evaluation and ethical use of information resources. Students will develop skills in locating, selecting, citing, and analyzing academic and popular sources.

Credits: 1
Term(s) Typically Offered: Offered Every Term

## LIBR 139-University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## LIBR 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## LIBR 210 - Library Research Methods

An introduction to the research process inducing methods for identifying, retrieving, and evaluating information. The aim of this course is to identify an informal need and locate, evaluate, and use appropriate resources. The focus on implementing effective strategies for finding relevant information including the selection and effective use of Bailey Library resources.

Credits: 3
Term(s) Typically Offered: Offered Summer Terms
LIBR 290 - Experimental
A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## LIBR 390-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## LIBR 490 - Independent Study

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor. Prerequisites:
Permission of the instructor
Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## Management (MGMT)

## MGMT 130 - Dynamics of Global Commerce

Exploration of the challenges of business operations in the global marketplace. Topics discussed include the business, economic, social and political aspects of the global marketplace. This may include, but not be limited to, topics such as e-commerce, entrepreneurship, sustainability, and business ethics.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): International Business, Transfer Thread Completion Course

## MGMT 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## MGMT 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MGMT 195-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## MGMT 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MGMT 219 - Business Analytics I

Probability and statistics in a business environment, encompassing descriptive statistics, probability theory, hypothesis testing, linear regression and correlation. Cross-listed as ECON 219.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## MGMT 290-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MGMT 295-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## MGMT 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
MGMT 319 - Business Analytics II
This course introduces various methods on how to analyze large sets of business data in order to uncover potential business opportunities. Students will learn both predictive analytics and prescriptive analytics. The predictive analytics include trend analysis, forecasting techniques, data mining, and spreadsheet modeling. Prescriptive analytics covers linear optimization and decision analysis. Business software such as productivity software, data visualization, and business intelligence software will be heavily used as a main focus of learning.

Prerequisites: (ECON $219^{\mathrm{D}}$ or MGMT $219^{\mathrm{D}}$ or STAT $152^{\mathrm{D}}$ or BUSA $219^{\mathrm{D}}$ ) and (MATH $113^{\mathrm{D}}$ or MATH $115^{\mathrm{D}}$ or MATH $117^{\mathrm{D}}$ or MATH $118^{\mathrm{D}}$ or MATH $122^{\text {D }}$ or MATH $123^{\text {D }}$ or MATH $125^{\text {D }}$ or MATH $131^{\text {D }}$ or MATH $210^{\text {D }}$ or MATH $225^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.

## MGMT 320-Operations Management I

Operations strategy and competition, production systems and processes, decision analysis and graphical linear programming, quality management and process control, facility location and layout, work methods and measurement, inventory management and project evaluation review technique (PERT).

Prerequisites: (MGMT $219^{\mathrm{D}}$ or BUSA $219^{\mathrm{D}}$ or ECON $219^{\mathrm{D}}$ ) or (MATH $152^{\mathrm{D}}$ or STAT 152 ${ }^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Every Term
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 341 - Organizational Leadership

This course will include a combination of leadership theory, practice, and application to contemporary organizations. Major challenges will be discussed including the strengths and weaknesses of these firms and ways in which organizational effectiveness can be improved. We will discuss the inextricable relationship between leadership and diversity and the essential nature of a diverse workforce for maximum success through the empowerment of people. Concepts such as strategic thinking, self-leadership, change and globalization are included.

Prerequisite: MGMT $351^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Summer \& Winter Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 351 - Organizational Behavior

Study of the satisfaction, motivation, learning, problem solving and growth of persons in organizational settings. Conceptual learning is combined with self-analysis in each area.

## Credits: 3

Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): Leadership Development, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 352- Operations Management II

Management science analysis and optimization techniques including linear programming, transportation algorithm, waiting line models, simulation processes, network models, materials requirement planning, and forecasting methods applied to a variety of business operations situations.

Prerequisite: MGMT $320^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Term(s) Typically Offered: Offered Fall, Winter, \& Summer
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 353 - Development of Management Thought

Contemporary management as the result of an evolutionary process involving the thoughts and writings of many famous management theoreticians and practitioners.
Prerequisite: MGMT $351^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 354 - Human Resources Management

A survey course emphasizing aspects of the basic processes of HRM including principles, policies, tools and techniques utilized in the human resource function in any organization. Managing human capital encompasses recruiting, hiring, training, development, compensation, and performance management. Managing individuals and groups that include a diversity of backgrounds throughout each function, are core human resource activities and are incorporated in this class through a variety of techniques.

Prerequisites: MGMT $351^{\text {D }}$ or HCAM $360^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Every Term
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 357-International Operations Management

Issues critical to globalization of manufacturing operations including global planning and organization, comparison of operations, international operations strategy, managerial issues in global operations.

Prerequisites: MGMT $351^{\text {D }}$ and MGMT $320^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 360-Total Quality Management

Managerial and technological issues that are necessary to understand and implement quality assurance programs including human resource development, strategic planning, management information systems, cost effectiveness, implementation procedures and statistical quality control.

Prerequisites: (MGMT $219^{\mathrm{D}}$ or BUSA $219^{\mathrm{D}}$ or ECON $219^{\mathrm{D}}$ or MATH $152^{\mathrm{D}}$ or STAT $152^{\mathrm{D}}$ ) and MGMT $351^{\mathrm{D}}$ and (MRKT $230^{\mathrm{D}}$ or MRKT $330^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 364 - Recruitment and Selection

Components of an effective selection program including job analysis, employment testing, and selection interviews with emphasis on the legal issues and relevant federal regulations.
Prerequisite: MGMT $354^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 370-Sustainable Entrepreneurship and Innovation

This integrative course introduces students to issues related to sustainable new venture creation. It includes topics such as the importance of innovation and creativity in opportunity recognition and the design of sustainable business models, industry/market analysis, resource acquisition and disposition, assessing a venture's financial strength, and ethical legal issues. Students will learn the entrepreneurial process while acknowledging multiple stakeholders and addressing social, economic and environmental concerns.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): Innovation, Entrepreneurship, and Positive Change,
Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 390-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## MGMT 449 - Sustainable Management Internship

Supervised placement, work, and research in selected public and private organizations.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment is limited to students with a program in Sustainable
Management or Sustainable Management.

## MGMT 450 - Internship

Supervised placement, work, and research in selected public and private organizations.

Credits: 1-12
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 452 - Management-Labor Relations

Modern industrial relations from the perspective of both management and labor, including the historical development of large-scale business and organized labor.

Prerequisite: MGMT $351^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 453-Collective Bargaining

The major issues in the negotiation process: bargaining, public policy implications, impasse resolution, strikes, and legislation affecting collective bargaining.

Prerequisite: MGMT $351^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 454 - Management Seminar

Contemporary methods and theories of management are discussed in terms of current organizational practice.

Prerequisites: MGMT $320^{\mathrm{D}}$ and MGMT $354^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 455 - Compensation Management

Rationale, composition and administration of employee reward systems considering both the internal organizational factors and external environmental factors. Contemporary issues such as comparable worth, CEO salaries, and the rising cost of benefits are included.

Prerequisite: MGMT $354^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 456 - Management and Society

This course will engage students in exploring the social, ethical, environmental, economic, and political/legal restraints on organizational decision-making that managers face today. Students will develop critical thinking, communication and managerial skills necessary to be effective in a business world, where multiple stakeholder interests must be addressed

Prerequisite: MGMT $351{ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 457 - International Management

Examination of environments, resources, strategies and models of managerial functions in international organizations.

Prerequisite: MGMT 351 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 458 - Business Capstone

Business Capstone uses a web-based business simulation as a learning tool to enhance student understanding of the interaction and influence of an organization's competitive strategy and policy on the functional area of business. Course material includes the sources of competitive advantage, cross-functional integration and management's commitment to ethics and diversity.

Prerequisites: ACCT $209^{\mathrm{D}}$ and (ACCT $210^{\mathrm{D}}$ or ACCT $310^{\mathrm{D}}$ or ACCT $322^{\mathrm{D}}$ ) and ECON $201^{\text {D }}$ and ECON $202{ }^{\mathrm{D}}$ and FIN $320^{\mathrm{D}}$ and (ECON $219^{\mathrm{D}}$ or BUSA $219^{\mathrm{D}}$ ) and MGMT $320^{\mathrm{D}}$ and MGMT $351^{\mathrm{D}}$ and (MRKT $330^{\mathrm{D}}$ or MRKT $230^{\mathrm{D}}$ ) and (ECON 319 (may be taken concurrently) ${ }^{\text {D }}$ or MGMT 319 (may be taken concurrently) ${ }^{\text {D }}$ or MATH 123 (may be taken concurrently) ${ }^{\text {D }}$ or MATH $125^{\text {*D }}$ or MATH $225^{* D}$ ) and (ACCT 340 (may be taken concurrently) ${ }^{\text {D }}$ or BUSA 340 (may be taken concurrently) ${ }^{\text {D }}$ ) and (FIN 303 (may be taken concurrently) ${ }^{\text {D }}$ or MRKT 303 (may be taken concurrently) ${ }^{\text {D }}$ or BUSA 303 (may be taken concurrently) ${ }^{\text {D }}$ ) and (CPSC 365 (may be taken concurrently) $^{\text {D }}$ or MIS 365 (may be taken concurrently) ${ }^{\text {D }}$ or MIS $265^{* D}$ ) (may be taken concurrently).
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Every Term
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

## MGMT 459 - Sustainable Business Consulting

In this course student teams engage in field-based consulting to analyze actual problem situations involving sustainability for regional businesses.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): Innovation, Entrepreneurship, and Positive Change, Transfer Thread Completion Course
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

## MGMT 460-Training and Development

Training and development as a human resource management function supporting organizational strategic planning including: training needs analysis, training program objectives, training methods, management and organization development methods, program evaluation and costbenefit analysis, and training budgeting. Current trends in training and development will be covered including computer based training, competency based training and cross cultural training.

Prerequisite: MGMT $354^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 465 - Management of Information Technology

Management and specific technical concepts and techniques applied to the function of providing information technology services to the organization.

Prerequisite: MGMT $351^{D}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 490 - Independent Study

In -depth reading and/or research with the guidance of a faculty member in an area selected by the student. Prerequisites: 12 credits in major courses, application, and permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MGMT 498-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Management Information Systems (MIS)

## MIS 139-University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## MIS 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## MIS 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## MIS 210 - Productivity Software

An in-depth, practical study of existing productivity software packages that focuses primarily on decision-support systems for microcomputers. Projects will involve the use of intermediate and advanced features of various software packages, as well as the use of several packages in finding computer-based solutions to information storage and retrieval problems.

Credits: 3
Term(s) Typically Offered: Offered Every Term

MIS 211 - Information Systems Application Development
The purpose of this course is to introduce the students to the fundamental concepts and models of application development so that they can understand the key processes related to building functioning applications and appreciate the complexity of application development. Students will learn the basic concepts of program design, data structures, programming, problem solving, programming logic and fundamental design techniques for event-drive programs. Program development will incorporate the program development life cycle: gathering requirements, designing a solution, implementing a solution in programming language and testing the completed application.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms

## MIS 265 - Management Information Systems

Managerial and technological issues that are necessary to understand, establish, manage and use information systems in all functional areas of organizations.

Prerequisites: CPSC $210^{\mathrm{D}}$ or MIS $210^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## MIS 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MIS 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
MIS 300-Challenges of Computer Technology
An in-depth study of the critical issues related to the computerization of society. Ethical, legal, and moral issues raised by the evolution of computer technology will be discussed.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): The Future, Transfer Thread Completion Course Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MIS 301 - Practical Computer Security

A practical introduction to the threats present to the online, electronic community, and how to protect yourself and your organization from them. We will explore the connectivity structure of the Internet, along with the security and criminal threats to members of the online community. The legal, ethical and technical issues related to threats such as viruses, worms, and identity theft will be covered.

Prerequisites: CPSC $099^{D}$ or CPSC $110^{\mathrm{D}}$ or CPSC $130^{\mathrm{D}}$ or CPSC $100^{\mathrm{P}}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{P}$ Requires minimum grade of $P$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MIS 310 - Business Data Analysis and Visualization

This course covers how data analysts can process data sets from a variety of sources to create information that guides leaders in crafting strategy and tactics which allow an organization to survive and thrive in a turbulent environment. Students will review how business data analysis has been successfully used in the past and learn appropriate processes and a variety of techniques to accomplish effective analyses. Emphasis is on analyzing data, visualizing and interpreting the results of those analyses and translating results into clear and simple insights to aid managerial decision making.

Prerequisites: MIS $210^{C}$ or STAT $152^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

## MIS 323 - Data Base Systems

Database Systems is a study of relational database concepts as applied to comprehensive information systems. These concepts include data design; modeling; normalization; the use of Structured Query Language (SQL) to define, manipulate and test the database; programmatic access to a database; and practical issues faced by database developers.

Prerequisites: CPSC $130^{\mathrm{D}}$ or CPSC $146^{\mathrm{D}}$ or CPSC $210^{\mathrm{D}}$ or MIS $210^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Students cannot enroll who have a program in Information Systems.

## MIS 328 - Exploring Big Data for Business I

Due to the explosion of social media and the computerization of every aspect of social and economic activity, large volumes of structured and unstructured data currently exist. They include weblogs, videos, speech recordings, photographs, health data, e-mails, Tweets and business data. Also, improvements in technology have led to the development of powerful computers that can store and process large volumes of data. This course is to introduce students to the essential information systems and technologies used in manipulating, storing, and analyzing big data. Students will be familiar with highly scalable systems that can be used to accept, store, and analyze large volumes of unstructured data in batchmode and/or real-time.

Prerequisites: MIS $210^{C}$ and (ECON $219^{C}$ or MGMT $219^{C}$ ) and (MIS $323^{C}$ or CPSC $323^{C}$ )
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.
Enrollment limited to students in a Bachelor of Science degree.
Enrollment limited to students in the College of Business college.

## MIS 333 - Introduction to Computer Forensics

This is a fundamental course which covers computer forensics. This class covers methods and tools for gainng forensic information from computer systems and networks. It includes case studies of cyber crimes as well as the application and management of cyber forensics. The course introduces students to forensics tools using hands-on experience and the Internet.

Prerequisites: CPSC $099^{\mathrm{P}}$ or CPSC $100^{\mathrm{P}}$ or CPSC $110^{\mathrm{D}}$ or CPSC $130^{\mathrm{D}}$ or CPSC $210^{\mathrm{D}}$ or MIS $210^{\mathrm{D}}$ or PE $202^{\mathrm{D}}$
${ }^{\mathrm{P}}$ Requires minimum grade of P .
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MIS 353 - Business Data Communications and Technologies

This course provides an introduction and overview of computer networks and data communications. provides an understanding of the underlying concepts of computer networking, email, instant messaging (e.g. texting, multimedia messaging). Introduces several software packages used in business data communications. Emphasis is placed on terminology, techniques and issues in business data communications.

Prerequisites: CPSC $210^{\mathrm{D}}$ or MIS $210^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MIS 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1, Freshman 2 or Sophomore 1.

## MIS 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MIS 401 - Information Systems Security

This course covers key bodies of knowledge and specializations in security and privacy associated with information systems. The course explores the management of various technologies in emerging areas of information assurance including computer and network security, digital forensics, cryptography and biometrics. course concepts include information Assurance, Information Security Governance and Risk Management, Operations Security, Cryptography, Access Control, Physical Security, Telecommunications Security, Business Continuity and Disaster Recovery Planning, Legal and Ethical Issues.

Prerequisites: CPSC $301^{\text {D }}$ or MIS $301^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MIS 403 - Introduction to Healthcare Information Systems

This course will give an introduction to computer-based information systems as they are applied to the health care industry. Topics will include characteristics of health care data, design and life cycle of HCIS, the information technology supporting HCIS and management issues.

Prerequisites: CPSC $210^{\mathrm{D}}$ or MIS $210^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MIS 413 - Systems Analysis

A course in computer-based information systems. Course content includes: foundations of information science, techniques for system development, information architectures, and resource allocations. Case studies are discussed and utilized as class projects.

Prerequisites: CPSC $323^{D}$ or MIS $323^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MIS 423 - Advanced Business Database Systems

This course will provide students with advanced skills in database implementation and management with a focus on business systems. It will provide students with a hands-on experience of client-server databases, and the skills to develop one using reputable enterprise relational database management system. They will develop knowledge of creating, querying and maintaining relational database. Students will also learn to use advanced Structured Query Language (SQL) extensively to create integrated business systems to access, retrieve and manipulate business data. Students taking this course are expected to have a basic understanding of relational database concepts, and knowledge of a programming language.

Prerequisite: MIS $323^{C}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.
Enrollment limited to students in a Bachelor of Science degree.
Enrollment limited to students with the QUIE attribute.
Enrollment limited to students in the College of Business college.
Enrollment limited to students with department of Healthcare Adm \& Info Systems.

## MIS 428 - Exploring Big Data for Business II

This course focuses on Big Data tools and technologies. It is for students who want to become conversant with the terminology and the core concepts behind big data problems, applications, and systems. It is for those who want to start thinking about how utilizing big data might be useful in their business or career. Students will gain skills to implement data-driven approach to decision-making, develop big data solutions to create business intelligence and competitive advantage through the use of analytical techniques and Big Data.

Prerequisites: MIS $210^{\mathrm{D}}$ and (ECON $219^{\mathrm{D}}$ or MGMT $219^{\mathrm{D}}$ ) and (MIS $323^{\mathrm{D}}$ or CPSC $323^{\mathrm{D}}$ ) and MIS $328^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.
Enrollment limited to students in a Bachelor of Science degree.
Enrollment limited to students with the QUIE attribute.
Enrollment limited to students in the College of Business college.
Enrollment limited to students with department of Healthcare Adm \& Info Systems.

## MIS 443 - Project Management

An introduction to project management in the information systems, or IT development, area. Provides an understanding of the purpose, methods and benefits of process management by exposing the student to the concepts, practices, processes, tools and techniques used in process management for software development.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MIS 450 - Internship

Professional work experience performed as an intern at selected agencies supervised both by the agency and by the Computer Science Department.

Credits: 1-12
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MIS 453 - Fundamentals of Enterprise Architecture

This course explores the design, selection, implementation and management of enterprise IT solutions. The focus is on applications and their fit with the hosting organization.
Prerequisites: MIS $323^{\circ}$ and MIS $413^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MIS 490- Independent Study

Supervised study in a special interest area. Prerequisites: Two computer science courses selected from 370 or above, permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MIS 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Marine Science (MARS)

## MARS 110 - Introduction to Oceanography

An introduction to marine sciences with emphasis on physiography of the ocean basins, waves, tides, near-shore processes, the physical and chemical nature of seawater, circulation, characteristics of marine plant and animal communities, history of oceanography, and law of the sea.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## MARS 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MARS 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## MARS 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## MARS 200 - Art Workshop-Painting of the Coastal Area

This workshop is to be an intensive involvement with the esthetic qualities of the seashore and its environs. Paintings using various media (watercolor, oils, acrylics) according to personal preference will be created. Slides and other reproductions of relevant paintings by artists of historical importance will be examined and discussed.

## Credits: 3

Term(s) Typically Offered: Offered as Needed

## MARS 201-Art Workshop-Pewter and Marine Jewelry

This workshop will explore pewter and objects found in the near-shore environment as materials for making jewelry and body ornaments. Participants will learn techniques of casting, fabricating, soldering, tinning and bezel setting for the purpose of creating unique pieces.

Credits: 3
Term(s) Typically Offered: Offered as Needed
MARS 204 - Writing about the Sea
A survey of literature from several genre, both fiction and nonfiction, which focuses on maritime themes and topics.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
MARS 211 - Field Methods in Oceanography
A course to familiarize students with the dynamic marine environment and field work on board small research vessels, to instruct in the use and application of standard oceanographic instruments and sampling devices and to promote and encourage independent research through the initial stages of scientific projects.

Prerequisites: MARS $110^{\mathrm{D}}$ or EGEO $131^{\mathrm{D}}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered as Needed

## MARS 212 - Navigation

This course covers navigation, i.e. the art and science of safely bringing a boat from one position to another in a body of water. Topics covered are piloting, navigation within sight of land, electronic navigation, radio bearings by radio direction finder, LORAN, OMEGA, radar, celestial navigation, circles of equal altitude, navigational triangle, celestial lines of position, celestial fix, Greenwich Mean Time, Greenwich Hour Angle.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## MARS 215 - Marine Wildlife Photography

This class includes an in-depth study of the science of photography and how this relates to the field work of marine biology. The student will develop skills in micro- and macrophotography and an understanding of the science of optics, filter and camera techniques, and darkroom procedures and techniques. The class will learn various chemical processes for color and black/white photography. Specific articles on marine science photography will be used to develop an understanding both within the marine science laboratory and in the field.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## MARS 221 - Marine Invertebrates

A study of the invertebrate phyla with emphasis on development, reproduction, structure, function and classification of selected marine organisms. Laboratory field experience will be given in collection, preservation and classification of the phyla.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## MARS 241 - Marine Biology

A study of plant and animal life in the marine environment. Emphasis will be on physical and chemical environmental factors affecting the biota in the inter-tidal, open water, and benthic habitats. Common biota characteristic of each habitat will be investigated in terms of their natural history, morphology, and ecological relationships.

Credits: 3
Term(s) Typically Offered: Offered as Needed
MARS 250 - Wetland Ecology
The ecology and management of wetland wildlife with emphasis on the management of wetlands as ecological systems.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## MARS 260 - Marine Ecology

A study of the ecology of marine organisms, the relationship of plants and animals to physical, chemical and bio-logical factors and their zonation and communities.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## MARS 270 - Coastal Vegetation

In-depth examination of vegetation falling under the marine influence. Identification of same and determination of factors limiting and controlling their distribution.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## MARS 280 - Field Biology

An introduction to basic principles of ecology and natural history of selected plants and animals in terrestrial, freshwater, and marine environments. Course is suitable for non-science majors.

Credits: 3
Term(s) Typically Offered: Offered as Needed

MARS 285 - Recreation Management/Development in the Coastal Zone
This course focuses on the recreation component of coastal zone management. The nature, extent, location, and value of coastal recreation behavior will be probed and related to the overall coastal management framework.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## MARS 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MARS 295-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## MARS 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MARS 300-Behavior of Marine Organisms

Concepts of ethology; discussion and observation of the influences of external and internal factors on the regulation and control of behavior of organisms living in the marine coastal environment.

Prerequisites: BIOL $101^{\text {D }}$ or BIOL $104^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 310 - The Mammals of Coastal Ecosystems

Distribution, behavior, physiology, adaptations, and ecological relationships of mammals with special emphasis on the mammals of the Delmarva Peninsula. In addition to the lectures and seminars, the laboratory and field work will deal with the productivity, population dynamics, species diversity, ecoenergetics, and behavior of local mammals.

Prerequisites: BIOL $104^{\text {D }}$ or BIOL $101^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 320 - Marine Microbiology

A survey of methods and concepts of marine microbiology. Attention will be given to technical aspects of sample collection, microbial ecology of the marine environment, enrichment culturing, methods of enumeration and identification with emphasis on marine bacteria.

Prerequisite: BIOL $330^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 330 - Tropical Invertebrates

An introduction to tropical invertebrates. A variety of collection and observation methods will be used to sample near-shore and reef areas. Emphasis will be on systematics and ecology using the communities approach. One week at Wallops will be intensive review of general systematics and ecology of marine invertebrates. The last two weeks in Florida will involve sampling and identifying species and describing ecological communities.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 331 - Chemical Oceanography

Treatment of a wide range of oceanic chemical phenomena, including salinity and age of the oceans, sources and residence times of chemical constituents in seawater, geochemical cycles of mineral resources and trace elements. Sampling and laboratory analysis techniques.
Prerequisites: MARS $110^{\mathrm{D}}$ or EGEO $131^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 342 - Marine Botany

A study of marine and marine fringe plants of the Middle Atlantic Coast, their taxonomy, ecology, distribution, life histories, physiology, and economic status. Techniques of collecting, preserving, identifying and herbarium cataloging will be stressed. Exercises in plant ecology and marine microbiology will be included.

Prerequisites: BIOL $101^{\text {D }}$ or BIOL $104^{\text {D }}$ or BIOL $201^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 343 - Marine Ichthyology

A study of the fishes. Specimens collected along the eastern seaboard by the students will be used to illustrate the anatomy, physiology and systematics of this major vertebrate group. Field collections will also give students the opportunity to observe the relationships of these animals to their biotic and physical environment.

Prerequisites: BIOL $101^{\text {D }}$ or BIOL $104^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 344 - Anatomy of Marine Chordates

A course designed to familiarize the students with the qualitative aspects of the speciation process; to lay ground work for understanding the basic and specialized structure of marine chordates; to trace the most obvious or important trends (and their functional significance) in the evolution of this basic structure in various vertebrate lines. The laboratories will be devoted primarily to dissection of representative marine vertebrates, particularly those collected live on field trips.
Prerequisites: (BIOL $104^{\mathrm{D}}$ or BIOL $101^{\mathrm{D}}$ ) and BIOL $212^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 345- Ornithology

Introduces the student to avian fauna of the seacoast and at the same time enables comparison with inland species. In addition to the field work providing visual and vocal identification, lecture material will include information on the distribution, behavior, physiology, and anatomy of birds.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 350 - Physiology of Marine Invertebrates

Mechanisms and regulation of organ function in marine invertebrates with emphasis on homeostasis. Invertebrate examples of fundamental principles and of unique physiological mechanisms.
Prerequisites: BIOL $104^{\text {D }}$ or BIOL $101^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 362 - Marine Geology

Structure and sedimentology of the ocean basins and shores; methods of exploration, general feature of the ocean basins, and theory of ocean basin evolution.

Prerequisites: MARS $110^{\mathrm{D}}$ or EGEO $131^{\mathrm{D}}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 364 - Physical Oceanography

A study of the physical properties of the oceans to include: mass and energy budgets; theory of distribution of variables; cause, nature, measurement, analysis and prediction of tides, currents and waves; basic instrumentation in field work.

Prerequisites: MARS $110^{\mathrm{D}}$ or EGEO $131^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

MARS 394 - Comparative Physiology of Marine Organisms
This course will provide an introduction to the physiology of marine organisms utilizing a comparative approach. The lecture will introduce the topics of respiration, circulation, metabolism, osmoregulation, thermoregulation, locomation and sensory systems by drawing comparisons between the mechanisms and strategies utilized by a wide range of marine organisms. Laboratory and field work will focus on the physiological responses of marine plants and animals to common environmental stresses such as salt load, temperature variation, depletion of dissolved oxygen, and tidal flux. This will be accomplished through measurements and observations in the field, as well as through experimental manipulations in a laboratory setting.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 395-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## Credits: 1-6

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisites: BIOL $104^{\text {D }}$ or BIOL $101^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 420 - Marine Micropaleontology

Designed for students majoring in either biological or geological sciences, the course will deal with modern, living representatives of micro-organisms important in the fossil record. Particular emphasis will be on the taxonomy, morphology, evolution and ecological affinities of the Foraminifera (Sarcodina), but other groups, including the Radiolaria, Diatoms and Ostracoda, will also be considered. Laboratory and field aspects will include sample collecting, preparation and analysis.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 431 - Ecology of Marine Plankton

Study of the phytoplankton and zooplankton in marine and brackish environments. Qualitative and quantitative comparisons will be made between the planktonic populations of various types of habitats in relation to primary and secondary productivity.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 432 - Marine Evolutionary

The study of the ecological mechanisms underlying evolutionary processes. This course is broad in scope and requires that students synthesize both evolutionary and ecological concepts and theory into an understanding of how organisms adapt to their environment. Marine, estuarine, and maritime organisms will be used as model systems and processes, which affect marine populations, will be emphasized.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 441 - Biology of Molluscs

The Mollusca is the second largest group of animals and perhaps the most diverse in terms of morphological, ecological and behavioral variations. This course offers an evolutionary, functional, and ecologic approach to studying this important group of organisms.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 451 - Coastal Environmental Oceanography

This course examines the interaction of biological, chemical, physical, geological and ecological ocean processes as applied to coastal environments. Emphasis is placed on environmental management issues of the coastal zone. Topics include water quality analysis, barrier island geology and ecology, estuarine pollution, beach defense and biological implications in areas of coastal up welling and coastal fronts. Specific cases in coastal pollution will be examined from coastal environments around the U.S., including Kepone in the James River, VA, DDT on the Palos Verde Shelf, CA., Eutrophication on the North Carolina Coast, The Exxon-Valdex Oil spill and Pfsteria in the coastal waters of N.C. and VA. Cross listed as MARS551.

Prerequisites: MARS $110^{\mathrm{D}}$ or EGEO $131^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 457 - Marine Geophysics

A study of the basic geophysical theories about the transmission of shock waves, and gravity and magnetic fields to the understanding and exploration of the continental shelves and marine basins. The student is introduced to the use and limitations of the portable seismic refraction seismograph, gravity meter, and magnetometer.
Prerequisites: MARS $110^{\mathrm{D}}$ or EGEO $131^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 458 - Exploration Methods in Marine Geology

A study of geophysical and geologic instruments and techniques used to penetrate the water layer obscuring the ocean bottom topography and geology and the results of some of that effort. Emphasis is on laboratory and field assignments using basic geophysical and geological instruments. The students are introduced to the use, limitations and results of these instruments.

Prerequisite: EGEO $101^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 459 - Coastal Geomorphology

A study of coastal environments with an emphasis on understanding the inter-relationship among land forms, processes and materials. The student will participate in field studies conducted along high and low wave energy environments.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## MARS 464 - Biological Oceanography

Interdisciplinary study of the interactions between biological communities and the ocean environment as seen by distributions of coastal plankton, fish, and benthic invertebrates. Projects will involve boat trips to sample populations and to quantitatively document environmental variables with state of the art equipment, laboratory and field experiments to determine rate processes, and visits to nearby field and government laboratories. Examples of project topics include transport of plankton at barrier island passes, effect of submarine banks on fish populations, ground truth data for satellite imagery, and other current topics in biological oceanography.

Prerequisites: MARS $110^{\mathrm{D}}$ or EGEO $131^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 490 - Independent Study

Independent research under the guidance of a faculty member. Prerequisite: Permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. (repeatable up to 6 credits) Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MARS 491 - Coral Reef Ecology

A study of coral reef structure, formation, types, and the relationships of reef organisms to their environment. Emphasis is given to species diversity, identification, symbioses, and effects of temperature, salinity, light, nutrient concentration, predation, and competition on the abundance and the distribution of coral reef organisms.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 492 - Marine Mammals

A study of the distribution, population ecology, behavior, physiology and adaptations of marine mammals. Student projects will entail collecting physiological and behavioral data at field sites and at facilities studying marine mammals.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 493 - Behavioral Ecology

Designed to present animal behavior within an ecological and evolutionary context. Presents mathematical and theoretical framework of behavioral ecology. An in-depth exploration of the ways in which the behavior of animals is influenced by the environment, especially with regard to resource distribution.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 494 - Marine Aquaculture

This course will include the theory and practice of raising organisms for food and for the aquarium trade. Techniques for raising economically important organisms from the egg stage to marketable size and their food supplies will be studied.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MARS 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Marketing (MRKT)

MRKT 139 - University Seminar
University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## MRKT 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MRKT 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## Credits: 1-6

Term(s) Typically Offered: Offered as Needed

## MRKT 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MRKT 230 - Principles of Marketing

An analytical overview of market decision-making including product, pricing, place, and promotional strategies considering the heterogeneity and diversity of customers and markets with respect to their demographic, geographic, psychographic, cultural, and behavioral characteristics.

Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): Leadership Development, Transfer Thread

## Completion Course

Students with a semester level of Freshman 1 may not enroll.

## MRKT 290-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MRKT 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## Credits: 1-6

Term(s) Typically Offered: Offered as Needed

## MRKT 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MRKT 303-Issues in Global Business

This course will focus on fundamental issues in the modern globalization of business. The topics covered will include the cultural environments in which business work, politics and law in global business, economic integration, global trade and investment, global finance, global operations and managing global businesses. A special emphasis will be placed on the challenges and opportunities presented to global businesses by the social, political and economic diversity encountered in the global marketplace.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): Global Citizenship, International Business, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MRKT 331 - Distribution Management

Principles, methods and problems relating to wholesaling, retailing and physical distribution management.

Prerequisites: MRKT $230^{\mathrm{D}}$ or MRKT $330^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MRKT 332 - Business Marketing

A management perspective of the internal and external environments affecting the demand for industrial goods; marketing intelligence and control; and marketing strategy for product, service, channel, price, and promotional components.

Prerequisites: MRKT $330^{\text {D }}$ or MRKT $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MRKT 333 - Consumer Behavior

The buying process with emphasis on economic, social, cultural and psychological determinants of consumer choice.

Prerequisites: MRKT $330^{\mathrm{D}}$ or MRKT $230^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall, Spring, \& Summer
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MRKT 334 - Advertising Management

Management of advertising, including background, roles, planning, media strategy, message, testing, research, evaluation, and administration of advertising.

Prerequisites: MRKT $330^{\mathrm{D}}$ or MRKT $230^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MRKT 335 - Retail Management

Store location and layout, retail personnel management, merchandising policies and control, and marketing strategy.

Prerequisites: MRKT $330^{\mathrm{D}}$ or MRKT $230^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MRKT 336 - Professional Selling

Provides foundations of sales processes and management to prepare students for careers in selling or sales management.

Prerequisites: MRKT $330^{\text {D }}$ or MRKT $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MRKT 338 - E-Commerce

The role, structure, organization, and use of the Internet as a channel of distribution to conduct electronic commerce.

Prerequisites: (MRKT $230^{\mathrm{D}}$ or MRKT $330^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MRKT 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MRKT 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MRKT 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MRKT 430 - Marketing Research

Research methodology as a managerial tool used in problem solving and decision making in marketing

Prerequisites: (MGMT $219^{\mathrm{D}}$ or BUSA $219^{\mathrm{D}}$ or ECON $219^{\mathrm{D}}$ ) and (MRKT
$330^{\mathrm{D}}$ or MRKT $230^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MRKT 431 - Marketing Seminar

Advanced topics in marketing with emphasis on the analysis and solution of marketing problems

Prerequisites: MGMT $320^{\mathrm{D}}$ and MRKT $332^{\mathrm{D}}$ and MRKT $333^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MRKT 437 - International Marketing

The marketing issues of firms engaged in international business with emphasis on strategies for successful foreign market penetration.

Prerequisites: MRKT $330^{\mathrm{D}}$ or MRKT $230^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall, Spring, \& Summer
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MRKT 450 - Internship

Supervised placement, work, and research in selected public and private organizations.

Credits: 1-12
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MRKT 490 - Independent Study

In-depth reading and/or research with the guidance of a faculty member in an area selected by the student. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MRKT 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MRKT 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Mathematics (MATH)

## MATH 113 - Mathematics as a Liberal Art

A cultural enrichment course, which introduces topics and applications from different branches of mathematics

Prerequisites: (ACSD $110^{\text {C }}$ or ESAP $110^{\circ}$ ) or minimum score of 470 in SAT MATH SECTION SCORE' or minimum score of 17 in 'ACT Math' or minimum score of $Y$ in 'WAIVE ACSD1 10 W HIGHER MATH'
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Every Term

## MATH 115 - Financial Mathematics

Methods of solving problems arising from the growth of money through simple and compound interest. Savings accounts, loans, financing, mortgages, depreciation, bonds, pensions and life insurance are included.

Prerequisites: ACSD $110^{\circ}$ or minimum score of 470 in 'SAT MATH
SECTION SCORE' or minimum score of 17 in 'ACT Math'
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): Innovation, Entrepreneurship, and Positive Change, Transfer Thread Completion Course

## MATH 117 - Quantitative Reasoning

Quantitative reasoning is the application of basic mathematical skills to the analysis and interpretation of real-world quantitative information to draw conclusions that are relevant to people in their daily lives. In this course, students will explore various quantitative models and their interpretations in a way that emphasizes mathematical and statistical reasoning skills. Conceptual understanding will be stressed over manipulative skills. Students will learn to create sophisticated arguments supported by quantitative evidence and clearly communicate them in a variety of formats (using words, tables, graphs, mathematical equations, etc.) as appropriate. Technology, such as spreadsheets, will also be used. This course satisfies the Quantitative Reasoning requirement in the Rock Studies Program. This course is graded A, B, C, NC.

Prerequisites: (ACSD $110^{\circ}$ or ESAP $110^{\circ}$ ) or minimum score of 470 in 'SAT MATH SECTION SCORE' or minimum score of 17 in 'ACT Math' or minimum score of Y in 'WAIVE ACSD110 W HIGHER MATH'
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3

## MATH 118 - Elementary Geometry

A survey of Euclidean geometry and related elementary geometrical concepts. This course is not appropriate for those planning to teach geometry at the secondary level, but would be an excellent choice for those who will be teaching mathematics in the elementary school.

Prerequisites: (ACSD $110^{\circ}$ or ESAP $110^{\circ}$ ) or minimum score of 470 in 'SAT MATH SECTION SCORE' or minimum score of 17 in 'ACT Math' or minimum score of $Y$ in 'WAIVE ACSD1 10 W HIGHER MATH'
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment is limited to students with a program in Early Childhood Ed (PK-4), Early Childhood Educ-Int'I Ed, School Wellness Education, HealthPhysical Educ Teaching, Health and Physical Education, Early Child-Spec Ed-Intnl Ed, Early Child/Spec Ed(PK-4)PK-8), Sec Education-English(7-12),
Sec Education-French ( $\mathrm{K}-12$ ), Mid Level-EngI\&Lang Arts (4-8), Mid
Level-Mathematics (4-8), Mid Level-Social Studies (4-8), Middle LevelScience (4-8), Sec Ed-Social Stud-Hist (7-12), Secondary Educ-Spanish ( $\mathrm{K}-12$ ), Music Education ( $\mathrm{K}-12$ ), Music Educ-Voice ( $\mathrm{K}-12$ ), Music EducSaxophone ( $K-12$ ), Music Educ-Instrumental ( $K-12$ ), Music Educ-Piano (K-12), Elementary School Mathematics, Middle School Mathematics or Art With Certification (K-12).

## MATH 120 - Intermediate Algebra

Linear functions, equations, inequalities, polynomials, algebra of functions, rational exponents, quadratic equations and inequalities, systems of equations.
Prerequisites: (ACSD $110^{\text {C }}$ or ESAP $110^{\circ}$ ) or minimum score of 470 in 'SAT MATH SECTION SCORE' or minimum score of 17 in 'ACT Math' or minimum score of Y in 'WAIVE ACSD1 10 W HIGHER MATH' or minimum score of 30 in 'ALEKS PPL Assessment'
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall, Spring, \& Summer
MATH 122 - Finite Mathematics with Matrices
The algebra of matrices with applications in linear optimization, algebraic and graphical solutions.

Prerequisites: MATH $120^{\mathrm{D}}$ or MATH $199^{\mathrm{D}}$ or minimum score of 560 in 'SAT MATH SECTION SCORE' or minimum score of 23 in 'ACT Math' or minimum score of 60 in 'ALEKS PPL Assessment'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed

## MATH 123 - Introduction to Applied Calculus

The course is compatible with the background and interests of students not majoring in the physical sciences or mathematics. The theorem-proof approach of differential calculus is replaced with the explanation-example approach. The course includes an introduction to exponential and logarithmic functions, limits, derivatives, maxima/minima, and Lagrange multipliers, and applications from business, economics, and finance. Problem-solving with mathematical software will also be emphasized.
Prerequisites: MATH $120^{\mathrm{D}}$ or MATH $111^{\mathrm{D}}$ or MATH $199^{\mathrm{D}}$ or MATH $125^{\mathrm{D}}$ or minimum score of 560 in 'SAT MATH SECTION SCORE' or minimum score of 23 in 'ACT Math' or minimum score of 60 in 'ALEKS PPL Assessment'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed

## MATH 125 - Precalculus

A bridge between high school algebra and calculus involving polynomial, trigonometric, logarithmic, exponential functions, complex numbers, and the conic sections.
Prerequisites: MATH $120^{\mathrm{D}}$ or MATH $199^{\mathrm{D}}$ or minimum score of 560 in 'SAT MATH SECTION SCORE' or minimum score of 23 in 'ACT Math' or minimum score of 60 in 'ALEKS PPL Assessment'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 4
Term(s) Typically Offered: Offered Fall, Spring, \& Summer

## MATH 131 - Discrete Mathematics

This course begins the study of the language and concepts needed for higher-level mathematics. Students will learn principles of logic, focusing on logical forms, truth tables, and statement calculus. Students will analyze examples of and complete calculations involving sets, relations, and functions. Students will also receive an introduction to counting techniques and recursion. This course is not a proof-based course.
Prerequisites: MATH $125^{\text {D }}$ or MATH $225^{\text {D }}$ or MATH $230^{\circ}$ or minimum score of 600 in 'SAT MATH SECTION SCORE' or minimum score of 25 in
'ACT Math' or minimum score of 75 in 'ALEKS PPL Assessment'
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms

## MATH 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## MATH 180 - Introduction to Mathematical Software

An introduction to the appropriate use of mathematical software with emphasis on problem solving. Topics will include mathematical concepts from calculus, linear algebra, and differential equations.

Prerequisite: MATH 225 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered as Needed

## MATH 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MATH 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## MATH 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MATH 210 - Elementary Mathematics I

This course is designed for future K-8 teachers to explore number systems (including definitions, operations, and properties of whole numbers and fractions), numeration systems, proportionality, algebraic thinking, and problem-solving. Emphasis is on conceptual understanding in addition to procedural skill.

Prerequisites: (ACSD $110^{\mathrm{D}}$ or ESAP $110^{\mathrm{D}}$ ) or minimum score of 470 in 'SAT MATH SECTION SCORE' or minimum score of 17 in 'ACT Math' or minimum score of $Y$ in 'WAIVE ACSD1 10 W HIGHER MATH'
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1 may not enroll.
Enrollment is limited to students with a program in Early Childhood Ed
(PK-4), Early Childhood Educ-Int'I Ed, School Wellness Education, HealthPhysical Educ Teaching, Health and Physical Education, Early Child/ Spec Ed(PK-4)PK-8), Sec Education-English(7-12), Sec Education-French ( $\mathrm{K}-12$ ), Mid Level-Engl\&Lang Arts (4-8), Mid Level-Mathematics (4-8), Mid Level-Social Studies (4-8), Middle Level-Science (4-8), Sec Ed-Social Stud-Hist (7-12), Secondary Educ-Spanish ( $\mathrm{K}-12$ ), Special Education (PK-12), Music Education ( $\mathrm{K}-12$ ), Music Educ-Voice ( $\mathrm{K}-12$ ), Music EducSaxophone (K-12), Music Educ-Instrumental (K-12), Music Educ-Piano (K-12), Elementary School Mathematics, Middle School Mathematics or Art With Certification (K-12).
MATH 225 - Calculus I
This course begins the study of calculus of functions of one variable. Students will study limits and continuity of real-valued functions. Students will explore the derivative as a rate of change and learn how to calculate derivatives of algebraic and transcendental functions. Applications of the derivative to various physical and other phenomena will be considered. This course also provides an introduction to Riemann integration.

Prerequisites: MATH $125^{\text {C }}$ or minimum score of 600 in 'SAT MATH SECTION SCORE' or minimum score of 25 in 'ACT Math' or minimum score of 75 in 'ALEKS PPL Assessment'
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 4
Term(s) Typically Offered: Offered Fall, Spring, \& Summer

## MATH 230 - Calculus II

This course continues the study of calculus of real-valued functions of one variable. Students will learn various techniques of evaluating antiderivatives and approximating definite integrals. These integrals will be used in various applications such as calculating areas and volumes, arc length, work, and solving simple first-order differential equations. Parametric and polar equations and their differential and integral calculus are also considered. Students will also investigate sequences and series, their convergence properties, and the use of power series to represent functions.

Prerequisite: MATH $225^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 4
Term(s) Typically Offered: Offered Fall, Spring, \& Summer

## MATH 231 - Calculus III

This course continues the study of calculus with the study of functions of several variables. Students will learn about the geometry of twoand three-dimensional space, vector-valued functions, and functions of several variables. Students will investigate these functions with partial derivatives and multiple integration. Vector calculus topics such as Green's, Stokes, and the Divergence Theorems will be covered. Computer software such as Mathematica will be used in problem solving in this course.

Prerequisite: MATH $230^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 4

Term(s) Typically Offered: Offered Fall \& Spring Terms

## MATH 235 - Foundations of Mathematical Proof

This course provides a foundation for writing mathematical proofs. Students will work with common proof techniques such as direct proof, proof by contrapositive, proof by contradiction, and proof by induction, along with the logical bases supporting them. In developing their proof-writing skills, students will work with foundational mathematical concepts such as basic set theory, relations between sets, and functions.

Prerequisites: MATH $225^{\text {D }}$ and MATH $131^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## MATH 240 - Linear Algebra and Differential Equations

Computational aspects of matrices, determinants, systems of linear equations, vector spaces, linear dependence, Wronskian, characteristic values, elementary differential equations, separable and exact equations, linear differential equations with constant coefficients.

Prerequisite: MATH $230^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## MATH 280 - Theory of Interest

A rigorous, calculus based treatment of the Theory of Interest, including simple and compound interest, annuities, bonds, yield rates, amortization schedules and sinking funds, yield curves, and practical applications. This course is intended to prepare students for the Society of Actuaries examination on the theory of interest.

Prerequisite: MATH $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
MATH 281 - Actuarial Exam Preparation I
The purpose of this course is to prepare students for The Society of Actuaries" (SOA) first professional examination. Topics will be selected from the SOA syllabus which currently includes general probability theory, univariate and multivariate probability distributions (discrete and continuous), applications involving insurance and risk analysis, and supporting topics from Calculus.

Credits: 1
Term(s) Typically Offered: Offered as Needed

## MATH 282 - Actuarial Exam Preparation II

The purpose of this course is to prepare students for The Society of Actuaries" (SOA) second professional examination. Topics will be selected from the SOA syllabus which currently includes time value of money, yield rates, methods of loan repayment, annuities, asset/liability management, immunization, duration, convexity, bonds, stocks, mutual funds, capital budgeting, short sales, spot and forward rates, options, derivatives, futures, and arbitrage.

Prerequisite: MATH $280^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered as Needed

## MATH 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MATH 295-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
MATH 298 - Selected Topics
A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MATH 301 - Differential Equations I

First and second order differential equations, existence and uniqueness theorems, Laplace transforms, systems of linear ordinary differential equations.
Prerequisite: MATH $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 302 - Differential Equations II

A continuation of MATH 301. Series solutions of ordinary differential equations, non-linear systems and stability, partial differential equations.

Prerequisite: MATH 301 ${ }^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 304-Geometric Structures

Finite and infinite axiomatic systems, including Euclidean and projective geometrics.

Prerequisite: MATH $235^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## MATH 309 - Linear Algebra

Matrices and systems of linear equations, determinants, vector spaces, linear transformations, linear dependence, eigenvalues and eigenvectors.

Prerequisite: MATH $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 310 - Elementary Mathematics II

This course is designed for future K-8 teachers to continue to explore number systems (including definitions, operations, and properties of integers, rational and real numbers), descriptive statistics, basic probability, and measurement and related geometry. Emphasis is on conceptual understanding in addition to procedural skill.

Prerequisite: MATH $210^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Early Childhood Ed (PK-4), Early Childhood Educ-Int'I Ed, School Wellness Education, HealthPhysical Educ Teaching, Health and Physical Education, Early Child/ Spec Ed(PK-4)PK-8), Sec Education-English(7-12), Sec Education-French (K-12), Mid Level-Engl\&Lang Arts (4-8), Mid Level-Mathematics (4-8), Mid Level-Social Studies (4-8), Middle Level-Science (4-8), Sec Ed-Social Stud-Hist (7-12), Secondary Educ-Spanish (K-12), Special Education (PK-12), Music Education (K-12), Music Educ-Voice (K-12), Music EducSaxophone (K-12), Music Educ-Instrumental (K-12), Music Educ-Piano (K-12), Elementary School Mathematics, Middle School Mathematics or Art With Certification (K-12).

MATH 311 - Deterministic Models of Operations Research Topics include deterministic methods in operations research. Linear programming, duality, integer programming, dynamic programming, nonlinear programming, inventory theory, transportation and assignment and network theory.

Prerequisites: MATH $231^{\text {C }}$ or MATH $240^{\text {C }}$ or (MATH $122^{\text {C }}$ and MATH $230^{\text {C }}$ )
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

MATH 312 - Stochastic Models of Operations Research
Decision making under uncertainty. Probability, Markov Chains, Poisson processes, Survival Analysis, Queueing Systems, Random Walk, Branching.

Prerequisites: MATH $231^{\text {C }}$ or MATH $240^{\text {C }}$ or (MATH $122^{\text {C }}$ and MATH $230^{\text {C }}$ )
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 313 - Introductory Analysis I

This course begins the rigorous mathematical study of the real numbers. Topics include cardinality of sets; sequences of real numbers; completeness of the real numbers; topology of the real line including open sets, closed sets, and compact sets; and continuous, real-valued functions. Students will be expected to communicate using mathematical proofs throughout the course.

Prerequisites: MATH $2311^{\text {C }}$ and MATH $235^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 314 - Introductory Analysis II

This course continues the rigorous mathematical treatment of the real numbers that begins in MATH 313. The concepts of differentiation and Riemann integration of real-valued functions on the real line from calculus are explored and made rigorous. Additionally, series of functions are explored, including convergence (pointwise and uniform) and Taylor series. Students will be expected to communicate using mathematical proofs throughout the course.

Prerequisite: MATH $313{ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 315 - Numerical Mathematics

The mathematics of computation and approximation, interpolation, calculating the roots of equations, curve fitting linear systems, numerical differentiation and integration and error analysis.

Prerequisites: MATH $240^{\text {D }}$ or MATH $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## MATH 316 - Advanced Methods of Operations Research

Topics include Brownian motion, stationary processes, weak convergence of stochastic processes, regenerative phenomena, random walks, simulations.

Prerequisite: MATH $312^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 317 - Complex Variables

Complex numbers, analytic functions, complex integration, convergence of sequences and series, and applications.

Prerequisite: MATH $231^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 320 - Theory of Numbers

A study of the properties of natural numbers and number theoretic functions.

Prerequisite: MATH $235^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 325 - Abstract Algebra I

An introduction to groups. Topics include integers mod n, cyclic groups, permutation groups, normal subgroups, isomorphisms, finite Abelian groups.

Prerequisite: MATH $235^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 326 - Abstract Algebra II

An introduction to rings. Topics include integral domains, fields, polynomial rings.

Prerequisite: MATH $325^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 331 - Mathematical Methods of Physics

Applications in physical science and engineering of the following: vector analysis, complex variables, Fourier and Laplace transforms, linear algebra, and some boundary value problems. Cross-linked as PHYS 331. This course may be counted as a physics course or as a mathematics course, but not both.

Prerequisites: PHYS $211^{\mathrm{D}}$ and MATH $240^{\mathrm{D}}$ and MATH $231^{* D}$ (may be taken concurrently).
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 335 - Mathematical Modeling

A general introduction to mathematical modeling involving optimization, dynamic and probabilistic models. Specific topics selected from dimensional analysis, optimization techniques, continuous and discrete modeling, stability analysis, linearization, eigenvalue methods, qualitative analysis, Markov chains, regression models, simulation techniques, and others as time permits.

Prerequisite: MATH $231^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 403 - Elementary Topology

Topological properties of the real line.
Prerequisites: MATH $309^{\mathrm{D}}$ and MATH $313^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 406 - Intermediate Analysis

Selected topics.
Prerequisite: MATH $314^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 411 - Partial Differential Equations

This course in partial differential equations has wide-ranging applications in a variety of fields such as engineering and physics. Topics include first order equations and the method of characteristics; an introduction to Fourier series; second order equations including the heat, wave, and Laplace equations; numerical methods for computing solutions; conservation laws.

Prerequisites: MATH $231^{\text {C }}$ and MATH $301^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 482 - Actuarial Mathematics

Interest rate models, including the Vasicek and Cox-Ingersoll-Ross bond price models, rational valuation of derivative securities, simulation and risk management techniques.

Prerequisites: MATH $231^{\text {D }}$ and MATH $280^{\text {D }}$ and (MATH $353^{\text {D }}$ or STAT $353^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 484 - Life Contingencies

An introduction to survival models, individual life insurance and life annuities including determining premiums and reserves using a stochastic approach. It will include multiple life theory, binomial models, geometric Brownian motion and simulation in option pricing. It will develop a theoretical basis of contingent payment models and the application of those models to insurance risk.

Prerequisites: MATH $231^{\mathrm{D}}$ and MATH $280^{\mathrm{D}}$ and MATH $353^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 490 - Independent Study

Supervised study in advanced area. Prerequisites: Two 300 -level mathematics courses, a 3.000 QPA in major, permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 491 - Mathematics Seminar

Designed to broaden the students' backgrounds by investigating topics in mathematics not usually taught in the regular curriculum. Students may elect to take course up to three times.
Prerequisite: MATH $235^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 1
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MATH 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Mechanical Engineering (MECH)

## MECH 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## MECH 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MECH 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## MECH 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MECH 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MECH 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## MECH 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
MECH 310 - Machines and Mechanisms
Analysis of motion and forces in linkages and mechanisms. Synthesis of plane mechanisms, analysis of cams, gears and gear trains. Fundamentals of vibrations in machines. Analysis techniques include graphical, analytical and computational methods.
Prerequisite: ENGR $240^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 4
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MECH 320 - Manufacturing Processes

Introduction to properties and uses of engineering materials. Introduction to mechanical testing methods, metrology, tolerances, testing and inspection; semi-finished product manufacturing; macro-processing (forming, casting, powder metallurgy, metal working, composite fabrication); joining; nontraditional manufacturing processes; and surface processing.

Prerequisites: ENGR $220^{\text {D }}$ and ENGR $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MECH 330 - Introduction to Mechatronics

Selection of mechanical and electronic components and integration of these components into complex systems. Hands-on laboratory and design experiments with components and measurement equipment used in the design of mechatronic products.

Prerequisite: ENGR $310^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 4
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MECH 340-Heat Transfer

One-, two-, three-dimensional steady state conduction: transient conduction; free and forced convection; radiation; heat exchangers; heat and mass transfer by analytical, numerical analogical and experimental methods; design of thermal systems.

Prerequisites: ENGR $320^{\text {D }}$ and MATH $301^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 4
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MECH 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MECH 395-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MECH 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MECH 410 - Machine Design

Application of fundamental engineering principles to the design of various elements found in machines. Elements include connections, shafts, keys, couplings, springs, gears, belts, chains, bearings, clutches, brakes, screws, etc.

Prerequisite: MECH $310^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 4
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MECH 411 - Mechanical Control Systems

Introduction to theory of feedback and control. Performance and stability of linear systems. Design of feedback control systems. Practical application and introduction to state-space methods.

Prerequisites: ENGR $310^{\mathrm{D}}$ and MECH $410^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MECH 412 - Finite Element Analysis

Modern analysis techniques used to investigate a variety of systems in engineering and science. Computational models of problems are developed using energy concepts, structural mechanics, and matrix operations. The methods used are implemented using a general finite element program and the accuracy of the results is evaluated. The learned theoretical approach is applied to common structural elements such as trusses, beams, frames, and plates.

Prerequisite: ENGR $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MECH 420 - Design and Manufacturing

Manufacturing methods and operations. The interaction between design and manufacturing stressed in terms of drawing specifications versus process capability and tolerances, including standards applications and 1 redesign for producibility

Prerequisite: MECH $320^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MECH 421 - Mechanical Vibrations

Introduction to mechanical vibrations: single and multi-degree of freedom systems, free and forced vibrations, impedance and modal analysis including applications.

Prerequisites: MECH $410^{\mathrm{D}}$ and ENGR $240^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## MECH 422 - Thermal System Design

Device design and system design of compressors, turbines, heat exchangers, piping systems, internal combustion engines, and other component equipment. Optimization including thermo-economic evaluation and energy analysis.

Prerequisite: MECH $340^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MECH 423 - Additive Manufacturing

Introduction to technologies and processes used to translate virtual solid model data into physical models for prototyping and end-use manufacturing applications. Discussion of design tools and design considerations for additively manufactured components.

Prerequisite: MECH $320^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MECH 430 - Mechatronics

Instrumentation and measurements emphasizing systems that combine electronics and mechanical components with modern controls and microprocessors. First and second order behavior, transducers and intermediate devices, measurement of rapidly changing engineering parameters, microcontrollers and actuators.

Prerequisite: MECH $330^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MECH 431 - Introduction to Robotics

Introduction to robots and their types. Homogeneous transformations. Kinematic equations and their solutions. Motion trajectories, statics, dynamics, and control of robots. Robot programming. Actuators, sensors and vision systems.

Prerequisites: ENGR $310^{\text {D }}$ and MECH $330^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## MECH 440 - HVAC Systems

The analysis and design of heating air conditioning systems. Topics include: psychometrics, comfort \& health, heating and cooling loads, solar radiation, air distribution systems and refrigeration.

Prerequisites: MECH $340^{\text {D }}$ and ENGR $301^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MECH 441 - Sustainable Energy

The technical, economic, environmental and physical resources constraints of energy sources are discussed in terms of both national and global development needs. The current states of both non-renewable and renewable technologies are presented in terms of their potential contribution to sustainable energy resources required for continued viable economic development

Prerequisite: ENGR $320^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MECH 460 - Capstone Design I

Capstone Design course is the culmination of the educational experience in Mechanical Engineering. The courses require students to draw upon all previous coursework and cultivate new skills in order to solve complex design problems associated with an assigned group project. This is the first course of a year-long design experience.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment limited to students with department of Physics and Engineering.

## MECH 461 - Capstone Design II Capstone Design II

Capstone Design course is the culmination of the educational experience in Mechanical Engineering. The courses require students to draw upon all previous coursework and cultivate new skills in order to solve complex design problems associated with an assigned group project. This is the second course of a year-long design experience.

Prerequisite: MECH 460 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Mechanical Engineering
Enrollment limited to students in the Coll of Health, Engineer \& Sci college.

## MECH 490 - Independent Study

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MECH 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MECH 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Military Science (Army ROTC) (MS)

## MS 100 - The American Military Experience

Establishes a framework of reference regarding military service, an understanding of the profession of arms and its impact on and place in American society. The course begins the Army's leadership development process. Includes a lab. ++

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Leadership Development, Transfer Thread Completion Course

## MS 102 - Principles of Leadership

This course continues the student's introduction to the military organization and begins to teach leadership techniques and principles using military situations as a point of reference. Various academic studies of civilian-based leadership theories and styles are examined and compared to military theories and styles. Includes a lab. ++

Credits: 3
Term(s) Typically Offered: Offered Spring Terms

## MS 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## MS 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MS 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## MS 198-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MS 201 - Basic Military Skills

Begins to teach basic military skills such as map reading, land navigation using a map and compass, first aid, weapons marksmanship, drill and small unit tactics. Includes a lab. ++

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
MS 202 - Intermediate Military Skills
Continues instruction in map reading, land navigation using a map and compass, first aid, weapons marksmanship, drill and small unit tactics. Begins to integrate all skills into leading small units in tactical situations. Includes a lab. ++

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
MS 209-Evolution of Modern Military Art
A survey of the development of all branches of the American military spanning the colonial period to present day, this course includes a brief introduction to the development of the western way of war from preHellenistic conflict through the Middle Ages in Europe. Technological innovation, evolution of tactical through strategic levels of warfare, and the symbiotic relationship between military development, national policy, and societal expectations will be examined.

Credits: 3
Term(s) Typically Offered: Offered as Needed
MS 250 - ROTC Basic Leadership Practicum
A five week experience of training and evaluation conducted in a tactical framework at Fort Knox, Kentucky. Students learn basic military skills which enable them to take advanced military science courses on campus.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## MS 280 - Leadership Seminar

This course involves individualized instruction, research and presentation on research in areas required to fill in a students knowledge base to be able to move into the ROTC advanced course. This course may be taken only once.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## MS 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MS 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## MS 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MS 301 - Fundamentals of Tactical Operations

Focuses on tactics at the squad level. Students learn the troop leading procedures and how to give both oral and written operations orders. Students continue to enhance their skills at land navigation and rifle marksmanship. Physical fitness conditioning is a mandatory part of the laboratory. Includes a lab. ++

Credits: 4
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MS 302 - Advanced Military Skills

Continues development of intermediate level cadet leader skills in preparation for attendance at the Leadership Development and Assessment Course at Ft. Lewis, Washington. The course is supplementary in scope and includes leadership, written and oral communications, operations and tactics, land navigation, weapons, and radio and wire communications subjects. A laboratory experience is required.++

Credits: 4
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

MS 350-ROTC Advanced Leadership Practicum
A five week experience of training and evaluation conducted in a tactical framework at Fort Lewis, Washington. Cadets demonstrate and learn advanced military skills. Cadets also demonstrate their leadership skills in a variety of leadership positions in tactical and non-tactical environments.

Prerequisites: MS $301^{\mathrm{D}}$ and MS $302^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MS 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MS 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MS 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MS 401 - Leadership Dimensions and Concepts

This course begins the transition from cadet to officer. Focus is on organization of the Army, command and staff functions, officer and noncommissioned officer evaluation system, military law and development of training. Students participate in a staff ride to a significant military battlefield. Includes a lab. ++

Credits: 4
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MS 402 - Officership and the Profession of Arms

This course continues the transition from cadet to officer. Students begin a critical analysis of the role of the officer and the noncommissioned officer, and their interaction, at the platoon, company and battalion level. Students are introduced to joint operations and conduct some critical analysis of national military policy. Includes a lab. ++

Credits: 4
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MS 450 - The Cadet Troop Leadership Internship

A three-week experience as a leader in a U.S. Army unit, under the close supervision of a U.S. Army lieutenant or captain. It gives the student the opportunity to lead real soldiers in a real U.S. Army unit. The intern will actually supervise the planning and execution of the unit's scheduled training.

Prerequisites: MS $301^{D}$ and MS $302^{D}$ and MS $350^{D}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MS 490 - Independent Study

In-depth reading and research in an area of particular interest to the student with the guidance of an individual faculty member. This course may be taken only once. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MS 495-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MS 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Modern Languages (MODL)

## MODL 105 - Introduction to Asian Civilizations

This course is an introductory, interdisciplinary course designed to give students a broad understanding of the geographic, historical and religious, cultural, artistic, social, political and economic forces that shape Asia. No prior knowledge is expected. This is a Liberal Studies, Global Community, Non-US course.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## MODL 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2

Enrollment limited to students with the ROCK STUDIES STUDENT attribute

MODL 151 - Self-Instructional Languages
Self-Instruction in basic language is open to serious students with previous language background. The course is designed to develop the speaking, listening comprehension of the student on a basic level. Course may be repeated in each language up to a maximum of three credits. Not applicable for modern language requirement or liberal studies. Students may choose from any world languages not available in the regular offerings.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## MODL 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MODL 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## MODL 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MODL 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MODL 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## MODL 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MODL 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MODL 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MODL 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MODL 490 - Independent Study

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings.Ã,Â Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MODL 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MODL 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Music (MUSI)

## MUSI 029-Clinical Integration Lab

This is a laboratory experience associated with Clinical Integration MUSI 229.

Corequisite(s): MUSI 229
Credits: 0
Term(s) Typically Offered: Offered Fall \& Spring Terms
MUSI 101 - Exploring Music
A survey course designed to develop the student perception and understanding of changing musical styles and practices in Western culture.

Credits: 3
Term(s) Typically Offered: Offered Every Term

## MUSI 102-Exploring World Music

A course designed to survey non-Western musical traditions and practices. Emphasis is given to the music of India, Russia, Japan, Africa, the Middle East, and the American Indian.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Creating Art, Political Arts, Transfer Thread Completion Course

## MUSI 104 - Exploring American Music

A survey course designed to develop student knowledge and understanding of music composed and performed in the United States between 1620 and the present.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Being
American, Creating Art, Political Arts, Transfer Thread Completion Course
MUSI 105 - Exploring Jazz
The stylistic development of jazz and its relevance to society.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## MUSI 106-Introduction to Jazz Performance

This course will introduce the high school music student to jazz pedagogy at the university level. Emphasis will be placed on performing skills, theory, improvisation, ear training and music technology. Course may be repeated up to four credits.

Credits: 1
Term(s) Typically Offered: Offered Summer Terms

## MUSI 107 - Fundamentals of Music

Understanding and using music notation and terminology.
Credits: 3
Term(s) Typically Offered: Offered Summer Terms

## MUSI 108 - Flute Camp

The SRU "Flute Camp" will give high school flutists an opportunity to be on the SRU campus during the Summer Arts Academy for an intensive 2 week program involving all aspects of flute performance. Follow up involvement of the high school students during the fall semester will consist of their attendance at flute related university events and critical writing about the concerts/rehearsals/master classes they observed during the fall component.

Credits: 1
Term(s) Typically Offered: Offered Summer Terms

## MUSI 109-Jazz Combo

Students will meet weekly with the appropriate faculty member to work on jazz performance in the small group (combo) setting. Study of phrasing, articulation, jazz theory, improvisation, and other jazz performance practices will be addressed. Students will be auditioned at the beginning of the semester for placement. At least one public performance will be given per semester. One hour of rehearsal time per week. One credit for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

## Credits: 1

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 111 - Introduction to Music Education

This course is designed to introduce the student to the field of music education. This course will be an introduction to planning and preparation for teaching music, including creating an effective classroom environment for teaching music, instructional delivery in music, historical background relevant to music education, copyright laws in the music classroom, instructional planning, diversity, and advocacy. Students will complete their Field Experience Level 1: Observation hours as a requirement of this course.

## Credits: 2

Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Education, Transfer Thread Completion Course

## MUSI 113-Saxophone Quartet

Students will meet weekly with the appropriate faculty member to work on literature selected for their performance ability level. Study of phrasing, articulation, balance, blend, intonation, and other performance practices will be addressed. Students will be auditioned at the beginning of the semester for placement. At least one public performance will be given per semester. Two hours per week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 114 - Symphonic Wind Ensemble

Symphonic Wind Ensemble: A chamber ensemble composed of select musicians chosen by audition, performing contemporary literature as well as transcriptions for winds and percussion. Four and a half hours of week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread
Completion Course

## MUSI 115 - Concert Choir

Auditioned mixed chorus of 50-70 singers that studies and performs a variety of music from Renaissance to 21 st century, classical to contemporary, a cappella and music accompanied by piano, chamber groups, and symphonic ensembles. Three hours per week rehearsal time. Multiple concerts are presented both on and off campus and on periodic tours. One to three credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. Entrance is by successful audition, held the first week of classes every semester; contact the instructor for information. The ensemble is also available without credit.

Credits: 1-3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread
Completion Course

## MUSI 116 - Women's Choir

An ensemble of 30-40 women who perform choral music especially composed for female voices. This ensemble performs traditional and modern repertoire, with and without accompaniment. Concerts are presented on campus and on tours. Two and one-half hours per week rehearsal time. Multiple concerts are presented both on and off campus and on periodic tours. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. No audition is required. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 117-Chamber Singers

An elite chamber choir of 16-24 outstanding singers who perform challenging repertoire with a greater emphasis on a cappella music. Members of this group are expected to display initiative to prepare music to the highest possible level of their ability. Two and one-half hours per week rehearsal time. One or two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. Entrance is by successful audition, held the first week of classes every semester; contact the instructor for information. The ensemble is also available without credit.

Corequisite(s): MUSI 115
Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 118 - Marching Pride

The Marching Pride performs during the half time at football games, both home and away, and for other special events. Much of its music is specially arranged. Open to all students. Six hours a week rehearsal during the football season. One to six credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 6 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-6
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Art \& Society, Creating Art, Education, Transfer Thread Completion Course

## MUSI 119 - Concert Band

The Concert Band members are carefully selected to provide a balanced instrumentation of the best players. Music written for concert band is the main repertoire. Concerts on campus. Four hours a week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 5 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 120- Jazz Ensemble

The SRU Jazz Ensemble performs jazz literature from all eras of jazz history including big band, bop, hard bop, fusion and contemporary. This ensemble often performs with guest artists of national and international stature, both on and off campus. Membership in this ensemble requires an audition. Three hours and forty-five minutes of rehearsal per week. One to three credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

## Credits: 1-3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 121 - Orchestra

The orchestra is a string ensemble, with winds and percussion added when needed, which performs music from the orchestral repertoire. Admission by audition. Four hours a week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 122 - Chamber String Ensemble

The Chamber String Ensemble is a small ensemble selected for the study and performance of chamber music written for strings. Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 123-Brass Ensemble

The university's Brass Ensemble is a select ensemble of brass (and percussion) players who study and perform music from all historical periods. Both large brass choir works and small chamber brass works are performed. The ensemble performs on and off campus. Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

## Credits: 1-2

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 124 - Woodwind Ensemble

The Woodwind Ensemble is a small select ensemble of woodwind players who study and perform music for woodwinds from all historical periods. Three hours a week rehearsal time. One credit for every semester of satisfactory participation is granted for this music performance group, with a maximum allowance of ten credits in any one music organization. Additional credits are possible with a waiver from the departmental chairperson. The ensemble is also available without credit.

Credits: 1
Thematic Thread(s): Transfer Thread Completion Course

## MUSI 125-Percussion Ensemble

This small select ensemble of percussionists studies and performs music composed and transcribed for both percussion and mallet ensembles.
Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread
Completion Course

## MUSI 126-Flute Choir

The SRU Flute Choir is made up of a select group of flutists who will rehearse and perform a variety of music written for flute ensemble. Audition required. Two and a half hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 127-Orientation to Music Therapy

Orientation to the field of music therapy through lectures, readings, and viewing music therapy sessions. The course includes an overview of music therapy history, principles, and foundations through a survey of music therapy literature and clinical applications.

Credits: 2
Term(s) Typically Offered: Offered Fall Terms

## MUSI 128 - Applied Alexander Technique

This course is an introduction to the Alexander Technique in which the students will examine their habitual movement patterns in order to encourage positive energy usage within the body. This technique heightens kinesthetic sensitivity, offering performers a control that is fluid and lively, thus lessening chances of performance injury. The principles of this technique are based on an understanding of human anatomy, which promotes ease, and freedom of movement, balance, flexibility, and coordination. Course may be repeated up to two credits.

## Credits: 1

## MUSI 129-Guitar, Ukulele, \& Bass Methods

A music education course designed to prepare music education majors to teach guitar, ukulele, string bass, and electric bass in elementary and secondary schools. It will also prepare students with the functional skills to use the guitar and ukulele as accompanying instruments.

## Credits: 1-2

Term(s) Typically Offered: Offered Fall Terms
Enrollment is limited to students with a program in Music Education (K-12).

## MUSI 131 - Class Piano I

For beginners with no previous keyboard experience. Fundamentals of note reading, beginning piano repertoire, melody harmonization and improvisation. Of particular value to the student desiring to gain a working knowledge of the piano either as a classroom tool or for personal use. Music majors only.

Credits: 1
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with department of Music.

## MUSI 132 - Class Piano II

Continued development of skills begun in Class Piano I (MUSI 131).
Music majors only.
Prerequisite: MUSI $131^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Spring Terms

## MUSI 133-Class Voice I

Designed for the purpose of studying basic singing technique and thereby producing a good vocal tone; valuable to the student interested in improving his/her vocal skill. Music majors only.

Credits: 1
Term(s) Typically Offered: Offered Fall Terms

## MUSI 134 - Voice Methods

The pedagogy of singing is emphasized via individual teaching demonstrations thereby enabling students to improve their ability to communicate basic vocal principles to other students. Music majors only.

Prerequisite: MUSI $133^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Spring Terms
MUSI 137 - Functional Guitar for Music Therapy I
A study of the fundamental concepts needed to play and teach beginning guitar. Students must provide their own instruments. Music majors only.

Credits: 1
Term(s) Typically Offered: Offered Fall Terms
MUSI 138 - Functional Guitar for Music Therapy II
Continued development of skills begun in Class Guitar I (MUSI 137).
Music majors only.
Prerequisite: MUSI $137^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Spring Terms

MUSI 139 - University Seminar
University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## MUSI 140-Low Brass Methods

A study of the fundamental concepts and skills needed to play and teach trombone, baritone horn, euphonium, and tuba to homogeneous and heterogeneous instrument groups in pre-K-12 instrumental music education setting. This includes the integration and application of national and state standards for music education.

Credits: 2
Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students in the College of Liberal Arts college. Enrollment limited to students with department of Music.

## MUSI 151 - Music Theory and Analysis I

The student will study the grammar and literature of music through composition, analysis, listening, and performance. Three class meetings each week.

Credits: 2
Term(s) Typically Offered: Offered Fall Terms

## MUSI 154 - Musicianship Skills I

Students will develop aural and rhythmic skills through basic rhythm reading, sight- singing, intervals and pattern recognition, simple and compound meters, and basic harmonic progressions.

Credits: 1
Term(s) Typically Offered: Offered Fall Terms
MUSI 165 - Applied Performance Voice
Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 165, 265, 365 may each be taken two times for a total of 18 credits; MUSI 465 may be taken four times for a total of 12 credits.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 166 - Applied Performance Piano

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 166, 266, 366 may each be taken two times for a total of 18 credits; MUSI 466 may be taken four times for a total of 12 credits.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 167 - Applied Performance Strings

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 167, 267, 367 may each be taken two times for a total of 18 credits; MUSI 467 may be taken four times for a total of 12 credits.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 168 - Applied Performance Woodwind

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 168, 268, 368 may be taken two times for a total of 18 credits; MUSI 468 may be taken four times for a total of 12 credits.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.
MUSI 169 - Applied Performance Brass
Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 169, 269, 369 may each be taken two times for a total of 18 credits; MUSI 469 may be taken four times for a total of 12 credits.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 170-Applied Performance Percussion

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 170, 270 and 370 may each be taken two times for a total of 18 credits; MUSI 470 may be taken four times for a total of 12 credits.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 179-Applied Music

With the approval of the applied music teacher, lessons are available in piano, voice, and any of the standard string, brass, woodwind or percussion instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 181-Applied Voice

With the approval of the applied music teacher, lessons are available in voice. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

## Credits: 1

Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 182 - Applied Strings

With the approval of the applied music teacher, lessons are available in standard string instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

## Credits: 1

Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 183-Applied Brass

With the approval of the applied music teacher, lessons are available in standard brass instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

## Credits: 1

Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 184 - Applied Woodwinds

With the approval of the applied music teacher, lessons are available in standard woodwind instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

## Credits: 1

Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 185 - Applied Percussion

With the approval of the applied music teacher, lessons are available in standard percussion instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

## Credits: 1

Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MUSI 192 - Tuba-Euphonium Ensemble

The SRU Tuba-Euphonium Ensemble is comprised of tuba and euphonium players who rehearse and perform a variety of music written for tuba-euphonium ensemble. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 193 - Jazz Lab Band

The SRU Jazz Lab Band is a rehearsal ensemble that performs one concert per academic semester. The group does require an audition which takes place in the first week of the Fall semester. If openings occur in the Spring semester, the director will hold an audition for the open seats only. The ensemble rehearses big band literature from every stylistic period in jazz history. The focus of the course is on developing sight-reading, jazz performance practice and techniques, stylistic interpretation, foundational ensemble techniques, jazz band rehearsal techniques, and exposure to the literature, history, and composers of jazz music. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

MUSI 194 - World Percussion Ensemble
The SRU World Percussion Ensemble rehearses and performs the percussion music of cultures outside of Western Europe and the United States, concentrating on, but not exclusive to, the Caribbean (Trinidad and Tobago, Cuba, The Dominican Republic, and Puerto Rico), Asia (Japan, India, and Korea), South America (Brazil), and West Africa. Students learn the instruments, techniques, some choreography (when appropriate), and musical styles in multiple genres for at least one public performance each academic semester. The ensemble rehearses and performs on authentic instruments (whenever possible) or modern, commercially available substitutes. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats a re possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## MUSI 196 - Winter Guard

The Slippery Rock University Winter Guard is the indoor color guard performing ensemble. In this performing ensemble, students will combine the use of flags, sabers, mock rifles, and other equipment, as well as dance and interpretive movement, in shows for public performance and competition. Held in the spring semester the group performs in competition as part of the indoor marching arts circuit as well as for campus and community events. The course may be repeated up to 5 times. Additional repeats are possible with a waiver from the department chairperson.

Credits: 1-2
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MUSI 199 - Fundamental Skills in Music Therapy

Designed to prepare music therapy majors in fundamental clinical skills in music therapy necessary for working with a variety of client populations. It includes identifying client needs, delineating goals and objectives, task analysis and treatment strategies (re-creative techniques) through the application of functional music skills. Group processes and leadership techniques appropriate for various clientele.

Prerequisites: MUSI $127^{\text {D }}$ and MUSI $137^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 2
Term(s) Typically Offered: Offered Spring Terms

## MUSI 201 - Studies in Children's Music

Listening, moving, playing instruments, singing and creating using repertoire suitable for children of various developmental levels.

## Credits: 3

## MUSI 203 - Musician's Health

This course is designed for music students, performing arts majors or any student who desires a deeper understanding of musicianship and performing artist wellness. An emphasis on healthy living for the performer including elimination of risk for injury will be discussed. The course will explore concepts such as ergonomics, good posture, and breathing and support. Students will learn about concepts such as effective practicing and the brain's perception of sound. Students will learn to identify and correct problems facing the performer when they arise.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms

## MUSI 204 - Art and Science of Performing

This course focuses on how to define, detect, and manage performance anxiety. Students will learn about the body's innate response to stress and pressure situations, and how to recognize maladaptive responses to pressure situations. Students will learn about conventional methods for treating performance anxiety as well as unconventional methods including self-analysis, meditation, guided imagery, and the Alexander technique. Pre-performance routines such as centering will be discussed. Students will learn about tools such as engaged practicing that will help to produce better performances. The concept of flow state will also be discussed.

Credits: 1
Term(s) Typically Offered: Offered Fall Terms

## MUSI 205 - Music in Recreation

A practical study of the ways and means of planning effective music programs for leisure and recreation and developing the competencies needed by a music leader in recreation.

Credits: 3

## MUSI 206 - Fundamentals of Conducting

In this course, students will learn the foundational skills necessary to conduct both instrumental and vocal ensembles. As an introductory course, it will serve as a catalyst for developing the lifelong conductorpractitioner regardless of area emphasis - vocal or instrumental. Fundamental skills that will be developed include, but are not limited to: conducting patterns in stationary focal point conducting, expressive gesture, baton technique and basic transpositions.

Prerequisites: MUSI $253^{\text {D }}$ and MUSI $256^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with department of Music.

## MUSI 208-Clarinet and Saxophone Methods

A study of the fundamental concepts and skills needed to play and teach clarinet and saxophone to homogeneous and heterogeneous instrument groups in pre-K-12 instrumental music education setting. This includes the integration and application of national and state standards for music education.

Credits: 2
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students in the College of Liberal Arts college. Enrollment limited to students with department of Music.

## MUSI 209-Jazz Combo

Students will meet weekly with the appropriate faculty member to work on jazz performance in the small group (combo) setting. Study of phrasing, articulation, jazz theory, improvisation, and other jazz performance practices will be addressed. Students will be auditioned at the beginning of the semester for placement. At least one public performance will be given per semester. One credit for every semester of satisfactory participation is granted for this music performance group, with a maximum allowance of ten credits in any one music organization. Additional credits are possible with a waiver from the departmental chairperson. The ensemble is also available without credit.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread
Completion Course

## MUSI 212 - Fundamentals of Conducting Lab

This course is the lab component to MUSI 206: Fundamentals of Conducting and will include application of conducting skills through time on the podium.
Prerequisites: MUSI $253^{\text {C }}$ and MUSI $256^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 1
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students in the College of Liberal Arts college. Enrollment limited to students with department of Music.

## MUSI 213-Saxophone Quartet

Students will meet weekly with the appropriate faculty member to work on literature selected for their performance ability level. Study of phrasing, articulation, balance, blend, intonation, and other performance practices will be addressed. Students will be auditioned at the beginning of the semester for placement. At least one public performance will be given per semester. Two hours per week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 214-Symphonic Wind Ensemble

Symphonic Wind Ensemble: A chamber ensemble composed of select musicians chosen by audition, performing contemporary literature as well as transcriptions for winds and percussion. Four and a half hours of week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 215 - Concert Choir

Auditioned mixed chorus of 50-70 singers that studies and performs a variety of music from Renaissance to 21 st century, classical to contemporary, a cappella and music accompanied by piano, chamber groups, and symphonic ensembles. Three hours per week rehearsal time. Multiple concerts are presented both on and off campus and on periodic tours. One to three credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. Entrance is by successful audition, held the first week of classes every semester; contact the instructor for information. The ensemble is also available without credit.

## Credits: 1-3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread
Completion Course

## MUSI 216 - Women's Choir

An ensemble of 30-40 women who perform choral music especially composed for female voices. This ensemble performs traditional and modern repertoire, with and without accompaniment. Concerts are presented on campus and on tours. Two and one-half hours per week rehearsal time. Multiple concerts are presented both on and off campus and on periodic tours. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. No audition is required. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 217 - Chamber Singers

An elite chamber choir of 16-24 outstanding singers who perform challenging repertoire with a greater emphasis on a cappella music. Members of this group are expected to display initiative to prepare music to the highest possible level of their ability. Two and one-half hours per week rehearsal time. One or two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. Entrance is by successful audition, held the first week of classes every semester; contact the instructor for information. The ensemble is also available without credit.

Corequisite(s): MUSI 215
Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 218 - Marching Pride

The Marching Pride performs during the half time at football games, both home and away, and for other special events. Much of its music is specially arranged. Open to all students. Six hours a week rehearsal during the football season. One to six credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 6 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-6
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Art \& Society, Creating Art, Education, Transfer Thread Completion Course

## MUSI 219-Concert Band

The Concert Band members are carefully selected to provide a balanced instrumentation of the best players. Music written for concert band is the main repertoire. Concerts on campus. Four hours a week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 5 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

## Credits: 1-4

Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread
Completion Course

## MUSI 220 - Jazz Ensemble

The SRU Jazz Ensemble performs jazz literature from all eras of jazz history including big band, bop, hard bop, fusion and contemporary. This ensemble often performs with guest artists of national and international stature, both on and off campus. Membership in this ensemble requires an audition. Three hours and forty-five minutes of rehearsal per week. One to three credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 221 - Orchestra

The orchestra is a string ensemble, with winds and percussion added when needed, which performs music from the orchestral repertoire. Admission by audition. Four hours a week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 222 - Chamber String Ensemble

The Chamber String Ensemble is a small ensemble selected for the study and performance of chamber music written for strings. Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 223-Brass Ensemble

The university's Brass Ensemble is a select ensemble of brass (and percussion) players who study and perform music from all historical periods. Both large brass choir works and small chamber brass works are performed. The ensemble performs on and off campus. Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread
Completion Course

## MUSI 224 - Woodwind Ensemble

The Woodwind Ensemble is a small select ensemble of woodwind players who study and perform music for woodwinds from all historical periods. Three hours a week rehearsal time. One credit for every semester of satisfactory participation is granted for this music performance group, with a maximum allowance of ten credits in any one music organization. Additional credits are possible with a waiver from the departmental chairperson. The ensemble is also available without credit.

Credits: 1
Thematic Thread(s): Transfer Thread Completion Course
MUSI 225 - Percussion Ensemble
This small select ensemble of percussionists studies and performs music composed and transcribed for both percussion and mallet ensembles.
Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 226 - Flute Choir

The SRU Flute Choir is made up of a select group of flutists who will rehearse and perform a variety of music written for flute ensemble. Audition required. Two and a half hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

## Credits: 1-2

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 228 - Therapeutic Musical Strategies

Designed to further prepare music majors in various therapeutic musical strategies (receptive and compositional techniques) through the application of functional music skills, group processes and leadership techniques appropriate for various clientele.

Prerequisites: MUSI 127 (may be taken concurrently) ${ }^{\mathrm{D}}$ and MUSI $137^{* D}$ and MUSI $138^{* \mathrm{D}}$ and MUSI $199^{* \mathrm{D}}$ (may be taken concurrently).
${ }^{D}$ Requires minimum grade of $D$.
Credits: 2
Term(s) Typically Offered: Offered Fall Terms

## MUSI 229-Clinical Integration

A supervised clinical experience allowing the music therapy student practical experience in a variety of community health care agencies and educational settings.
Prerequisites: MUSI $127^{\text {D }}$ and MUSI $137^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Fall Terms

## MUSI 230 - Clinical Integration

A supervised clinical experience allowing the music therapy student practical experience in a variety of community health care agencies and educational settings.
Prerequisites: MUSI $228^{\text {D }}$ and MUSI $229^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 1

Term(s) Typically Offered: Offered Spring Terms

## MUSI 233-Chamber Music Performance

A chamber music ensemble (of various instrumental and/or vocal combinations) which studies and performs music from many style periods. Two hours a week rehearsal time. Course may be repeated up to ten credits. Permission of the instructor.

## Credits: 1-2

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread
Completion Course

## MUSI 234 - Class Piano III

Continued development of skills acquired in Class Piano II to prepare music majors for piano proficiency exam, including sight-reading, transposition, playing by ear, technique and repertoire. Music majors only.
Prerequisite: MUSI $132^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Fall Terms

## MUSI 235 - Class Piano IV

Continued development of skills acquired in Class Piano III to prepare music majors for piano proficiency exam, including sight-reading, transposition, playing by ear, technique and repertoire. Music majors only.
Prerequisite: MUSI $234^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Spring Terms

## MUSI 236 - Music Therapy Assessment, Measurement and Evaluation

This course will present professional standards of music therapy practice including assessment, documentation, and evaluation; as well as techniques and application of behavioral observation and measurement in music therapy.

Prerequisites: MUSI $127^{D}$ and MUSI $199^{D}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 2
Term(s) Typically Offered: Offered Spring Terms

## MUSI 237-Opera Performance

Performance of scenes, arias, or full operas, taking into consideration the interest and skill of each student. Four hours of rehearsal per week; more rehearsal as needed in weeks leading to performance. One to four credits for every semester of satisfactory participation is granted for this music performance group. Additional repeats are possible with a waiver from the department chairperson. Each course number may be repeated up to five times.

## Credits: 1-4

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread
Completion Course

## MUSI 245 - Brass Methods

A study of the fundamental concepts needed to play and teach beginning brass instruments (French horn, trumpet, trombone, baritone horn, tuba) both as soloists and in ensemble.

Credits: 1
Term(s) Typically Offered: Offered Spring Terms

## MUSI 247 - Percussion Methods

A study of the fundamental concepts needed to play and teach beginning percussion instruments (pitched and non-pitched).

## Credits: 1-2

Term(s) Typically Offered: Offered Fall Terms

## MUSI 253 - Music Theory and Analysis II

This course is a continuation of Music Theory and Analysis I. The student will study musical literature written between 600-1750 through composition, analysis, aural discrimination, diatonic harmony, modal counterpoint, and performance. Three class meetings each week.
Prerequisite: MUSI $151^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 2
Term(s) Typically Offered: Offered Spring Terms

## MUSI 254 - Music Theory and Analysis III

This course is a continuation of the Music Theory and Analysis I and II semesters in which the student will study the musical literature of the years 1750-1900 through the means of chromatic harmony, analysis, score reading, aural discrimination, composition and performance. Three class meetings each week.

Prerequisite: MUSI $253{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 2
Term(s) Typically Offered: Offered Fall Terms
MUSI 255 - Music Theory and Analysis IV
This course is a continuation of the Music Theory and Analysis I, II and III sequence. Musical literature of the 20th century will be approached through analysis, listening, score reading, composition and performance. Three class meetings per week.

Prerequisite: MUSI $254^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 2
Term(s) Typically Offered: Offered Spring Terms

## MUSI 256-Musicianship Skills II

Students will build on the aural and rhythmic exercises established in Musicianship I through higher level rhythm reading, sight- singing, intervals and pattern recognition, simple, compound, and mixed meters, and harmonic progressions.
Prerequisites: MUSI $154^{\text {C }}$ and MUSI $253^{* C}$ (may be taken concurrently).
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Term(s) Typically Offered: Offered Spring Terms

MUSI 257 - Musicianship Skills III
Students will build on the skills established in Musicianship II by working on advanced aural and rhythmic exercises through rhythm reading, sightsinging, intervals and pattern recognition, simple, compound, and mixed meters, and harmonic progressions.

Prerequisites: MUSI $256^{\mathrm{C}}$ and MUSI $254^{* C}$ (may be taken concurrently).
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 1
Term(s) Typically Offered: Offered Fall Terms

## MUSI 258 - Musicianship Skills IV

Students will build on the skills established in Musicianship III by working on more complex and advanced aural and rhythmic exercises through rhythm reading, sight- singing, intervals and pattern recognition, simple, compound, and mixed meters, and harmonic progressions.

Prerequisites: MUSI $257^{\text {C }}$ and MUSI $255^{* C}$ (may be taken concurrently).
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Term(s) Typically Offered: Offered Spring Terms

## MUSI 265 - Applied Performance Voice

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI $165,265,365$ may each be taken two times for a total of 18 credits; MUSI 465 may be taken four times for a total of 12 credits.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 266-Applied Performance Piano

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 166, 266, 366 may each be taken two times for a total of 18 credits; MUSI 466 may be taken four times for a total of 12 credits.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 267-Applied Performance Strings

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 167, 267, 367 may each be taken two times for a total of 18 credits; MUSI 467 may be taken four times for a total of 12 credits.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 268 - Applied Performance

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 168, 268, 368 may be taken two times for a total of 18 credits; MUSI 468 may be taken four times for a total of 12 credits.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 269-Applied Performance Brass

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 169, 269, 369 may each be taken two times for a total of 18 credits; MUSI 469 may be taken four times for a total of 12 credits.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 270 - Applied Performance Percussion

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits.
Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 170, 270 and 370 may each be taken two times for a total of 18 credits; MUSI 470 may be taken four times for a total of 12 credits.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 275 - Keyboard Music

This course will examine the music literature for western keyboard instruments using live and recorded performances.

## Credits: 3

## MUSI 276 - Songs \& Singers

This course will examine music literature for voice. Areas of consideration include solo songs, opera, oratorios, and vocal chamber music.

Credits: 3
MUSI 278 - Literature of the American Musical Theater
A study of the changing styles in the musical theater from 1860 to current Broadway musicals, rock operas, and operetta. Study conducted through the use of recordings, scores and participation.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## MUSI 279-Applied Piano

With the approval of the applied music teacher, lessons are available in piano. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 281 - Applied Voice

With the approval of the applied music teacher, lessons are available in standard voice. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 282 - Applied Strings

With the approval of the applied music teacher, lessons are available in string instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

## Credits: 1

Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 283-Applied Brass

With the approval of the applied music teacher, lessons are available in standard brass instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

## Credits: 1

Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.
MUSI 284 - Applied Woodwinds
With the approval of the applied music teacher, lessons are available in standard woodwind instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

## Credits: 1

Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 285 - Applied Percussion

With the approval of the applied music teacher, lessons are available in standard percussion instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

## Credits: 1

Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Music.

## MUSI 288 - Music Education for Diverse Learners

This course is an introduction to historical and instructional foundations of using music with diverse learners. Major topics and developments in the field of special education, important terminology, and curricular issues are explored. Students will learn about the characteristics of students with specific needs, the educational effects of these needs, appropriate adaptations, as well as music education approaches used with diverse learners.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Education, Transfer Thread Completion Course

## MUSI 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MUSI 291 - Field Experience in Music 2: Pre-K Experience

In this course, students will complete Field Experience Level 2:
Exploration by observing and assisting in a pre-K music class taught by a certified music educator with teaching experience with pre-K students.

Prerequisite: MUSI $111^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment is limited to students with a program in Music Education (K-12), Music for Education or Music for Ed: Early Childhood. Enrollment limited to students in the College of Liberal Arts college.

## MUSI 292 - Tuba-Euphonium Ensemble

The SRU Tuba-Euphonium Ensemble is comprised of tuba and euphonium players who rehearse and perform a variety of music written for tuba-euphonium ensemble. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 293 - Jazz Lab Band

The SRU Jazz Lab Band is a rehearsal ensemble that performs one concert per academic semester. The group does require an audition which takes place in the first week of the Fall semester. If openings occur in the Spring semester, the director will hold an audition for the open seats only. The ensemble rehearses big band literature from every stylistic period in jazz history. The focus of the course is on developing sight-reading, jazz performance practice and techniques, stylistic interpretation, foundational ensemble techniques, jazz band rehearsal techniques, and exposure to the literature, history, and composers of jazz music. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art

## MUSI 294 - World Percussion Ensemble

The SRU World Percussion Ensemble rehearses and performs the percussion music of cultures outside of Western Europe and the United States, concentrating on, but not exclusive to, the Caribbean (Trinidad and Tobago, Cuba, The Dominican Republic, and Puerto Rico), Asia (Japan, India, and Korea), South America (Brazil), and West Africa. Students learn the instruments, techniques, some choreography (when appropriate), and musical styles in multiple genres for at least one public performance each academic semester. The ensemble rehearses and performs on authentic instruments (whenever possible) or modern, commercially available substitutes. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats a re possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## MUSI 296 - Winter Guard

The Slippery Rock University Winter Guard is the indoor color guard performing ensemble. In this performing ensemble, students will combine the use of flags, sabers, mock rifles, and other equipment, as well as dance and interpretive movement, in shows for public performance and competition. Held in the spring semester the group performs in competition as part of the indoor marching arts circuit as well as for campus and community events. The course may be repeated up to 5 times. Additional repeats are possible with a waiver from the department chairperson.

Credits: 1-2
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course

## MUSI 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## MUSI 299 - Diction for Singers

In this study of language diction for singers, students will learn the International Phonetic Alphabet and apply it to the singing of English and Italian songs. The course is open to all voice majors.

Prerequisites: MUSI $133^{\text {D }}$ or MUSI $181^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-2
Term(s) Typically Offered: Offered Fall Terms Even

## MUSI 300 - Marching Band Techniques

Planning and preparation of half time shows using computer assisted design software and the "corps style" approach. Leadership skills, marching band pedagogy, and hand charting techniques will also be studied.

Prerequisite: MUSI 118 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 2
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the MUSIC UPPER DIV REVIEW STATUS attribute

## MUSI 301 - Women and Music

Explores the musical contributions of women, a group often excluded from studies of music history, from the Middle Ages to the present. Emphasis will be placed on the changing roles of and attitudes towards women as composers, performers, teachers, writers, patrons, and instrument-builders. Focus will be on the music itself, as well as reception history and historical and sociological context. There will also be discussion on the role of gender in shaping musical ideology and experiences.

Prerequisite: MUSI $101^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Thematic Thread(s): Political Arts, Revolutions, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 304-Orchestral String Methods

A study of the fundamental concepts needed to play and teach beginning orchestral string instruments. No previous experience required. Instruments are provided by the university.

Credits: 2
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 309-Jazz Combo

Students will meet weekly with the appropriate faculty member to work on jazz performance in the small group (combo) setting. Study of phrasing, articulation, jazz theory, improvisation, and other jazz performance practices will be addressed. Students will be auditioned at the beginning of the semester for placement. At least one public performance will be given per semester. One hour of rehearsal time per week. One credit for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread
Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 312 - Music Therapy for Children

Application of music therapy techniques and materials in all areas of mental health and special education.

Prerequisites: MUSI $236^{\mathrm{D}}$ and (SPED $121^{\mathrm{D}}$ or SPED $122^{\mathrm{D}}$ )
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 313 - Saxophone Quartet

Students will meet weekly with the appropriate faculty member to work on literature selected for their performance ability level. Study of phrasing, articulation, balance, blend, intonation, and other performance practices will be addressed. Students will be auditioned at the beginning of the semester for placement. At least one public performance will be given per semester. Two hours per week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 314 - Symphonic Wind Ensemble

Symphonic Wind Ensemble: A chamber ensemble composed of select musicians chosen by audition, performing contemporary literature as well as transcriptions for winds and percussion. Four and a half hours of week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 315 - Concert Choir

Auditioned mixed chorus of 50-70 singers that studies and performs a variety of music from Renaissance to 21 st century, classical to contemporary, a cappella and music accompanied by piano, chamber groups, and symphonic ensembles. Three hours per week rehearsal time. Multiple concerts are presented both on and off campus and on periodic tours. One to three credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. Entrance is by successful audition, held the first week of classes every semester; contact the instructor for information. The ensemble is also available without credit.

Credits: 1-3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 316 - Women's Choir

An ensemble of 30-40 women who perform choral music especially composed for female voices. This ensemble performs traditional and modern repertoire, with and without accompaniment. Concerts are presented on campus and on tours. Two and one-half hours per week rehearsal time. Multiple concerts are presented both on and off campus and on periodic tours. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. No audition is required. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 317 - Chamber Singers

An elite chamber choir of 16-24 outstanding singers who perform challenging repertoire with a greater emphasis on a cappella music. Members of this group are expected to display initiative to prepare music to the highest possible level of their ability. Two and one-half hours per week rehearsal time. One or two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. Entrance is by successful audition, held the first week of classes every semester; contact the instructor for information. The ensemble is also available without credit.

Corequisite(s): MUSI 315
Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread

## Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 318 - Marching Pride

The Marching Pride performs during the half time at football games, both home and away, and for other special events. Much of its music is specially arranged. Open to all students. Six hours a week rehearsal during the football season. One to six credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 6 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-6
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Art \& Society, Creating Art, Education, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 319-Concert Band

The Concert Band members are carefully selected to provide a balanced instrumentation of the best players. Music written for concert band is the main repertoire. Concerts on campus. Four hours a week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 5 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 320 - Jazz Ensemble

The SRU Jazz Ensemble performs jazz literature from all eras of jazz history including big band, bop, hard bop, fusion and contemporary. This ensemble often performs with guest artists of national and international stature, both on and off campus. Membership in this ensemble requires an audition. Three hours and forty-five minutes of rehearsal per week. One to three credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 321 - Orchestra

The orchestra is a string ensemble, with winds and percussion added when needed, which performs music from the orchestral repertoire. Admission by audition. Four hours a week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 322 - Chamber String Ensemble

The Chamber String Ensemble is a small ensemble selected for the study and performance of chamber music written for strings. Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread

## Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 323 - Brass Ensemble

The university's Brass Ensemble is a select ensemble of brass (and percussion) players who study and perform music from all historical periods. Both large brass choir works and small chamber brass works are performed. The ensemble performs on and off campus. Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 324 - Woodwind Ensemble

The Woodwind Ensemble is a small select ensemble of woodwind players who study and perform music for woodwinds from all historical periods. Three hours a week rehearsal time. One credit for every semester of satisfactory participation is granted for this music performance group, with a maximum allowance of ten credits in any one music organization. Additional credits are possible with a waiver from the departmental chairperson. The ensemble is also available without credit.

Credits: 1
Thematic Thread(s): Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 325 - Percussion Ensemble

This small select ensemble of percussionists studies and performs music composed and transcribed for both percussion and mallet ensembles. Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 326 - Flute Choir

The SRU Flute Choir is made up of a select group of flutists who will rehearse and perform a variety of music written for flute ensemble. Audition required. Two and a half hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

## Credits: 1-2

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 327-Psychology of Music

This course combines the study of 1) a survey and analysis of music therapy research in order to provide a foundation for developing skills in formulating a research question, reviewing the literature, designing a study, examining ethical questions related to research, analyzing data and writing reports; and 2) psychological and physiological foundations of musical behavior.

Prerequisites: (PSYC $105^{\text {C }}$ or PSYC $100^{\circ}$ ) and MUSI $236^{\text {D }}$
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 329-Clinical Integration

A supervised clinical experience allowing the music therapy student practical experience in a variety of community health care agencies and educational settings.

Prerequisite: MUSI $230^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 1
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 330 - Clinical Integration

A supervised clinical experience allowing the music therapy student practical experience community health care agencies and educational settings.
Prerequisite: MUSI $329^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 1
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 332 - Vocal Conducting

This course is designed to give the student a practical knowledge of choral conducting techniques and a theoretical understanding of the Vocal Ensemble and its function from auditions through performance.

Prerequisites: MUSI $133^{\mathrm{D}}$ and MUSI $151^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 333 - Instrumental Conducting

The practical aspects of learning to conduct the instrumental ensemble. Students will focus on developing expressive gestures to enhance the basic techniques. Score study, acoustical properties of the instruments, ensemble precision, balance and intonation will be addressed.

Prerequisite: MUSI $151^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 334 - Vocal \& Choral Methods

The course is designed to prepare the student to teach elementary and secondary vocal and choral music, including choosing appropriate teaching materials, incorporating relevant technology, sequencing and differentiating instruction, integrating and applying national and state standards for music education, supervising a music program, and becoming aware of professional organizations, workshops, and conferences.

Prerequisite: MUSI $206^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 2
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 335 - Early Childhood, Elementary, and Secondary General Music Methods

A music education course designed to prepare the music education major to teach general music to students in grades preK-12 through the study of appropriate musical literature, methodologies, and materials.

Prerequisite: MUSI $258{ }^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 2
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.
MUSI 336 - Instrumental Methods
Instrumental methods is a music education course designed to prepare the student for a career in elementary and secondary instrumental music, including selecting appropriate literature, repair of instruments, public relations, incorporating relevant technology, sequencing and differentiating instruction, integrating and applying national and state standards for music education, and rehearsal techniques.

Prerequisites: MUSI $129^{\circ}$ and MUSI $140^{\circ}$ and MUSI $206^{C}$ and MUSI $208^{C}$ and MUSI $247^{\text {C }}$ and MUSI $304^{\text {C }}$ and MUSI $376^{\text {C }}$ and MUSI $377^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .

## Credits: 2

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 337-Instrumental Rehearsal Techniques

In this course for music education majors, students will analyze and conduct beginning and intermediate musical scores for concert band and orchestra. The student conductor will identify performance errors and learn specific rehearsal techniques to improve the ensemble's performance. Students must register for MUSI 339 concurrently with this course to complete field experience in the public schools as part of the requirements of this course.

Prerequisites: MUSI $245^{\mathrm{D}}$ and MUSI $206^{\mathrm{D}}$ and MUSI $247^{\mathrm{D}}$ and MUSI $304^{\mathrm{D}}$ and MUSI $374^{\mathrm{D}}$ and MUSI $406^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Corequisite(s): MUSI 339
Credits: 1
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY or MUSIC UPPER DIV REVIEW STATUS attributes.
Enrollment limited to students with department of Music.

## MUSI 339 - Rehearsal Techniques Field Experience

In this course, students will complete field experience with a focus on ensemble rehearsals in the public schools, supervised by university faculty who are certified music educators.
Prerequisites: MUSI $245^{\mathrm{D}}$ and MUSI $206^{\mathrm{D}}$ and MUSI $247^{\mathrm{D}}$ and MUSI $304^{\mathrm{D}}$ and MUSI $374^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Corequisite(s): MUSI 407
Credits: 1
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER
CANDIDACY or MUSIC UPPER DIV REVIEW STATUS attributes.
Enrollment limited to students with department of Music.
MUSI 350-Computer Technology in Music
This course will introduce students to the technologies that are prevalent in the music and arts world today. Students will study the history of music and technology and work with today's computer music technologies such as, DC-Rom and MIDI, as well as creating software through the use of the program Hypercard.

Prerequisite: MUSI $255^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 2

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 351 - Arranging \& Orchestration

This course covers the basic concepts of arranging relative to instrumental and vocal groups. Emphasis is placed on the making of arrangements in addition to the transcription of composition.

Prerequisite: MUSI $255^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 2
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 352 - Music Technology

This course will cover the basic techniques, operation and creative use of recording equipment, electronic music equipment, and computer equipment through practical experience in the Department of Music's recording studio, electronic music studio, and computer music laboratory. Application of music technology in music education, composition, performance, and studio work will be addressed.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 353 - Music Methods Block Field Experience

In this course, students will complete field experience with a focus on elementary, secondary and/or instrumental music in the schools, supervised by university faculty who are certified music educators.
Prerequisites: MUSI $129^{\mathrm{D}}$ and MUSI $140^{\mathrm{D}}$ and MUSI $206^{\mathrm{D}}$ and MUSI $207^{\mathrm{D}}$ and MUSI $208^{\mathrm{D}}$ and MUSI $247^{\mathrm{D}}$ and MUSI $304^{\mathrm{D}}$ and MUSI $375^{\mathrm{D}}$ and MUSI $376^{\mathrm{D}}$ and MUSI $377^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Corequisite(s): MUSI 334, MUSI 335, MUSI 336 and MUSI 354

## Credits: 1

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY or MUSIC UPPER DIV REVIEW STATUS attributes. Enrollment limited to students with department of Music.
MUSI 354 - Integrated Music Methods Lab
A combined course designed to integrate general music, choral, and instrumental methods principles and lab teaching experiences for students in the Music Methods Block. Prerequisite: Admission to Teacher Candidacy Required

Corequisite(s): MUSI 334, MUSI 335, MUSI 336 and MUSI 353
Credits: 1
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY or MUSIC UPPER DIV REVIEW STATUS attributes.
Enrollment limited to students in the College of Liberal Arts college.
Enrollment limited to students with department of Music.
MUSI 359 - History of Music I
A survey of musical styles from the ages of classical Greece and Rome through the Baroque period. Important composers and their literature will be discussed in relation to artistic, social, political, and economic conditions of their period. A reading knowledge of music is essential.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 360 - Keyboard Improvisation

Melody harmonization and improvisation at the keyboard in 20th century popular and jazz styles. One class meeting and one laboratory session each week.

Prerequisite: MUSI $235^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 361 - Instrumental Improvisation

This course teaches the basic concepts of improvisation, chord notation and chord styles in popular and jazz music scales. Open to all instrumentalists.

Prerequisite: MUSI $254^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 365 - Applied Performance Voice

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits.
Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 165, 265, 365 may each be taken two times for a total of 18 credits; MUSI 465 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 366 - Applied Performance Piano

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 166, 266, 366 may each be taken two times for a total of 18 credits; MUSI 466 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 367 - Applied Performance Strings

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 167, 267, 367 may each be taken two times for a total of 18 credits; MUSI 467 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 368 - Applied Performance

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 168, 268, 368 may be taken two times for a total of 18 credits; MUSI 468 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 369-Applied Performance Brass

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 169, 269, 369 may each be taken two times for a total of 18 credits; MUSI 469 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI $203{ }^{C}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 370 - Applied Performance

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 170, 270 and 370 may each be taken two times for a total of 18 credits; MUSI 470 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.
MUSI 373 - History of Music II
This course examines the music and culture from the period of the Rococo to the present. Lectures, readings, performances and listening sessions develop the student's musical understanding of the period. A reading knowledge of music is essential.

Prerequisite: MUSI $151^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 374 - Woodwind Methods

A study of the fundamental concepts needed to play and teach beginning instruments of the woodwind family and the factors peculiar to each instrument (flute, oboe, clarinet, bassoon and saxophone). Students must register for MUSI 375 concurrently with this course to complete field experience in the public schools as part of the requirements of this course.

Corequisite(s): MUSI 375
Credits: 1
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## MUSI 375 - Woodwind Methods Field Experience

In this course, students will complete field experience with a focus on teaching individual and/or group instrumental lessons in the public schools, supervised by university faculty who are certified music educators. Acceptance into Teacher Candidacy.

Corequisite(s): MUSI 374
Credits: 1
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY or MUSIC UPPER DIV REVIEW STATUS attributes.
Enrollment limited to students with department of Music.

## MUSI 376 - Flute, Oboe, \& Bassoon Methods

A study of the fundamental concepts and skills needed to play and teach flute, oboe, and bassoon to homogeneous and heterogeneous instrument groups in pre-K-12 instrumental music education setting. This includes the integration and application of national and state standards for music education. Pre-requisites: Admission to Teacher Candidacy required

Corequisite(s): MUSI 375
Credits: 2
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY or MUSIC UPPER DIV REVIEW STATUS attributes.
Enrollment limited to students in the College of Liberal Arts college. Enrollment limited to students with department of Music.

## MUSI 377- High Brass Methods

A study of the fundamental concepts and skills needed to play and teach trumpet and French horn to homogeneous and heterogeneous instrument groups in pre-K-12 instrumental music education setting. This includes the integration and application of national and state standards for music education.

Credits: 2
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students in the College of Liberal Arts college.
Enrollment limited to students with department of Music.

## MUSI 379-Applied Piano

With the approval of the applied music teacher, lessons are available in standard piano. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 1

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 381-Applied Voice

With the approval of the applied music teacher, lessons are available in standard voice. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 1

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 382 - Applied Strings

With the approval of the applied music teacher, lessons are available in standard string instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 1

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 383 - Applied Brass

With the approval of the applied music teacher, lessons are available in standard brass instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 384 - Applied Woodwinds

With the approval of the applied music teacher, lessons are available in standard woodwind instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 385 - Applied Percussion

With the approval of the applied music teacher, lessons are available in standard percussion instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 387 - Applied Counterpoint I

This study and practice of writing music according to contrapuntal theory of the 16th century. Course may be repeated for up to 3 credits.

Prerequisite: MUSI $255^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 388 - Applied Counterpoint II

The study and practice of writing music according to contrapuntal theory of the 18th century. Course may be repeated for up to 3 credits.

Prerequisite: MUSI $255^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 389-Applied Composition

Compositional techniques relative to the student's interest will be studied through an analysis of works by major composers. Although no definite idiom is prescribed, contemporary techniques are encouraged. May be repeated for up to three credits.

Prerequisite: MUSI $255^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 1
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 390-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 391 - Applied Electronic Composition

A course designed to present the elements involved in electronic composition. The student will compose using magnetic tape, computer, and synthesizer. Course may be repeated for up to 3 credits.
Prerequisites: MUSI $255^{\text {D }}$ or MUSI $352^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 1

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 392 - Tuba-Euphonium Ensemble

The SRU Tuba-Euphonium Ensemble is comprised of tuba and euphonium players who rehearse and perform a variety of music written for tuba-euphonium ensemble. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

## Credits: 1-2

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread

## Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 393 - Jazz Lab Band

The SRU Jazz Lab Band is a rehearsal ensemble that performs one concert per academic semester. The group does require an audition which takes place in the first week of the Fall semester. If openings occur in the Spring semester, the director will hold an audition for the open seats only. The ensemble rehearses big band literature from every stylistic period in jazz history. The focus of the course is on developing sight-reading, jazz performance practice and techniques, stylistic interpretation, foundational ensemble techniques, jazz band rehearsal techniques, and exposure to the literature, history, and composers of jazz music. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 394 - World Percussion Ensemble

The SRU World Percussion Ensemble rehearses and performs the percussion music of cultures outside of Western Europe and the United States, concentrating on, but not exclusive to, the Caribbean (Trinidad and Tobago, Cuba, The Dominican Republic, and Puerto Rico), Asia (Japan, India, and Korea), South America (Brazil), and West Africa. Students learn the instruments, techniques, some choreography (when appropriate), and musical styles in multiple genres for at least one public performance each academic semester. The ensemble rehearses and performs on authentic instruments (whenever possible) or modern, commercially available substitutes. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats a re possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## MUSI 396 - Winter Guard

The Slippery Rock University Winter Guard is the indoor color guard performing ensemble. In this performing ensemble, students will combine the use of flags, sabers, mock rifles, and other equipment, as well as dance and interpretive movement, in shows for public performance and competition. Held in the spring semester the group performs in competition as part of the indoor marching arts circuit as well as for campus and community events. The course may be repeated up to 5 times. Additional repeats are possible with a waiver from the department chairperson.

Credits: 1-2
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 399- Diction for Singers II

In this study of language diction for singers, students will continue the study of the International Phonetic Alphabet and apply it to the singing of German and French art songs. The course is open to all voice majors.

Credits: 1-2
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Music, Music - Voice, Music Education (K-12), Music Educ-Voice (K-12), Music Performance, Music Performance-Voice, Music Therapy or Music Therapy-Voice.

MUSI 402 - Teaching General Music Through Distance Education
This course is designed to provide students with the knowledge and skills necessary to effectively teach general music through distance or cyber education.

Prerequisites: PE $411^{\mathrm{C}}$ and PE $421^{\mathrm{C}}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## MUSI 403 - Teaching Music Performance Through Distance Education

This course is designed to provide students with the knowledge and skills necessary to effectively teach music performance through distance or cyber education.

Prerequisites: PE $302^{\text {C }}$ and PE $303{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## MUSI 404 - Field Experience Immersion in Music

In this course, students will participate in field experience through observing, assisting and teaching while being immersed in the culture of a different population. Travel expenses, which may include lodging, airfare, meals and other expenses, will be required as part of this course. Admission to Degree Candidacy required.

Credits: 1
Term(s) Typically Offered: Offered Winter Terms Even
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER
CANDIDACY or MUSIC UPPER DIV REVIEW STATUS attributes.
Enrollment limited to students with department of Music.

## MUSI 406 - Advanced Conducting

In this course, students will develop advanced skills of conducting instrumental and vocal ensembles, including but not limited to: expanding technique beyond stationary focal point conducting to variable focal point conducting, developing gestural vocabulary guided by the Laban Method and developing advanced score study and analysis.

Prerequisite: MUSI $206{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 2
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 407 - Choral Rehearsal Techniques

In this course for music education majors, students will analyze and conduct beginning and intermediate musical scores for choir. The student conductor will identify performance errors and learn to use various rehearsal techniques to improve the ensemble's performance. Students will also survey and learn performance practice for choral literature of all historical stylistic periods, and discuss numerous aspects of choral pedagogy, such as designing curriculum for and administrating a choral program.

Prerequisites: MUSI $406^{C}$ and (MUSI $115^{C}$ or MUSI $215^{C}$ or MUSI $315^{C}$ or MUSI $415^{C}$ )
${ }^{C}$ Requires minimum grade of $C$.
Corequisite(s): MUSI 339
Credits: 1
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY or MUSIC UPPER DIV REVIEW STATUS attributes. Enrollment limited to students with department of Music.
MUSI 408 - Professional Preparation for the Music Job Search In this class, which is designed for music majors, students will create a resume, cover letter, and a portfolio; will engage in interview practice; and will form strategies for approaching the job search. The course is intended to be taken by students who will be entering the job search soon.

Credits: 1
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1 or Senior 2.
Enrollment limited to students with department of Music.

## MUSI 409 - Jazz Combo

Students will meet weekly with the appropriate faculty member to work on jazz performance in the small group (combo) setting. Study of phrasing, articulation, jazz theory, improvisation, and other jazz performance practices will be addressed. Students will be auditioned at the beginning of the semester for placement. At least one public performance will be given per semester. One hour of rehearsal time per week. One credit for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 413 - Saxophone Quartet

Students will meet weekly with the appropriate faculty member to work on literature selected for their performance ability level. Study of phrasing, articulation, balance, blend, intonation, and other performance practices will be addressed. Students will be auditioned at the beginning of the semester for placement. At least one public performance will be given per semester. Two hours per week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 414 - Symphonic Wind Ensemble

Symphonic Wind Ensemble: A chamber ensemble composed of select musicians chosen by audition, performing contemporary literature as well as transcriptions for winds and percussion. Four and a half hours of week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 415 - Concert Choir

Auditioned mixed chorus of 50-70 singers that studies and performs a variety of music from Renaissance to 21 st century, classical to contemporary, a cappella and music accompanied by piano, chamber groups, and symphonic ensembles. Three hours per week rehearsal time. Multiple concerts are presented both on and off campus and on periodic tours. One to three credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. Entrance is by successful audition, held the first week of classes every semester; contact the instructor for information. The ensemble is also available without credit.

Credits: 1-3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 416 - Women's Choir

An ensemble of 30-40 women who perform choral music especially composed for female voices. This ensemble performs traditional and modern repertoire, with and without accompaniment. Concerts are presented on campus and on tours. Two and one-half hours per week rehearsal time. Multiple concerts are presented both on and off campus and on periodic tours. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. No audition is required. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 417 - Chamber Singers

An elite chamber choir of 16-24 outstanding singers who perform challenging repertoire with a greater emphasis on a cappella music. Members of this group are expected to display initiative to prepare music to the highest possible level of their ability. Two and one-half hours per week rehearsal time. One or two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. Entrance is by successful audition, held the first week of classes every semester; contact the instructor for information. The ensemble is also available without credit.

Corequisite(s): MUSI 415
Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread
Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 418 - Marching Pride

The Marching Pride performs during the half time at football games, both home and away, and for other special events. Much of its music is specially arranged. Open to all students. Six hours a week rehearsal during the football season. One to six credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 6 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-6
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Art \& Society, Creating Art, Education, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 419 - Concert Band

The Concert Band members are carefully selected to provide a balanced instrumentation of the best players. Music written for concert band is the main repertoire. Concerts on campus. Four hours a week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 5 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 420-Jazz Ensemble

The SRU Jazz Ensemble performs jazz literature from all eras of jazz history including big band, bop, hard bop, fusion and contemporary. This ensemble often performs with guest artists of national and international stature, both on and off campus. Membership in this ensemble requires an audition. Three hours and forty-five minutes of rehearsal per week. One to three credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 421 - Orchestra

The orchestra is a string ensemble, with winds and percussion added when needed, which performs music from the orchestral repertoire. Admission by audition. Four hours a week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 422 - Chamber String Ensemble

The Chamber String Ensemble is a small ensemble selected for the study and performance of chamber music written for strings. Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 423 - Brass Ensemble

The university's Brass Ensemble is a select ensemble of brass (and percussion) players who study and perform music from all historical periods. Both large brass choir works and small chamber brass works are performed. The ensemble performs on and off campus. Two hours a week rehearsal time. One credit for every semester of satisfactory participation is granted for this music performance group, with a maximum allowance of ten credits in any one music organization. Additional credits are possible with a waiver from the departmental chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 424 - Woodwind Ensemble

The Woodwind Ensemble is a small select ensemble of woodwind players who study and perform music for woodwinds from all historical periods. Three hours a week rehearsal time. One credit for every semester of satisfactory participation is granted for this music performance group, with a maximum allowance of ten credits in any one music organization. Additional credits are possible with a waiver from the departmental chairperson. The ensemble is also available without credit.

Credits: 1
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## MUSI 425 - Percussion Ensemble

This small select ensemble of percussionists studies and performs music composed and transcribed for both percussion and mallet ensembles.
Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## MUSI 426 - Flute Choir

The SRU Flute Choir is made up of a select group of flutists who will rehearse and perform a variety of music written for flute ensemble. Audition required. Two and a half hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 428 - Music Therapy Advanced Topics

Seminar in professional ethics, disability studies, race theory, and feminism.

Prerequisites: MUSI $327^{D}$ and MUSI $330^{D}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Music, Music Education (K-12), Music Performance or Music Therapy.

## MUSI 431 - Pedagogy

Acquaintance with the philosophy, theories, techniques, materials, and practical applications of teaching applied music on the student's major instrument of study. Laboratory experience under the supervision of the instructor will be an integral part of the course.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 432 - Clinical Integration

A supervised clinical experience allowing the music therapy student practical experience in a variety of community health care agencies and educational settings.
Prerequisite: MUSI $330^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 433 - Clinical Integration

A supervised clinical experience allowing the music therapy student practical experience in a variety of community health care agencies and educational settings.

Credits: 1
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 437 - Opera Performance

Performance of scenes, arias, or full operas, taking into consideration the interest and skill of each student. Four hours of rehearsal per week; more rehearsal as needed in weeks leading to performance. One to four credits for every semester of satisfactory participation is granted for this music performance group. Additional repeats are possible with a waiver from the department chairperson. Each course number may be repeated up to five times.

Credits: 1-4
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread
Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 440 - Music Therapy for Adult Clients

Application of music therapy techniques and materials in all areas of mental health, corrections, and special education. Emphasis is placed on adult populations and group dynamics.

Prerequisites: MUSI $312^{\mathrm{D}}$ and MUSI $432^{\mathrm{D}}$ and PSYC $276^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 450 - Music Therapy Internship

A continuous six-month internship in an approved music therapy program under the direction of a Board Certified Music Therapist. Required of all candidates for graduation.
Prerequisites: MUSI $428^{D}$ and MUSI $440^{D}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-12
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students in the BM 5273 program.

## MUSI 455 - Student Teaching - Music

Under the guidance of a cooperating teacher and university supervisor, students engage in two eight-week assignments on a full-time basis in specified school districts and attend scheduled seminars. Supervisors assign additional requirements.

Prerequisites: MUSI $334^{\mathrm{D}}$ and MUSI $335^{\mathrm{D}}$ and MUSI $336^{\mathrm{D}}$ and MUSI $337^{\mathrm{D}}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 12
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER
CANDIDACY or MUSIC UPPER DIV REVIEW STATUS attributes.
Enrollment limited to students with department of Music.

## MUSI 465 - Applied Performance Voice

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 165, 265, 365 may each be taken two times for a total of 18 credits; MUSI 465 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 466 - Applied Performance Piano

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 166, 266, 366 may each be taken two times for a total of 18 credits; MUSI 466 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 467 - Applied Performance Strings

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 167, 267, 367 may each be taken two times for a total of 18 credits; MUSI 467 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 468 - Applied Performance

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 168, 268, 368 may be taken two times for a total of 18 credits; MUSI 468 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 469 - Applied Performance Brass

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits.
Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 169, 269, 369 may each be taken two times for a total of 18 credits; MUSI 469 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 470 - Applied Performance

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 170, 270 and 370 may each be taken two times for a total of 18 credits; MUSI 470 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $230^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 473 - History of Music III

This course examines the musical events from approximately 1890 to the present. Lectures, readings, performances and listening sessions develop the students' musical understanding of the period. A reading knowledge of music is essential.

Prerequisite: MUSI $151^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 479-Applied Piano

With the approval of the applied music teacher, lessons are available in standard piano. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisite: minimum score of $Y$ in 'Musicianship Health Competency' Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 481 - Applied Voice

With the approval of the applied music teacher, lessons are available in standard voice. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 482 - Applied Strings

With the approval of the applied music teacher, lessons are available in standard string instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.
MUSI 483 - Applied Brass
With the approval of the applied music teacher, lessons are available in standard brass instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 484 - Applied Woodwinds

With the approval of the applied music teacher, lessons are available in standard woodwind instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.

## MUSI 485 - Applied Percussion

With the approval of the applied music teacher, lessons are available in standard percussion instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of $Y$ in 'Musicianship Health Competency' or MUSI $203{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Music.
MUSI 487 - Applied Counterpoint I
This study and practice of writing music according to contrapuntal theory of the 16th century. Course may be repeated for up to 3 credits.

Prerequisite: MUSI $255^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 488 - Applied Counterpoint II

The study and practice of writing music according to contrapuntal theory of the 18th century. Course may be repeated for up to 3 credits.
Prerequisite: MUSI $255^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 489-Applied Composition

Compositional techniques relative to the student's interest will be studied through an analysis of works by major composers. Although no definite idiom is prescribed, contemporary techniques are encouraged. May be repeated for up to three credits.

Prerequisite: MUSI $255^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 1
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 490 - Independent Study

Students have an opportunity to study selected areas in greater concentration under the direction of a music faculty. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 491 - Applied Electronic Composition

A course designed to present the elements involved in electronic composition. The student will compose using magnetic tape, computer, and synthesizer. Course may be repeated for up to 3 credits.
Prerequisites: MUSI $255^{\text {D }}$ or MUSI $352^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 1

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 492- Tuba-Euphonium Ensemble

The SRU Tuba-Euphonium Ensemble is comprised of tuba and euphonium players who rehearse and perform a variety of music written for tuba-euphonium ensemble. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 493 - Jazz Lab Band

The SRU Jazz Lab Band is a rehearsal ensemble that performs one concert per academic semester. The group does require an audition which takes place in the first week of the Fall semester. If openings occur in the Spring semester, the director will hold an audition for the open seats only. The ensemble rehearses big band literature from every stylistic period in jazz history. The focus of the course is on developing sight-reading, jazz performance practice and techniques, stylistic interpretation, foundational ensemble techniques, jazz band rehearsal techniques, and exposure to the literature, history, and composers of jazz music. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread

## Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 494 - World Percussion Ensemble

The SRU World Percussion Ensemble rehearses and performs the percussion music of cultures outside of Western Europe and the United States, concentrating on, but not exclusive to, the Caribbean (Trinidad and Tobago, Cuba, The Dominican Republic, and Puerto Rico), Asia (Japan, India, and Korea), South America (Brazil), and West Africa. Students learn the instruments, techniques, some choreography (when appropriate), and musical styles in multiple genres for at least one public performance each academic semester. The ensemble rehearses and performs on authentic instruments (whenever possible) or modern, commercially available substitutes. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats a re possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 496 - Winter Guard

The Slippery Rock University Winter Guard is the indoor color guard performing ensemble. In this performing ensemble, students will combine the use of flags, sabers, mock rifles, and other equipment, as well as dance and interpretive movement, in shows for public performance and competition. Held in the spring semester the group performs in competition as part of the indoor marching arts circuit as well as for campus and community events. The course may be repeated up to 5 times. Additional repeats are possible with a waiver from the department chairperson

Credits: 1-2
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## MUSI 499 - Applied Recital

The purpose of this course is to give the performance majors an opportunity to perform a full recital on their major instrument. It will be taken in addition to study in the student's major applied area. Course may be repeated up to two credits.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Music Performance.

## Nursing (NURS)

## NURS 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## NURS 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

## NURS 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

## NURS 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

## NURS 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

## NURS 295-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

## NURS 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

## NURS 311 - Introduction to Health Care Informatics

This course is designed to provide students with an opportunity to apply knowledge and skills from information science and computer science to the health care field. Emphasis will be on developing a basic understanding of how automation is used to manage information in healthcare. Topics covered include types of information systems used in healthcare, how to select and implement information systems, current developments in healthcare information systems, issues surrounding computers in health care. In this course the focus is on the computer as a tool for helping healthcare providers do their work.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Nursing.

## NURS 312-Nursing in Transition

Nursing 312 examines professional role socialization from a historic, contemporary, and futuristic view. It enables the student to develop communication and technology skills necessary for success in a collegiate nursing program.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Nursing.

## NURS 322 - The Teaching-Learning Process in Nursing

This course is designed for the registered nurse who desires greater knowledge and skill in assisting individuals, families, and groups to acquire health-related knowledge, skills, and values. The course provides opportunities from a conceptual and practical perspective to explore the dynamics that contribute to effective health education. Emphasis will be placed upon developing the nurses' abilities, confidence, and self-image as teachers.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Nursing.

## NURS 327 - Group Process for Nursing

Provides opportunities to develop leadership skills with groups for the purposes of maintaining, regaining or improving their levels of wellness. The focus is on the group as a system. Combined conceptual knowledge and practical skills needed to work effectively with health-related groups will be taught (3 credits theory)

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Nursing.
NURS 331 - Evidence Based Health Assessment and Promotion
This course emphasizes the complete health assessment, the nursing process, and its relationship to the prevention and early detection of disease in clients across the life span. This course reinforces the processes of health assessment: interviewing, history-taking, and physical assessment. Dominant models, theories and perspectives are used to explain health behaviors in relation to evidence-based health promotion and health education strategies. Students are expected to correlate health assessment and promotion with current evidence. This course includes assignments with computer simulated standardized patients. Incorporated throughout the course is the importance of communication and collaboration across culturally diverse populations.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Nursing.
NURS 390 - Experimental
A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

## NURS 395 - Workshop

All academic departments list this workshop course. Please contact the individual department for more information. A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

## NURS 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

## NURS 406 - Politics and Policy Nursing

This course is designed to enhance the student's understanding of health policy as it relates to professional nursing practice. Students will explore health care policy and the policy-making process at various levels of government, research the impact of special interest groups on policy, and learn effective strategies to interact with legislators as citizen lobbyists and/or members of professional nursing organizations.

Credits: 3
Term(s) Typically Offered: Offered Spring \& Summer Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Nursing.

## NURS 408 - Delivery of Nursing Care in a Managed Care Environment/ Clinica

This course prepares students to understand managed health care delivery systems and their impact of delivery and practice patterns with emphasis on the delivery of nursing care.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Nursing.

## NURS 422 - Nursing Research \& Evidence-Based Practice

This course examines the fundamental concepts of nursing research and evidence-based practice (EBP). Students are prepared to become critical consumers of nursing research. Through the application of research evidence, students are provided the tools necessary to advance nursing practice and improve patient outcomes.

Prerequisites: NURS $311^{\mathrm{D}}$ and NURS $312^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Nursing.

NURS 426 - Community and Public Health Nursing
In this course the focus is on the community as the client. Theories, models, and concepts from community and public health nursing are examined. A course project, the Community Assessment, provides students the opportunity to complete and analyze a community assessment.

Prerequisites: NURS $311^{\mathrm{D}}$ and NURS $312^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Nursing.

## NURS 429 - Financial Management for Nursing Case Managers

This course provides students with content related to current issues, tools (i.e. Excel spreadsheet), and regulation necessary to function as a nursing case manager.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Nursing.

## NURS 430 - Leadership in Nursing and Healthcare Systems

This course is designed to provide students with a working knowledge of concepts and processes of leadership theory and practice in nursing and healthcare systems. Students successfully completing this course will be able to identify the personal and situational factors affecting leadership performance and adapt their behavior to become more effective leaders.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

## NURS 432 - Practice Experience for Leadership and Management in

 NursingAs a practice experience, the student will apply concepts gleaned from previous courses and NURS 431 to enhance professional nursing practice. Nursing leadership and management theories will be applied within the practice environment by emphasizing planning, delivering, managing, and evaluating cost-effective quality care. This is a practice experience that requires completion of all 300 core nursing courses (NURS $311,312,327,331$ ) as prerequisites and NURS 431 as a corequisite course.

Prerequisites: NURS $311^{\mathrm{C}}$ and NURS $312^{\mathrm{C}}$ and NURS $327^{\mathrm{C}}$ and NURS $331^{\text {c }}$
${ }^{C}$ Requires minimum grade of $C$.
Corequisite(s): NURS 431
Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Nursing.

## NURS 433 - Innovative Technology for Healthy Communities

This course focuses on consumer health informatics and technology which explores how innovative technology can be used to improve individuals' health within various community settings. Topics include the mode of delivery of consumer health information such as Internet-based technology; shared access to individuals' private health information; quality of consumer health information via social media; and health and information literacy seeking behavior. Finally, various types of innovative technology used within the home environment or within a healthcare setting to support consumers within a home environment will be explored.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Nursing.

## NURS 434 - Leadership and Management in Nursing with Practice Experience

This course focuses on the theory for leadership and management roles, leadership theories, and the ethical decision-making process in the delivery of health care to diverse populations. The student will apply concepts from this course and gleaned from previous courses to enhance professional nursing practice in both the theoretical realm and the practice environment. Nursing leadership and management practices will be analyzed with an emphasis on planning, delivering, and evaluating cost-effective quality care. This is a course that requires completion of all 300 level core nursing courses (NURS 311, 312, 327, 331) as prerequisites.

Prerequisites: NURS $311^{\text {C }}$ and NURS $312^{\text {C }}$ and NURS $327^{\text {C }}$ and NURS $331^{\text {c }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Nursing.

## NURS 440 - Nursing Case Management in Today's Healthcare

## Environment

This course is designed to prepare students to understand the case management responsibilities which include planning, coordinating, and managing care of consumers within a health care system. Students will learn to use evidence-based pathways in making decisions, planning care and finding the best ways to deliver safe, quality and culturally appropriate care and controlling increasing health care costs. Identify innovative technologies to measure case management effectiveness and outcomes.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Nursing.

## NURS 450 - Health Care Informatics Internship

Provides opportunity to apply theory and develop competencies in health care informatics through a work-related experience in an appropriate health related enterprise.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

NURS 451 - Internship in Correctional Nursing
Provides opportunity to apply theory and develop competencies in correctional nursing through a work-related experience in an appropriate correctional institution.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

## NURS 490 - Independent Study

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings.Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

## NURS 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

## NURS 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

## Parks \& Conservation (PCRM)

PCRM 104 - Foundations in Sustainability

This course will provide a foundation of basic concepts associated with environmental and its associated cultural sustainability. Emphasis will be placed on the interdependence of our natural resources to achieve sustainability in a cultural context. Course development will move from individual environmental ethics and personal actions to civic responsibility and global perceptions.

Credits: 3
Thematic Thread(s): Building a Healthy Society, Environmental Problems Toolkit, Fighting Social Problems, Food, Wellness \& Environment Across Cultures, Healthy Body, Mind \& Environment, Sustainable International Development, Sustainability, Transfer Thread Completion Course
PCRM 105 - Leisure-Centered Living
The constructive use of leisure and education for leisure are essential tools for a person's successful growth and development. Leisurecentered living is designed to help students investigate, evaluate, and plan leisure/play as a basic human need and necessity for well-being.

## Credits: 3

## PCRM 110 - Foundations of Parks and Outdoor Recreation

This course is designed to provide the student with the conceptual foundations of outdoor recreation as it relates to park resources management, environmental education/interpretation, and outdoor leadership. The course examines the history and philosophy of outdoor recreation and where it fits in the broad field of leisure. Students will be introduced to the roles of government and the private sector in parks and outdoor recreation. In addition, an overview of national resources as well as the interaction of humans with our natural resources will be reviewed. Students will also explore career opportunities and identify needed skills of outdoor recreation professionals.

## Credits: 3

## PCRM 111 - Introduction to Park and Resource Management

This course is a sequel to Foundations of Parks and Recreation I and will continue to examine the historical and philosophical background of the leisure movement with regard to recreation organizations and services. Professional preparation in relation to perceived and actual needs concerning risk management, research and evaluation, information technology, ecological considerations and sustainable planning and management practices in the parks and recreation field will also be explored

Credits: 3

## PCRM 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## PCRM 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

## PCRM 195-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

## PCRM 198-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## Credits: 1-3

## PCRM 204-Environmental Communication

In this course, students will learn about the theoretical and applied concepts that guide the discipline of environmental communication including rhetoric \& discourse, media, public participation, social marketing, collaboration \& conflict resolution, risk communication, and popculture. Students will demonstrate understanding and show application of materials for successful environmental communication in a variety of protected areas and conservation settings.

## Credits: 3

## PCRM 210-Resources for Outdoor Programming

The outdoors was the first classroom and many lessons are still taught in and for the outdoors. This course is designed to provide anyone working in a recreational or park setting with methods and materials to use to achieve a variety of educational and recreational goals. Emphasis will be placed on identifying and using existing instructional materials, in addition to developing personal materials and lessons for outdoor programming

Credits: 3

## PCRM 211 - Outdoor Leadership

This course is a study of the principles and practices essential for outdoor leaders with emphasis on the development of KSAs to lead groups into the wild outdoors.

Credits: 3
Thematic Thread(s): Leadership Development, Transfer Thread Completion Course

## PCRM 214 - Parks and Recreation Planning

This course provides a comprehensive introduction to the field of recreation planning. Class sessions will focus on a variety of planning approaches and tools, which are utilized throughout the field of recreation. Students will gain familiarity with these planning tools as they engage in an abbreviated campus-wide study focused on the availability of recreational resources to SRU students.

Prerequisites: PREE $110^{\mathrm{D}}$ or PCRM $110^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3

## PCRM 251 - Field Experience

Opportunities for basic practical experience in a variety of park and recreation/environmental education settings. May be repeated up to 3 times.

Credits: 1

## PCRM 271 - Law Enforcement Firearms

This course provides basic orientation to and qualification with the approved handgun and familiarization with the 12 gauge shotgun including safety and "shoot-no shoot situations.

Credits: 3

## PCRM 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum

Credits: 1-3

## PCRM 295-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

## PCRM 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

## PCRM 304 - Search and Rescue/Wilderness Medicine

This course will provide basic and intermediate instruction in search and rescue techniques and emergency medical procedures in wilderness settings. Students will be introduced to the various evacuation and stabilization procedures that are commonly implemented in emergency situations.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 315 - Recreation Resource Planning and Analysis

This course is designed specifically for student in the Park and Resource Management track. It is designed to provide the student with appilcation of the planning process, from site and program analysis into planning recreational facilities. students will use a variety of planning tools and on-line analysis resources, as well as a variety of professional recreation planning frameworks.

Prerequisites: PREE $214^{\mathrm{D}}$ or PCRM $214^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 318 - Administrative Strategies for Resource Managers

The organization and administration of parks and recreation services, including organizational management, personnel practices and labor relations, financial and business procedures and legal aspects.

Credits: 3
Enrollment limited to students with a semester level of Freshman 1, Freshman 2 or Sophomore 1.

## PCRM 342 - Group Facilitation and Leadership

This course will cover the concepts related to working with groups as a facilitator. Hands-on approaches to program design, sequencing activities and processing experiences will be examined. Students will facilitate their classmates through a group development experience making use of SRU's low and high challenge courses and the Leadership Reaction Center.

Credits: 3
Thematic Thread(s): Leadership Development, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 347 - Interpretive Methods and Programming

A study of the principles and methods to interpret natural and cultural history in parks and other outdoor settings.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 348-Natural History of Ecosystems I

This course provides basic ecology and natural history information and skills for the purpose of environmental and resource management as well as interpretation and environmental education. Local animal identification, interactions of species with their environment, and species interactions are among the topics covered.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 349- Natural History of Ecosystems II

This field-oriented course is designed to integrate basic scientific inquiry and ecological field techniques to develop skills of analysis, synthesis and evaluation of scientific information for the purpose of environmental and resource management. Results of field investigations are applied to relevant ecological problems and management objectives for the purpose of environmental decision making. Topics include local plant and fungi identification, community ecology, ecosystem ecology, and ecological biogeography.
Prerequisites: PREE $260^{\text {D }}$ or PREE $348^{\text {D }}$ or PCRM $348^{D}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 351 - Parks \& Conservation Practicum

Observation and participation in parks and recreation or environmental education activities. Cross listed as RCTH352.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 371 - Fundamentals of National Park Service Law Enforcement

This course covers the legal and administrative fundamentals of National Park Service law enforcement including federal law and NPS policies and guidelines.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 372 - Visitor Services Management

A study of visitor services including information, safety, rescue and law enforcement services.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 374 - Federal Law \& Park Policy

This course is designed to provide students with advanced knowledge of federal law, policies, and procedures. Students will develop an in-depth understanding of Federal policy for various land management agencies with emphasis on National Park Service policy. The course will also cover legal updates in park law enforcement.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 377 - Cultural Resources Management

This course provides a comprehensive introduction to the management of cultural and historic resources. The course examines the goals, legislation, and methodologies related to cultural resources management, research and programming.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 395-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## Credits: 1-3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 405- Social Ecological Systems

This course uses a social-ecological systems framework in order to advance an interdisciplinary approach to conservation of biological diversity and natural resources. Students will be exposed to contemporary conservation and natural resource management challenges and will learn how those issues can be addressed through an integrated understanding of social and natural systems. Case studies will be presented and discussed in class in order to connect theoretical frameworks to on the ground conservation problems and to consider opposing and controversial viewpoints. Students will develop practical skills in understanding and discussing cross-cultural and interdisciplinary natural resource management issues.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

PCRM 415 - Challenges and Trends in Parks and Conservation
An integrative course for detailed study of current issues in parks and recreation with emphasis on unique and imaginative solutions to the challenges facing the recreation/parks profession. Must be a senior to enroll.

Credits: 3
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

## PCRM 450 - Internship

A supervised off-campus work experience in an appropriate aspect of parks and recreation or environmental education work. Open only to PCRT majors with advanced standing.

Credits: 1-12
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 471 - NPS Law Enforcement

This course provides an overview of NPS law enforcement policies and procedures, relevant federal laws, Titles 36 and 50, CFR, and courtroom procedures.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 472 - Park Law Enforcement

This course provides basic law enforcement skills essential for the park law enforcement ranger.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 475 - Park and Resource Management

The principles and practices of recreational land and water management. Field trips required.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

PCRM 477 - Wildlife \& Wildlands Field Methods and Management
Course will cover the application of natural history and ecological concepts as it related to parks, other public lands and environmenta education. Emphasis is placed on project development, problem solving and critical thinking skills as tghey relate to resource management.

Prerequisites: (PREE $348^{\mathrm{D}}$ or PCRM $348^{\mathrm{D}}$ ) and (PREE $349^{\mathrm{D}}$ or PCRM $349^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 490 - Independent Study

A special study opportunity for students to investigate in-depth, approved topics in recreation or environmental studies. Topic and credit established by student and supervising instructor. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 491 - Professional Seminar

This course is designed to assist students in preparing for entry into the environmental education profession. Topics will include career planning, employment opportunities, employment seeking skills, and discussions centering on areas of interest to the student.

Credits: 1
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PCRM 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## PCRM 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Parks \& Recreation (PREE)

## PREE 411 - Tourism Planning and Operations

This course studies the different components of travel, as well as the planning and operation of group/package tours and tourist attractions.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

PREE 414 - Concepts and Trends in Travel and Tourism
The course will focus on current concepts and trends of the travel and tourism industries both domestically and internationally.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Petroleum/Natural Gas Engineering (PNGE)

## PNGE 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## PNGE 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## PNGE 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## PNGE 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
PNGE 201 - Introduction to Petroleum and Natural Gas Engineering This course provides an overview of different aspects of petroleum and natural gas engineering from generation to exploration of petroleum reservoirs to drilling and production from these resources.

Credits: 1
Term(s) Typically Offered: Offered Fall Terms
PNGE 290 - Experimental
A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## PNGE 295-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## Credits: 1-6

Term(s) Typically Offered: Offered as Needed

## PNGE 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## PNGE 312 - Petrophysics

This course provides an in depth review of the properties of the reservoir rock and fluids. Topics covered will include theoretical and applied phase behavior of hydrocarbon systems and hydrocarbon fluid properties, basic properties of petroleum reservoir rocks and laboratory evaluation of basic and special petroleum reservoir rock and fluid properties.
Prerequisites: CHEM $107^{D}$ and CHEM $111^{\text {D }}$ and PNGE $201^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 4

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PNGE 315 - Reservoir Fluids

Thermodynamic behavior of naturally occurring hydrocarbon mixtures; evaluation and correlation of physical properties of petroleum reservoir fluids including laboratory and empirical methods.

Prerequisites: PNGE $312^{\text {D }}$ and CHEM $108^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PNGE 325 - Reservoir Engineering

This course provides an in depth review of reservoir characteristics and behavior. Topics covered will include fluid flow through porous materials, evaluation of oil and gas resources and the reserves under a variety of production methods, and prediction of reservoir performance to achieve maximum conservation.

Prerequisites: EGEO $327^{\text {D }}$ and PNGE $315^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PNGE 330 - Unconventional Reservoir Engineering

This course addresses topics that are specific to exploration of unconventional reservoirs - identification and characterization, economics, efficient completion technologies and development strategies. Tight gas and shale gas reservoirs and coal bed methane engineering are addressed.

Prerequisite: PNGE 325 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PNGE 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PNGE 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PNGE 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PNGE 410 - Drilling engineering with Lab

This course provides an in depth review of drilling engineering practices. Topics covered will include functions and design considerations for the rotating system, hoisting system and circulating system; drilling fluids calculations and selections; hydraulic programs; drilling optimization; casing string design; cementing programs; and pressure control; laboratory evaluation of mud weight control filtration, chemical contaminants and rheological models.

Prerequisites: ENGR 301 (may be taken concurrently) ${ }^{\text {D }}$ and PNGE $312^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$
Credits: 4
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PNGE 420 - Production Engineering

This course provides an in depth review of petroleum production engineering practices. Topics covered will include well completion, performance of productive formations, drill stem tests, completion of wells, flowing wells, gas lift methods and equipment, pumping installation design, well stimulation, emulsion, treating, gathering and storage of oil and gas, field automation.

Prerequisites: PNGE 410 (may be taken concurrently) ${ }^{D}$ and PNGE $325^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PNGE 430 - Reservoir Simulation

Mathematical models governing fluid flow in reservoirs; relevant numerical methods; numerical reservoir simulations; treatment of wells; history matching; simulation project performed using a commercial simulator.

Prerequisites: PNGE $325^{\text {D }}$ and ENGR $130^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PNGE 432 - Formation Evaluation

This course provides an in depth review of techniques for formation evaluation. Topics covered will include various well logging methods and related calculations with exercises in interpretation of data from actual well logs.

Prerequisite: PNGE $312^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PNGE 435 - Pressure Transient Analysis

This course provides an in depth review of the well test analysis methods. Topics covered will include pressure transient tests and interpretation methods, unsteady-state fluid flow through porous rock, analysis of the drawdown and buildup tests, wellbore storage, application of pressure derivative in pressure transient data analysis, testing of hydraulically fractured wells, type curve method, testing of horizontal wells, unified method of analysis, well test design.

Prerequisite: PNGE 420 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PNGE 440 - Hydraulic Fracturing

This course starts with a general overview of different types of unconventional reservoirs and their geological and petrophysical properties. Second part of the course emphasizes hydraulic fracturing design and data collection for proper fracture design. Economic analysis of hydraulic fracturing will be covered as well as more advanced topics such as completion design optimization.

Prerequisite: PNGE $325^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PNGE 441 - Oil and Natural Gas Resource Valuation and Economics

This course provides an in depth review of the techiques for oil and gas property evaluation. Topics covered will include reserve estimation, decline analysis, petroleum property evaluation, interest calculations, cost estimation, and tax evaluation, investment decision analysis and computer applications in property evaluation.

Prerequisites: PNGE $325^{\text {D }}$ and PNGE $432^{* D}$ (may be taken concurrently).
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PNGE 443 - Enhanced Oil Recovery

This course teaches an integrated version of the basics of waterflooding and enhanced oil recovery (EOR), illustrating the connection of each process to a few fundamental principles. It reviews the specifics of thermal and solvent EOR by relating basic principles to the results of cases from the field.

Prerequisite: PNGE $325^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Petro \& Natl Gas Engineering.
Enrollment limited to students in the Coll of Health, Engineer \& Sci college.

## PNGE 445 - Natural Gas Engineering with Lab

This course provides an in depth review of natural gas evaluation and production engineering practices. Topics covered will include natural gas properties, compression, transmission, processing and application of reservoir engineering principles to predict the performance and design of gas, gas-condensate and storage reservoirs. Includes a laboratory devoted to gas measurements.

Prerequisite: PNGE $325^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PNGE 450 - Internship

Supervised placement and research in selected public and private agencies.

Credits: 3-9
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PNGE 459 - Petroleum and Natural Gas Design/Capstone I

This course provides a proposal preparation for PNGE 460 which includes defining a comprehensive problem in design involving systems in oil and gas production, field processing, transportation, and storage.

Prerequisites: PNGE $325^{\mathrm{D}}$ and PNGE $410^{\mathrm{D}}$ and PNGE $420^{* D}$ and
PNGE $432^{* D}$ (may be taken concurrently).
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
PNGE 460 - Petroleum and Natural Gas Engineering Design/Capstone II This course provides comprehensive problems in design involving systems in oil and gas production, field processing, transportation and storage.

Prerequisite: PNGE 459 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 2

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.
PNGE 470 - Petroleum and Natural Gas Engineering Undergraduate Research
Research and design problems of limited scope approved on an individual basis intended to promote independent inquiry.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

PNGE 490 - Independent Study
Investigation of the theoretical or experimental area following a plan or proposal initiated by the student and approved by the major advisor. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## PNGE 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PNGE 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Philanthropy, Nonprofit Leadership, and Public Administration (NLPA)

## NLPA 120 - Civic Engagement and Community Decision-Making

An introduction to civic engagement in a democratic society with a focus on the complex nature of public policy making and the role each citizen plays in the formation and modification of socially just public policies. Students will gain introductory skills in civil voice, civil discourse, public policy analysis and community mobilizing for social good.

## Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, \& Summer
Thematic Thread(s): Transfer Thread Completion Course

## NLPA 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## NLPA 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
NLPA 195 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## NLPA 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## NLPA 200 - Empowered to Serve

Planning a career where you will help others? The interdisciplinary approach of this course introduces students to the historical, cultural and ethical context of service; investigates the increase in the number of helping professionals; takes students on a journey of personal empowerment; and offers theories and best practices that prepare them to empower the persons they will serve in their professions. Assigned readings, case studies, service-learning experiences, structured reflection and discussions empower students to understand and develop individual purpose, become lifelong learners, and combine knowledge, skills, values and motivation to make a difference in the lives of those they serve. This course would be especially useful for students seeking careers in helping professions such as animal care and protection, community and public service, counseling, education, health and wellness, human rights, legal and protective services, the military or social services.

## Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, \& Summer
Thematic Thread(s): 21 st Century Healthcare, Innovation, Entrepreneurship, and Positive Change, Transfer Thread Completion Course, Well-Being of Children and Youth

## NLPA 220 - Introduction to Nonprofit Management

An introduction to the nonprofit sector; emphasis on leadership and decision-making in rapidly growing areas of health and human service, cultural, environmental, educational, charitable, and religious organizations.

## Credits: 3

Term(s) Typically Offered: Offered Spring \& Summer Terms Thematic Thread(s): Fighting Social Problems, Innovation, Entrepreneurship, and Positive Change, Leadership Development, Transfer Thread Completion Course, Well-Being of Children and Youth

## NLPA 230 - Introduction to Public Administration

This interdisciplinary and global approach to public administration will explore the theories and best practices employed by public servants to promote the public good through ethical, culturally competent, and efficient and effective service provision. Through case studies and service-learning projects, students will be encouraged to consider a cross sector approach for implementing and evaluating policies and procedures that impact quality of life both domestically and globally. Students will develop a greater understanding of the role public servants have in their lives, develop skills employed by these professionals and explore public service career opportunities.

Credits: 3
Term(s) Typically Offered: Offerings Vary

## NLPA 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## NLPA 295-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## NLPA 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## NLPA 305 - Financial Best Practices for Decision Makers

Emphasizes practical use of accounting information to support decision making by those in fields such as business, sports, resort management, government, education, and not-for-profit. Overview of financial and managerial accounting from a user's perspective, including use and analysis of financial statements, internal control, budget preparation, and cost and revenues behavior patterns. (For non-business majors)

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd
Thematic Thread(s): Building a Healthy Society, Innovation,
Entrepreneurship, and Positive Change, Transfer Thread Completion

## Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## NLPA 320 - Community Change and Development

This course surveys the field of community development within the context of community collaboration and civic leadership. Topics include social capital, asset-based community development, sustainable community programs, economic development programs, private/public partnerships, and the shared role of the private, public, nonprofit sectors and everyday citizens in community development.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Thematic Thread(s): Building a Healthy Society, Environmental Problems Toolkit, Fighting Social Problems, Innovation, Entrepreneurship, and Positive Change, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
NLPA 325 - Social and Ethical Issues in Philanthropy and Fundraising Resource development, including grant writing and social entrepreneurs, is increasingly important to the future of nonprofit and educational organizations. This course addresses methods for integrating resource development and income generation into an organization's life. Three themes are found in this course: resource development as a management function, resource development as a management process, and issues in resource development.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Building a Healthy Society, Innovation,
Entrepreneurship, and Positive Change, Transfer Thread Completion

## Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## NLPA 328 - Program Design and Evaluation in Nonprofit and

 Governmental OrganizationsEffective and efficient programs change lives! This course offers students the strategies and best practices for designing high quality programs, the tools and ethical framework to monitor program delivery, the qualitative and quantitative research skills essential for relevant evaluation and the necessary processes for program elimination, modification and scaling. Through case studies, service-learning projects and other hands-on assignments, students will be challenged to apply concepts to practice including the preparation of SMART objectives, logic models, project timelines, evaluation plans, program reports and recommendations for future programming.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Innovation, Entrepreneurship, and Positive Change, Transfer Thread Completion Course, Well-Being of Children and Youth Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## NLPA 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## NLPA 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## NLPA 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## NLPA 450 - Internship

Supervised placement in selected professional agencies.
Credits: 1-12
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## NLPA 490 - Independent Study

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## NLPA 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## NLPA 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Philosophy (PHIL)

PHIL 101 - Philosophical Inquiry

A first encounter with the nature and methods of philosophical thinking in which a person's view of his/her own nature and of the world becomes challenged, explored and deepened. Students read a diverse range of primary texts, both classical and contemporary, western and non-western. They may also view films and other media that present philosophical arguments. This course introduces students to the many forms of inquiry and analysis conducted in the humanities, with a focus on the perennial questions that philosophy addresses.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Transfer Thread Completion Course

## PHIL 110 - Ethics and Civil Discourse

An introduction to the practice of civil discourse through a philosophical study of ethics from theoretical and applied perspectives.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## PHIL 113 - Formal Logic

An introduction to the standards and methods of inference utilized in formal systems of logic including traditional syllogistic logic and modern propositional logic. Phil 113 is designed to improve students' ability to recognize fallacies in reasoning, to identify and make valid inferences, and to construct sound arguments.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Transfer Thread Completion Course

## PHIL 123 - Ethics

An introduction to the study of questions concerning right action, moral obligation, and an examination of various theories of moral judgment. This course introduces students to the many forms of inquiry and analysis conducted in the humanities, especially philosophy, and the perennial questions that philosophy addresses. Students engage a diverse range of primary texts in ethics and ethical theory, both classical and contemporary, western and non-western. They also view and analyze films and other media that present ethical arguments.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Transfer Thread Completion Course

## PHIL 139- University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## PHIL 140 - World Religions

This course is designed to be a survey of religious traditions from across the globe and an exploration of their philosophies and world views. This course introduces students to the many forms of inquiry and analysis conducted in the humanities, especially religious studies and comparative religion. Students engage a range of primary and secondary texts to gain a comparative understanding of the world's religions.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Transfer Thread Completion Course

## PHIL 163 - Philosophy in Literature

An examination of the philosophical content of poetry, prose, and film of exceptional literary and philosophical merit. This course introduces students to the many forms of inquiry and analysis conducted in the humanities, especially philosophy, and the perennial questions that philosophy addresses. Students engage a diverse range of literary texts, both classical and contemporary, western and non-western. They also view and analyze films and other media that present philosophical arguments.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
PHIL 170 - American Philosophy
An investigation of the historical genesis of American culture through a reading of the prominent philosophical literature the culture has produced.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Becoming America, Being American, Transfer Thread Completion Course

## PHIL 171 - Philosophy of Human Existence

An investigation into and discussion of the central themes of existential philosophy. Philosophers such as Kierkegaard and Nietzsche will be studied in terms of their retrieval of the meaning of human existence.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Thematic Thread(s): Art \& Society, Transfer Thread Completion Course,
Violence, Who Do We Think We Are

## PHIL 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## PHIL 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## PHIL 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## PHIL 261 - Philosophy of Art

Exploration of basic issues and philosophical views of the experience of the arts. This course aims at the understanding and enhancement of the experience of the arts, and at a thoughtful appraisal of the role of art in life.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Creating Art, Political Arts, Transfer Thread Completion Course

## PHIL 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
PHIL 295 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## PHIL 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## PHIL 313 - Symbolic Logic

An advanced investigation of logical thought through the use of special techniques of symbolization, the logic of unquantified and quantified propositions, the nature and limits of logical systems and the foundation of mathematics are some of the important topics considered.

Prerequisites: PHIL $113^{\text {D }}$ or MATH $120^{\text {D }}$ or MATH $199^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHIL 324 - Environmental Ethics

An analysis of environmental issues using a philosophical understanding of nature, with a consideration of the ethical responsibilities in the use of the earth's resources, behavior toward non-human species, and obligations toward future generations.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Building a Healthy Society, Food, Wellness \&
Environment Across Cultures, Sustainability, Transfer Thread Completion
Course, Transnational Culture
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHIL 325 - Medical/Health Care Ethics

A course in applied ethics about conceptual, ethical, and legal dilemmas in the institutional rights of patients, in the responsibilities of practitioners, in technological challenges to values in the modern age in caring for the seriously ill and the dying, and in rationing health care in a large society.

## Credits: 3

Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): 21 st Century Healthcare, Fighting Social Problems, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHIL 326 - Business Ethics

A study of applied ethics about the conceptual and ethical dilemmas in the business professions. An examination of cultural challenges of social and moral responsibility in a technically sophisticated economic climate.

Credits: 3
Thematic Thread(s): Innovation, Entrepreneurship, and Positive Change, Leadership Development, Transfer Thread Completion Course Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHIL 331 - Social and Political Philosophy

An in-depth study of central concepts and issues in social and political thought from multiple, diverse perspectives. Issues may include just and fair societies, theories of political obligation, and theories of citizenship and civic engagement with regard to diverse, heterogeneous communities.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Thematic Thread(s): African-American Studies, Global Citizenship, Civil
Rights \& Social Movements, Political Arts, Transfer Thread Completion Course, Well-Being of Children and Youth
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHIL 335 - Philosophy of Law and Justice

A study of multiple theories of law and the nature of law's relation to justice with special emphasis on a notion of justice for institutions.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Thematic Thread(s): African-American Studies, Civil Rights \& Social Movements, Demystifying Crime \& Justice, Gender and Diversity, Transfer Thread Completion Course, Well-Being of Children and Youth
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHIL 336 - Philosophy of Gender and Sex

This course will examine concepts, values and assumptions relevant to gender and sex in our diverse society. topics to be explored may include the ontological status of gender and sex; the cultural representations of masculinity, femininity and sexuality; or the relationship between gender, society and power, and its epistemological and ethical consequences.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): African-American Studies, Body and Self, Gender and Diversity, Transfer Thread Completion Course, Well-Being of Children and Youth, Who Do We Think We Are
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHIL 338 - Ethics, Technology, and the Future

This course considers ethical, sociopolitical, epistemological, and metaphysical issues arising from the design and use of emerging technologies, including information technologies, robots and autonomous machines, neurological and implantable technologies, genetic engineering, and artificial intelligence, as well as the more speculative technologies of science fiction.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even
Thematic Thread(s): Global Citizenship, The Future, Leadership Development, Mind \& Brain, Revolutions, Transfer Thread Completion Course

## PHIL 341 - Philosophy of Religion

A critical inquiry into the nature and validity of religious belief and experience, its relation to other human interests, its diversity, and its contemporary significance.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## PHIL 343-Asian Philosophy

An investigation of the central religions and philosophical ideas of Oriental cultures, focusing primarily on the cultures of India, China, Japan and Southeast Asia.

Credits: 3
Thematic Thread(s): Mind \& Brain, Transfer Thread Completion Course, Transnational Culture, Who Do We Think We Are
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHIL 351 - Philosophy of Natural Science

An in-depth examination of the nature of natural science, including its aims, methods, central concepts, and limits and a thoughtful appraisal of its significance for the modern age.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHIL 362 - Philosophy of Mind

This course considers philosophical perspectives on the nature of mind and its relation to the world. Topics covered include the mind-body problem, the nature of consciousness, personal identity and the nature of the self, free will and moral responsibility, and the implications of technology for the future of human consciousness.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Thematic Thread(s): Mind \& Brain, Transfer Thread Completion Course, Who Do We Think We Are
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHIL 371 - Ancient Western Philosophy

A study of the major philosophers and schools of philosophy in the ancient Western world and their influence on the medieval period. The course examines basic questions and concepts in theory of knowledge, logic, ethics, politics, aesthetics, and metaphysics as found in the works of thinkers like Plato, Aristotle, the Presocratics, the Stoics, and the Epicureans. Students will consider how ancient philosophy continues to provide insight and inspiration in the contemporary world.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd
Thematic Thread(s): Food, Wellness \& Environment Across Cultures, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHIL 372 - Modern Western Philosophy

A study of Western philosophy from the Renaissance through the Age of Enlightenment and into the early nineteenth century, this course traces the basic concepts and problems of the period, especially problems of knowledge, ethics, and metaphysics. Students will consider the contribution of modern philosophers to the Scientific Revolution and to the development of the scientific method, as well as how modern philosophy continues to provide insight and inspiration in the contemporary world.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Thematic Thread(s): Mind \& Brain, Revolutions, Transfer Thread
Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHIL 373 - Modern Authors and Issues

Variable content within the modern contemporary period of philosophical thinking. Repeatable to 6 credits.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHIL 375 - Existentialism and Phenomenology

A study of important twentieth century philosophers in terms of their attempt to establish a new approach to philosophy and their reaction and attempt to overcome Western metaphysics.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Thematic Thread(s): Body and Self, Mind \& Brain, Transfer Thread
Completion Course, Who Do We Think We Are
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHIL 376-Analytic Philosophy

An examination of the development and influence of Anglo-American analytic philosophy in the twentieth century. The focus will be on how analytic philosophers have used logic, the analysis of language, and scientific methodology in approaching traditional philosophical questions.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHIL 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## PHIL 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHIL 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHIL 490 - Independent Study

A special course designed primarily for students seeking knowledge in philosophy beyond course offerings. The student's interests, in consultation with department members, determines the topics covered. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## PHIL 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHIL 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Physical and Health Education (PE)

## PE 106-Gymnastics Fundamentals

This course is based on the study of PreK-12 developmentally appropriate gymnastics, with the recognition of individual and group uniqueness, acknowledging and valuing diversity. An emphasis will be placed on an educational gymnastics approach, utilizing movement concepts appropriate for teaching children body awareness and body control. Students will also learn skill progressions, spotting techniques, and biomechanical principles involved in a variety of gymnastic skills performed on traditional and non-traditional gymnastics equipment.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Enrollment is limited to students with a major in School Wellness Education, Health-Physical Educ Teaching or Health and Physical Education.

## PE 107 - Aquatic Fundamentals

This course is designed to provide the student with an overview of a variety of aquatic activities. Consideration is given to basic swimming strokes, starts and turns, small craft safety, skin diving, elementary non-swimming rescue techniques, diving progressions from the deck, springboard diving, synchronized swimming, water polo, personal fitness, and aquatic games. This is a Theory and Technique Course (open to Physical Education majors or Aquatics minors only).

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Enrollment is limited to students with a program in School Wellness
Education, Health-Physical Educ Teaching, Health and Physical Education or Aquatics.

## PE 113-Golf

This course is designed to introduce the student to all phases of golf through application of the skills used in these activities. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1
Term(s) Typically Offered: Offered as Needed

## PE 114- Orienteering

This course is designed to teach the fundamental skills for traveling in the outdoors by map and compass in unfamiliar territory, and to introduce the sport of orienteering. The sport involves competitive cross country hiking/running on a set course as accurately and quickly as possible. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1
Term(s) Typically Offered: Offered as Needed

## PE 115 - Yoga and Well-Being

Yoga and Well-Being is an experiential and theoretical course that will introduce the student to the practice and examination of Yoga. The course will cover the practice of yoga postures (asanas), the use of controlled breathing (ujjayi) the engagement of body locks (bandhas), the study of yoga's historic background and the benefits of meditation and relations techniques. Additionally it will examine postures from an anatomical perspective providing the student with a comprehensive examination of proper alignment and correct positioning of the body in order to avoid injury. The course will present the many benefits of Yoga at a physical, mental and emotional level, and its application to the needs of our society today.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Healthy Body, Mind \& Environment, Transfer Thread Completion Course

## PE 123 - Stand-Up Paddle Boarding

This introductory course is designed to explore the fundamental skills and safety concepts necessary to paddle stand-up paddle boards (SUPs) effectively. Safety procedures will be emphasized such as, selection of waterways appropriate for an individual's skill set and experience level, self-rescue and group rescue approaches. Various paddling techniques including power strokes, turning strokes and bracing with the paddle will be examined. In addition, equipment selection and care, boating regulations, trip planning and logistics, outdoor leadership, basic water reading skills, flat water navigation skills, white water classification and minimum environmental impact techniques will be addressed. An overview of the various types of stand-up paddle boards (SUP) as well as necessary safety equipment will be explored.

## Credits: 2

Term(s) Typically Offered: Offered Fall Terms Odd

## PE 125 - Bicycling

This introductory course is designed to explore the fundamental skills and safety concepts necessary to participate in bicycling effectively. Cycling techniques related to both on-road and off-road will be examined. Safety procedures, bicycling control, fitness and social benefits to the rider will be emphasized. Current trends in cycling technology will be examined. Additionally, strategies to minimize environmental impact will be explored.

Credits: 2
Term(s) Typically Offered: Offered Fall Terms Even
PE 131 - Foundations of Leadership in Physical Activity
This course is designed to introduce the student majoring in
Leadership in Physical Activity to the history, philosophies, professional organizations, important concepts, careers and trends in physical activity leadership.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms

## PE 133 - Tai Chi Chuan: Chinese Classical Exercise

An introduction to the Chinese Classical Exercise System inspired by the Chinese "Book of Changes.Tai Chi Chuan concentrates on relaxed movement, proper breathing and attention to posture. Any age or physical performance level may participate. This is a Wellness and Lifetime Activity Course (offered to all students).

## PE 139- University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## PE 140 - Downhill Snow Skiing I

This course students to acquire a basic knowledge and appreciation of skiing as a sport and as a life-time leisure activity. Safety procedures and skiing etiquette also are discussed. Instruction takes place at Peek N' Peak Ski Resort. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1
Term(s) Typically Offered: Offered as Needed

## PE 141 - Personal Physical Fitness

This course provides students the opportunity for individual assessment and exercise programs to improve and/or maintain physical fitness and weight control. Principles involved with the maintenance of physical fitness, weight control, diets, and the aging process will be provided through lecture. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1
Term(s) Typically Offered: Offered as Needed
PE 146-Beginning Swimming
This course is designed to provide the novice or non-swimmer with the opportunity to learn elementary back stroke, water safety skills, diving and adjustment to water. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1
Term(s) Typically Offered: Offered as Needed

## PE 149- Tennis

This course teaches basic fundamentals. The rules, regulations, and history of tennis also will be covered, along with strategies of the single and double games. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1
Term(s) Typically Offered: Offered as Needed

PE 152 - Principles of School Wellness I
This course is an orientation to the art and the science of teaching physical education at the K-12 levels. Framed within the Collaborative Approach to Learning and Health: Whole School, Whole Community, Whole Child, students will study this latest collaborative approach to learning and health which is reflective of a local community and anchored in schools. Required school observations in diverse settings will provide students with the experience to observe and reflect upon class climate, responsibilities for fostering a positive learning environment and high quality teaching. The study of health trends in youth will envelop the latest model of how schools are promoting a comprehensive schoolbased physical activity model and the role physical education teacher play in it. Schools central to professional development including a writing assessment, resume development and starting a professional portfolio are used as artifacts of reflective practice at this initial state of teacher education. This is a Theory course (open to Physical Education majors only).

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment is limited to students with a major in School Wellness
Education, Health-Physical Educ Teaching or Health and Physical Education.

## PE 166-Coaching Practicum

The coaching practicum is designed to provide the student with a realistic experience at a level and in a setting similar to that in which he/ she wishes to obtain employment. The practicum experience is a $50-$ hour learning opportunity in which the student assists in all phases of the operation of an athletic program. The student may not be the head coach, unless a direct supervisor is present. The student may not be a current participating athlete on the team. The student may not work with the same team twice. Each experience must be at a different level if working with the same sport. A minimum of two different sports must be included in the practicum experiences. (For example: HS baseball, Little League baseball, HS football). Each student must complete a contract with the athletic program and submit the contract to the coaching practicum coordinator (University supervisor) for approval. The coordinator will then contact the athletic program for verification of the learning experience, dates of the experiences and details of evaluation procedures.

Prerequisites: PE $106^{\mathrm{D}}$ and (PE $171^{\mathrm{D}}$ or PE $356^{\mathrm{D}}$ ) and PE $175^{\mathrm{D}}$ and PE $177^{\mathrm{D}}$ and (PE $260^{\mathrm{D}}$ or PE $242^{\mathrm{D}}$ )
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 1

Term(s) Typically Offered: Offered Spring \& Summer Terms

## PE 175 - Teaching of Track and Field

Emphasizes track and field skill acquisition along with identification of appropriate teaching methods associated with these activities. This is a Theory and Technique Course (open to Physical Education majors only).

## Credits: 1

Term(s) Typically Offered: Offered as Needed

## PE 177-Teaching of Self-Defense/Lacrosse

The course deals with the skills, knowledge, and attributes needed for self-defense and lacrosse. This course also emphasizes the teaching, coaching, officiating, and physical skill development of men's and women's lacrosse. This is a Theory and Technique Course (open to Physical Education majors only).

Credits: 1
Term(s) Typically Offered: Offered as Needed

## PE 181 - Adventures in Backpacking

This course teaches the basic knowledge and skills of backpacking travel in a temperate environment. Techniques such as how to use and to carry a backpack, hiking skills including route selection and trail negotiation with a pack, map, and compass techniques, knowledge and care of backpacking equipment, planning backpacking trips, and environmentally sound backpacking skills will be covered. The course includes a mandatory weekend trip to put skills to practical use. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1
Term(s) Typically Offered: Offered as Needed

## PE 182 - Introduction to Rock Climbing

This course introduces students to the fundamental skills of top rope rock climbing. Beginning skills in belaying, static climbing, rappelling, prussiking, artificial wall climbing safety considerations and minimal environmental approaches will be covered. The student will be introduced to various teaching methodologies and classroom management approaches specific to rock climbing community and commercial settings.

Credits: 2
Term(s) Typically Offered: Offered Fall Terms

## PE 184 - Adventure Games

This course is designed to provide physical activity and direct experience in adventure challenges requiring self-discipline, willingness to try, and personal commitment. Coursework includes physical fitness and flexibility exercises, aerobic games, cooperative games and nongames, group initiatives, trust activities, and challenge course low and high elements involving perceived physical and psychological risk and challenges. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1
Term(s) Typically Offered: Offered as Needed

## PE 186 - Cross Country Skiing and Snowshoeing

This introductory course is designed to explore the fundamental skills and safety concepts necessary to participate in cross country skiing and snowshoeing effectively. The physical and cognitive benefits of outdoor aerobic activities will be addressed. Safety approaches to cold weather activities will be explored. Various skiing and snowshoeing techniques including diagonal stride, kick concept, double poling, descending/ ascending, striding, turning and walking/running will be examined. In addition, equipment selection and care, trip planning and logistics, and minimum environmental impact techniques will be addressed.

## Credits: 2

Term(s) Typically Offered: Offered Spring Terms

## PE 187 - Flat-water Canoe Tripping

This course teaches the basic skills and concepts of flat-water canoe camping, such as how to enter and to exit a canoe, tandem paddling techniques, canoe safety, and canoe portaging. Students will also learn basic canoe camping skills, including food planning, how to use camping equipment, and minimum impact camping techniques. Students will participate in a mandatory weekend canoe camping experience to put learned skills to practical use. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1
Term(s) Typically Offered: Offered as Needed

## PE 188 - Sailing

This course offers students an opportunity to develop skills, to learn techniques, and to achieve personal satisfaction in beginning sailing. The course also involves the knowledge and application of the rules of water safety to the sport of sailing. This class is designed for beginners. At its conclusion students will be able to enjoy sailing as a lifetime recreational sport. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1
Term(s) Typically Offered: Offered as Needed

## PE 189-Basic Canoeing

Instruction focuses on the fundamental skills and concepts needed to operate a canoe effectively. Furthermore, the student will be introduced to various teaching methodologies and classroom management approaches for teaching in non-traditional settings. Safety procedures will be emphasized including self-rescue and group rescue approaches. Various paddling techniques including power strokes, turning strokes and bracing with the paddle will be examined. In addition, equipment selection and care, boating regulations, trip planning and logistics, outdoor leadership, basic water reading skills, white water clarification and minimum environmental impact techniques will be addressed. An overview of the various types of and safety equipment will be explored.

Credits: 2
Term(s) Typically Offered: Offered as Needed

## PE 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## PE 191 - Foundations of School Wellness

This course is designed to introduce the student to the historical, philosophical, cultural and sociological influences that have shaped the profession of teaching health and physical education. A foundational perspective will be taken to clarify the related disciplines, history and current issues of health and physical education and of education, from the ancient cultures to the 21 st century. Including the framework involved in the Whole School, whole child, whole Community (WSCC) Model, the Comprehensive School Physical Activity Program (CSPAP) and the Health Optimizing Physical Education (HOPE) Model.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Enrollment is limited to students with a major in School Wellness Education, Health-Physical Educ Teaching or Health and Physical Education.

## PE 192 - Diversity Issues in Physical Education

This course will explore differences among students within a variety of physical education settings. Students will learn about other people and explore how others view participation in physical activity and exercise. This course will help students become sensitive to and appreciate the diversity of others, thus, demonstrating responsible social behaviors that will enable them to interact in a positive manner with diverse groups within the physical education enrichment. This is a Theory and Technique Course.

Credits: 2
Term(s) Typically Offered: Offered as Needed
Enrollment is limited to students with a major in School Wellness Education, Health-Physical Educ Teaching or Health and Physical Education.

## PE 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## PE 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## PE 202-Technology for Wellness

This course is designed to provide the student with an overview of the various types of technology that can be utilized in the area of wellness and fitness. The purpose of this course is to familiarize and enhance students' technology skills to support instruction in various education, wellness and fitness settings. the course includes personal computer use in creating materials to enhance instruction, promotion and assessment. Also included are other emerging technologies, in addition to various internet options. A portion of the course will be conducted using SRU's Learning Management System.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
PE 227 - Introduction to Adapted Physical Activity
Develop an understanding of disabilities and apply that knowledge in the application of active-living, community-based physical activity programs.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms

## PE 230-Teaching and Coaching of Track \& Field

This course is designed to introduce the student to the teaching and coaching aspects of track \& field. Skill acquisition, strength and conditioning methods, teaching and coaching skills and historical perspectives of track \& field will be studies. Emphasis will be placed on planning and applying developmentally appropriate activities for all learners.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms, Offerings Vary

PE 231 - Strategies for Teaching Physical Activity
This course is designed to teach evidence-based educational methods and adult learning strategies to equip the student to educate individuals throughout the lifespan through: 1) a basic understanding of learning and developmental theories; 2) communication techniques; 3) positive behavior management; 4) environmental modifications; and 5) group engagement strategies.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms

## PE 232 - Physical Activity and Wellbeing in Society

This course discusses patterns of social behavior as they relate to physical activity and well-being. Students will examine why physical activity behaviors have changed over time, and the effects these changes have had on human and society. Students will analyze physical activity trends and initiatives throughout the world and using a social-ecological approach will design a solution for how communities, businesses, schools and workplaces can re-engineer physical activity back into society.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms

## PE 236 - Introduction to Kayaking

This introductory course is designed to explore the fundamental skill and safety concepts necessary to paddle a kayak effectively. Safety procedures will be emphasized such as entering and exiting the kayak, the bow rescue, the Eskimo roll, as well as self-rescue and group-rescue approaches. Various paddling techniques including power strokes, turning strokes, and bracing with the paddle will be examined. In addition, equipment selection and care, boating regulations, tripping planning and logistics, outdoor leadership, basic water reading skills, white water classification and minimum environmental impact techniques will be addressed. An overview of the various types of kayaks and kayaking, such as whitewater kayaks, sit-on-top kayaks, and touring kayaks, as well as necessary safety equipment, will be explored.

Credits: 2
Term(s) Typically Offered: Offered Spring Terms

## PE 237 - Emergency Medical Response

This course is designed to provide the student with the knowledge and skills necessary to work as an emergency medical responder (EMR) to help sustain life, reduce pain and minimize the consequences of injury or sudden illness until more advanced medical help takes over. The course content meets or exceeds the current Emergency Medical Services Educational Standards for Emergency Medical Responders and current NATA Education Competencies.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
PE 238 - Applied Principles of Exercise
This course will provide students with an understanding of applied exercise principles associated with both health and skill related fitness, topics will include: warm up and cool down protocols, exercise frequency, intensity, type and time (FITT) principles, overload, progression, specificity, regularity and individuality (Basic Training Principles) and target heart-rate.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms

## PE 240 - Downhill Snow Skiing II

Advanced techniques of downhill skiing are presented. Instruction takes place at Peek N' Peak Resort. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1
Term(s) Typically Offered: Offered as Needed

## PE 241-Outdoor Pursuits

This course is designed to introduce the student to the varied but interrelated topics of outdoor pursuits, adventure programming, experiential education, group problem-solving, and cooperative games philosophy. The course will provide physical activity, direct experience, and leadership techniques in adventure challenges which require elfdiscipline, a willingness to try, and personal commitment. This is a Theory and Technique Course.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Healthy Body, Mind \& Environment, Transfer Thread Completion Course

## PE 242 - Physical Health and Fitness Education

This course is designed to provide knowledge of evidence based benefits associated with regular physical activity along with knowledge to develop, organize, administer and assess age appropriate physical activity and fitness programs for children, adolescents and adults.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms

## PE 243-Educational Movement in Health \& Wellness

This course helps students achieve individual competency in applying educational gymnastics, fundamental movement, educational/ multicultural games and educational/creative dance to learn Laban's educational movement concepts through the use of cooperative learning, problem solving and guided discovery. Students construct developmentally appropriate interdisciplinary standards-based expressive movement experiences that show meaningful application to children's learning inclusive of children with special needs and English language learners. Content will also address health and wellness concepts central to grades PreK-4 as it relates to educational movement. Students will reflect (metacognition) upon their educational movement experiences including but not limited to individual competency, diversity, critical thinking, core subject integration and differentiating instruction.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Education, Transfer Thread Completion Course

## PE 250 - Equine Assisted Activities

An introduction to equine assisted activities including basic safety skills, lesson preparation, benefits for individuals with disabilities, tack/equine selection, and certification procedures. Students will gain practical experience through riding horses and assisting individuals with disabilities during lessons.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## PE 253 - Principles of School Wellness II

This course is an orientation to the art and the science of teaching physical and health at the $\mathrm{K}-12$ levels. Framed within the National Standards \& Grade Level Outcomes for K-12 Physical Education (SHAPE America, 2014) pre-service teacher candidates will study curriculum models, grade level outcomes, class organization, management and safety techniques, developmentally appropriate communication techniques, health and wellness integration strategies infused in lessons, locating and using professional resources for planning and teaching, lesson plan writing, a spectrum of direct and indirect teaching styles, systematic observation tools, teaching and post-lesson reflecting. Skills central to professional development include lesson plan writing, class organization and management documentation, systematic observation of teaching, post-lesson reflecting. Pre-service teacher candidates will build on the professional portfolio started in PE 152 using artifacts.

Prerequisites: PE $152^{\text {C }}$ and PE $383^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with a semester level of Freshman 1,
Freshman 2, Sophomore 1 or Sophomore 2.
Enrollment is limited to students with a program in School Wellness Education.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## PE 258 - Social \& Emotional Wellness

This course is designed to examine topics relating to psychosocial health \& wellness of school aged youth as a part of a comprehensive approach to school wellness. Future educators will learn now to address topics such as respect and appreciation for all persons, bullying, conflict resolution, stress reduction, suicide prevention, depression, anxiety and high-risk behavior with K-12 students.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms

## PE 262 - Adapted Aquatics

Develop knowledge base in the study of disability through discussion and practical experiences as it relates to aquatic programming.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
PE 263 - Lifeguarding
The lifeguarding course is designed to provide lifeguard candidates with skills and knowledge necessary to keep patrons of aquatic facilities safe in and around water. This course includes techniques with aquaticspecific first aid and cardiopulmonary resuscitation (CPR) training,
Automated External Defibrillation, Oxygen Administration and training in specific water environments. Offered to all students.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms

## PE 266 - Disability Sport in the 21st Century: A Global Perspective

This course is designed to introduce the students to the study of Disability Sport across the world. Students will study the history, current movement, and future developments of Disability Sport in an ever changing and emerging field of sport for persons with disabilities.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## PE 268 - Contemporary Topics in Health

This course is designed to introduce students to current issues in health and wellness and provide opportunities for students to assess health needs in school and community settings. In this course, students will identify programs and initiatives that promote healthy living and improve well-being based on the health needs of society.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
PE 270 - Psychological and Sociological Bases of Sport
This course provides students with an understanding of the relationships between sport and various psychological and sociological factors. This is a Theory and Technique Course.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Enrollment is limited to students with a major in School Wellness
Education, Health-Physical Educ Teaching, PE-Physical Activ\&Fitness
Mgmt, Health and Physical Education or Athletic Training.
PE 272 - Enhancing Fitness through Running and Walking
This course is designed to teach students how to personally perform and to lead others in aerobic physical activities using indoor and outdoor settings. This course focuses on leading fitness enhancing activities through running, trail-running, Nordic walking, community walking and hiking. These activities are designed to improve aerobic fitness, manage weight and promote healthy lifestyles. The settings include roadways, trails and community common areas. Course content centers on individual and group health and fitness, and strategies for conveying this information.

Credits: 2
Term(s) Typically Offered: Offered as Needed

## PE 274 - Assessment Strategies in Physical Education

This course content is designed to give the student an understanding of assessment techniques used in physical education. Students will learn the various techniques used for assessing as applied in the public school setting. Students will have the opportunity to use several of the computer applications related to physical education. This is a Theory and Technique Course.

Prerequisite: PE $152^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment is limited to students with a major in School Wellness Education, Health-Physical Educ Teaching or Health and Physical Education.

## PE 275 - Women in Sport

This course emphasizes the problems, processes and patterns of sport involvement of women in utilizing an historical, sociological, psychological and biological approach. The focus is primarily on women in the United States, although the sport participation of women in other cultures is also examined. This is a Theory and Technique Course (open to Physical Education majors only).

Credits: 3
Term(s) Typically Offered: Offered as Needed

## PE 276 - Skate-Based Action Sports

This course explores the fundamental skills and safety concepts necessary to engage in skate-based action sports effectively. Safety procedures such as, choosing locations and terrain appropriate for an individual's skill set and experience level are emphasized. Skatebased learning progressions address various skating techniques including proper stance, effective stopping, efficient pushing, turning, carving, sliding, core-specific land paddling strokes and bracing with the paddle. In addition, equipment selection and care, safety equipment requirements, regulations, trip planning and logistics, outdoor adventure leadership, and minimum environmental impact techniques are examined. There is an overview of the various types of skateboards longboards/land paddling boards and in-line skates as well as necessary safety equipment.

Credits: 2
Term(s) Typically Offered: Offered Spring Terms

## PE 289 - Advanced Canoeing

This course teaches students the advanced skills and techniques of canoeing. Safety instruction is emphasized. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1
Term(s) Typically Offered: Offered as Needed

## PE 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## PE 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## PE 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## PE 301 - Sports Officiating

This diverse class is designed to provide the student with an overview of the techniques required for officiating various sports. The official's role and rules of the game(s) will be presented, and opportunities will be provided for practical officiating experience. This will be followed by comprehensive analysis of the student's officiating style, knowledge of the rules and professionalism.

## Credits: 3

Term(s) Typically Offered: Offered Summer Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 302 - Foundations of Online Teaching and Learning

The course is designed to provide learners opportunities to understand the foundations of distance education. Students will be able to demonstrate competencies and skills to apply instructional strategies to develop curriculum that meets the needs of distant learners. In addition, students will be able to use various assessment methods to evaluate student learning through distance education.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2, Junior 1, Junior 2, Sophomore 1 or Sophomore 2 may not enroll.

PE 303 - Using Educational Technology to Enhance Learning
This course is designed to provide students with the knowledge and skills necessary to effectively use educational technology to enhance learning in both a traditional face-to-face classroom and also through distance or cyber education.

Credits: 3
Term(s) Typically Offered: Offered Winter Terms
Students with a semester level of Freshman 1, Freshman 2, Junior 1, Junior 2, Sophomore 1 or Sophomore 2 may not enroll.

PE 304 - Teaching Physical Education through Distance Education
This course is designed to provide students with the knowledge and skills necessary to effectively teach physical education through distance or cyber education.

Prerequisites: PE $302^{C}$ and PE $303{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2, Junior 1,
Junior 2, Sophomore 1 or Sophomore 2 may not enroll.
PE 305 - Teaching Health Education through Distance Education
This course is designed to provide students with the knowledge and skills necessary to effectively teach health education through distance or cyber education.

Prerequisites: PE $302{ }^{\text {C }}$ and PE $303{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2, Junior 1, Junior 2, Sophomore 1 or Sophomore 2 may not enroll.

## PE 306 - Conditioning for Athletic Performance

This course is designed to engage and immerse students in the theory and application of power and speed training as well as athletic motor skill development. Students will study the relationships among biomotor abilities and apply training principles and methods associated with the development of power-based athletic skills. Students will design and apply daily-, short- and long-term training programs for coaching athletes who seek improved athletic performance.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

PE 310 - Elementary School Wellness Skills and Fitness Activities
This course is designed to engage and immerse the student in the Society for Health and Physical Education (SHAPE) elementary grade level standards for health and physical education knowledge and skills. along with these standards this course will engage students in developmentally appropriate activities and lesson plan concepts that will ensure the teacher candidates understand the developmental progression of fundamental motor skills, their application to higher level movement, fitness and rhythmics. Teacher candidates will develop knowledge to create physically literate elementary aged learners who are prepared to lead a healthy active and well life.

Prerequisites: PE $152^{\mathrm{C}}$ and PE $383^{\mathrm{C}}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## PE 311 - Middle School Wellness Skills and Fitness Activities

This course is designed to engage and immerse the teacher candidate in the Society for Health and Physical Education (SHAPE) middle school grade level standards for health and physical education knowledge and skills. Along with these standards this course will engage teacher candidates in developmentally appropriate activities and lesson plan concepts that will ensure that they understand how to develop physical skills and knowledge to create physically literate middle school aged learners are prepared to lead a healthy active and well life.

Prerequisite: PE $310^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

PE 312-Secondary School Wellness Skills and Fitness Activities
This course is designed to engage and immerse the teacher candidate in the Society for Health and Physical Education (SHAPE) high school grade level standards for health and physical education knowledge and skills. Along with these standards this course will engage teacher candidates in developmentally appropriate activities and lesson plan concepts that will ensure that they understand how to develop specialized health optimizing physical activity and knowledge to create physically literate high school aged learners who are prepared to be healthy and active adults and college or career ready.

Prerequisite: PE $310^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## PE 328 - School Nutrition and Wellness

This course will provide students with information about the K-12 school nutrition environment and school nutrition services as defined by the Society of Health and Physical Educators (SHAPE America). Students will learn strategies for teaching K-12 students to reach and maintain a healthy weight as well as strategies for modeling healthy dietary behaviors and providing opportunities for healthy eating in schools. The role of the collaboration between school wellness educators, food service personnel, School Nurses and Registered Dietitians for improving students' nutrition and wellness will be discussed. This course is designed to provide the student with an understanding of the fundamental aspects of nutrition concepts and how they are applied to the K-12 settings.

Prerequisite: PE $268^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## PE 331 - Evidence-Based Physical Activity

This course is designed to introduce students in current theories, models and successful interventions used in physical activity promotion including: factors/barriers influencing physical activity among children/ adolescents and adults. The focus of the course is on the acquisition of evidence-based practices that lead to appropriate assessment strategies, implementation models and evaluative techniques.

Prerequisites: PE $131^{\mathrm{D}}$ and PE $231^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## PE 332 - Administration and Management of Physical Activity

This course is designed to teach students how to ethically administered, manage and evaluate physical activity programs in the community with respect to managing operations, developing and managing financial resources and managing human resources.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## PE 334 - Applied Methodologies in Adventure

This course is designed to teach evidence-based educational methods and learning strategies to equip the student to educate individuals in a variety of adventure throughout the lifespan through variety of adventure activities. A number of pertinent topics specific to adventure education will be addressed including, foundational knowledge, self-awareness and professional conduct, decision making and judgment, experiential teaching and facilitation, environmental stewardship, adventure program management, adventure safety and risk management, inclusive learning, and technical ability.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in School Wellness Education, Health-Physical Educ Teaching, Health and Physical Education or Adventure Fitness.

## PE 335-Science of the Mind-Body Connection

This course will introduce students to a variety of fitness activities such as yoga, Pilates along with other physical activities associated with nature all with a mind and body connection and associated with stress management and overall health-related fitness. this course will explore the interconnectedness of the mind and body in relation to quality of life and prevention of chronic disease.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Healthy Body, Mind \& Environment, Mind \& Brain, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 338 - Teaching and Leading Group Exercise

This course provides opportunities for practical skills and instruction to prepare the student to teach and lead various large group fitness activities involving children, adolescents and adults. Emphasis is placed on design, developmental appropriateness, safety and modifications for divers populations who are apparently healthy.

Prerequisite: PE 238 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 342-Wellness through Movement

This course is designed to provide the student with scientifically based knowledge concerning the benefits of physical activity along with the consequences associated with a lack of physical activity both on a personal and societal level. Students will participate in application of physical activity training, health-related fitness assessments and lifestyle modification activities.

Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): 21 st Century Healthcare, Body and Self, Education, Food, Wellness \& Environment Across Cultures, Healthy Body, Mind \&
Environment, Transfer Thread Completion Course, Well-Being of Children and Youth
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

PE 345 - Teaching and Coaching of Water Polo
This course is designed to introduce the student to the teaching and coaching aspects of water polo. Skill acquisition, strategy and tactics, strength and conditioning, teaching and coaching skills for water polo will be studies. Emphasis will be placed on planning and applying developmentally appropriate activities for all learners.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 348 - Aquatic Leadership

This course is designed to prepare students for leadership responsibilities in the field of aquatics. Program development, facility operation, risk management, and staff management will be included in this course.

Credits: 2
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 349 - Skin and Scuba Diving

This course provides students with the opportunity to learn a wide variety of skin and scuba diving skills, including rescue techniques. In addition, emphasis will be placed upon the following: 1) selection, care, and use of diving equipment, 2) physical and biological aspects of various diving environments, 3) first aid as applied to scuba diving, including cardio-pulmonary resuscitation, and 4) aspects of physics, physiology, and medicine related to the diver's performance in the water. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 352 - Secondary Physical Education Teaching Methods

Designed as a third level pedagogy class. This course offers "in-depth continuation of the study and application of effective teaching and learning in the secondary physical education classroom. This is a Theory and Technique Course (open to Physical Education majors only).

Prerequisite: PE $274^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in School Wellness Education, Health-Physical Educ Teaching or Health and Physical Education.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## PE 353 - Adapted Physical Activity and Health Through the Lifespan

This course is designed to investigate the concept of transition across the lifespan with regard to health promotion and physical activity for individuals with disabilities. Students will develop and implement appropriate physical activity programs for specific developmental lifespan stages.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 356 - Net/Wall Activities and Games

This course is designed to introduce the student to games and skills associated with a variety of racquet activities and games, which will include tennis, badminton, racquetball, volleyball, and table tennis. Emphasis will be placed on planning and applying developmentally appropriate activities for all learners. This is a Theory and Technique Course (open to Physical Education majors only).

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 357 - Territory Activities and Games

This course is designed to introduce the student to the games and skills associated with a variety of territory activities and games, which will include flag football, basketball, hockey and soccer. Emphasis will be placed on planning and applying developmentally appropriate activities for all learners.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 358 - Lifetime/Leisure Activities and Games

This course is designed to introduce the student to the games and skills associated with a variety of target activities including, but not limited to, golf, bowling, and archery. Emphasis will be placed on planning and applying developmentally appropriate activities for diverse learners. This is a Theory and Technique Course (open to Physical Education majors only)

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 359 - Striking/Fielding Activities and Games

This course is designed to introduce the student to the games and skills associated with a variety of striking/fielding activities, which will include softball, cricket, and rounders. Emphasis will be placed on planning and applying developmentally appropriate activities for all learners. This is a Theory and Technique Course (open to Physical Education majors only).

Credits: 2
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

PE 360 - Anatomical and Physiological Basis of Physical Activity/Lab
This course is designed to provide the basic anatomical and physiological principles that have direct application to physical activity movement and health for populations. Weekly laboratory sessions will provide practical application experiences to illustrate the theoretical knowledge base.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 362 - School Health Education Methods

The course focuses on Health Education curriculum design and developmentally appropriate instructional techniques that can be utilized for health promotion in school settings. Course included universally accepted pedagogical strategies with opportunities to observe and practice these strategies with K-12 health education content.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students in the BSED1 151 program.
Enrollment limited to students with the ACCEPTANCE - TEACHER
CANDIDACY attribute.

## PE 363 - Lifeguarding Instructor

The purpose of the Lifeguarding Instructor course is to train instructor candidates to teach lifeguard training, first aid, lifeguard management, CPR for the professional rescuer, AED essentials, oxygen administration for the professional rescuer, preventing disease transmission, community water safety, and basic water rescue. The training in this instructor course prepares instructor candidates by developing their understanding of how to use course materials, how to conduct training sessions, and how to evaluate participants" progress.

Credits: 3
Term(s) Typically Offered: Offered Summer Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 364 - Biomechanics of Individuals with Disabilities

A study of human movement patterns with emphasis on the development of efficient movement for special populations. Efficient movement patterns will be based on anatomical, mechanical, and physiological principles.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Body and Self, Transfer Thread Completion Course Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 369 - Philosophy and Psychology of Coaching

This course emphasizes the relationships involved in the association of the coach with the administration, student body, players, press and community. This is a Theory and Technique Course.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

PE 378 - Teaching and Leading of Strength and Resistance Training
This course is designed to provide practical knowledge to prepare students to teach, lead and effectively design individualized weight training and/or a muscular fitness programs. Students will apply principles of resistance training in a hands-on setting with specific emphasis on techniques, strength and endurance training, safety procedures, equipment and individualized programming.

Prerequisite: PE 238 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 379 - Fitness Management

This course provides the knowledge base to effectively design, promote, manage and assess health related fitness programs in a variety of community and commercial facilities. A wide range of teaching, leading and managing practices associated directly with health fitness facilities will be reviewed.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 383 - Motor Development and Learning

This course introduces the student to the factors influencing the changes in the development and learning of motor skills from infancy to adolescence. Practical laboratory activities are utilized to illustrate basic concepts of motor development and motor learning. This is a Theory and Technique Course (open to Physical Education majors only).

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1 or Freshman 2 may not enroll.
Enrollment is limited to students with a major in School Wellness
Education or Health-Physical Educ Teaching.

## PE 390-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 393 - Nutrition for Physical Activity, Exercise, and Health

Students in this course will study nutrition guidelines and standards for physical activity, exercise, and health. This course will cover metabolism, macro and micronutrients, energy expenditure, and fluid and electrolyte requirements. Current trends and claims of diets and supplements will be evaluated, and nutrition differences between individuals and athletes will be discussed.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Food, Wellness \& Environment Across Cultures, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## PE 420 - Field Experience

This course is designed to provide students with experiences which allow them to apply their knowledge and skills in a practical worksite situation. This is a Theory and Technique Course (open to Physical Education majors only).

Corequisite(s): PE 042
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 430 - Living Well

This course, which is the capstone course for the Living Well program is designed to engage and immerse the student in evidence-based literature related to living well while building self-evaluation and motivation strategies. Content areas emphasized will be physical activity, nutrition/ dietary guidelines and stress. This course will also engage students in experiential education opportunities and reflection on these experiences. These experiences will be anchored by co-curricular opportunities provided on campus through the Aebersold Recreation Center, Aramark Nutrition Services, the Slippery Rock University Health Center and the Slippery Rock University Leadership office.

## Credits: 3

Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## PE 446 - Water Safety Instruction

The purpose of this instructor course is to train instructor candidates to teach American Red Cross Swimming and Water Safety courses. It is a certification course for American Red Cross Water Safety Instructor (WSI).

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 450 - Internship

Supervised placement or research in selected private or public agencies.
Prerequisites: PE $131^{D}$ and PE $231^{D}$ and PE $202^{D}$ and PE $331^{D}$ and PE $332^{D}$ and PE $473^{D}$ and PE $242^{D}$ and PE $360^{D}$ and PE $268^{D}$ and PE $335^{D}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 1-12
Term(s) Typically Offered: Offered Fall, Spring, \& Summer

## PE 452 - Elementary Strategies for School Wellness

This professional methods course will provide the preservice teacher candidate with knowledge and skills to effectively contribute to a culture of school wellness through a high quality physical and health education program. Students will develop best-practice planning, teaching and assessment strategies and apply them in a semester-long field experience involving grades $\mathrm{K}-6$. this will also include designing initiatives from leading comprehensive school wellness programs.
Prerequisites: PE $253^{D}$ and PE $310^{D}$ and PE $328^{D}$ and PE $383^{D}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 6

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in School Wellness Education, Health-Physical Educ Teaching or Health and Physical Education.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## PE 455 - Student Teaching - Physical Education

Under the guidance of a cooperating teacher and university supervisor, students in this course engage in two eight- week assignments on a fulltime basis in specified school districts and attend scheduled seminars.
Additional assignments required. This is a Theory and Technique Course (open to Physical Education majors only).
Prerequisite: PE $452^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 12
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.
Enrollment is limited to students with a major in School Wellness
Education, Health-Physical Educ Teaching or Health and Physical
Education.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## PE 460 - Program Design in Adapted Physical Activity

Develops competencies in the implementation of developmentally appropriate activities for children and adults with disabilities in the school and through transitional programs conducted within the community.

Prerequisite: PE $227^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 462 - Secondary Strategies in School Wellness

This professional methods course will provide the preservice teacher candidate with knowledge and skills to teach and lead school wellness education at the middle and high school levels. Strategies for facilitating lessons and activities that promote lifelong physical activity and overall wellness will be employed; and the teacher candidate will work collaboratively with a public school mentor teacher under the supervision of the university professor(s) to implement these strategies in schools.
Prerequisites: PE $268^{\text {D }}$ and PE $253^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 6
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in School Wellness
Education, Health-Physical Educ Teaching or Health and Physical

## Education.

Enrollment limited to students with the ACCEPTANCE - TEACHER
CANDIDACY attribute.
PE 468 - Senior Seminar in Physical and Health Education Teacher

## Education

This course is designed to provide a capstone overview of the organization, management and application of physical education and health instructional and extra-class programs. Content focuses on current issues and trends in the discipline. This is a Theory and Technique Course (open to Physical Education majors only).

Prerequisite: PE $352^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 2
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in School Wellness
Education, Health-Physical Educ Teaching or Health and Physical

## Education.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

PE 472 - School Wellness Assessment and Promotion
Provide teacher candidates with conceptual tools to analyze healthrelated behaviors of school-aged learners and the social, cultural and environmental context in which they occur. This course will apply theories drawn from public health, psychology and sociology to the process of planning and evaluating wellness instruction in schools that assists learners in developing and maintaining healthy behaviors. The process of collecting, tracking and analyzing health-related data will be included in the course as well as current applications, programs and tools that can be used to track and improve health behaviors.

Prerequisite: PE $253{ }^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Corequisite(s): PE 462
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER
CANDIDACY attribute.

PE 473 - Professionalism, Advocacy and Leadership in Physical Activity
This course is designed to actively involve the learner in an advanced study of physical activity. The course is conducted in seminar format and the students will study the application of the principles, methods, organization and administration of individualized physical activity programs and the development of professional, advocacy and leadership qualities and skills.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Leadership Development, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 485 - Fundraising/Grant Writing in Adapted Physical Activity

This course is designed to develop competencies in fund raising strategies utilizing grant writing skills geared toward corporations and charitable foundations. Students will study the specific skills needed to develop a funding concept, preparation of the proposal, and the establishment of relationships with potential donors.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students with department of Special Education or Physical and Health Education.

## PE 490 - Independent Study

With the approval of the students' advisors and departmental chairperson, students may pursue an individual project in physical education especially suited to meet the students' needs. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

## Credits: 1-3

Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PE 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## PE 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Physics (PHYS)

PHYS 101 - Concepts of Science I with Lab

A descriptive and conceptual course in physics designed for the nonscience major. Topics are selected from light, sound, motion, and astronomy to develop a necessary scientific attitude and background for today's society. There are two lectures and one-two hour laboratory per week.

Credits: 3
Term(s) Typically Offered: Offered Every Term

## PHYS 102 - Concepts of Science II

A descriptive and conceptual course in physics designed for the nonscience major to study energy systems. Topics are selected from heat, electricity, magnetism, and the structure of matter and modern areas of physics, such as lasers, X-rays, and nuclear energy. The purpose of the course is to develop a positive scientific attitude and background for today's society. No laboratory.

## Credits: 3

## PHYS 103- Investigating Matter and Energy/ Lab

This is an activity-based and discussion-oriented course designed for the non-science major. The topics of light, matter, heat, and electricity have been selected to help students develop meaningful understanding of some powerful ideas that they can apply to a wide variety of interesting phenomena. Laboratory credit is given for taking this liberal studies enrichment course.

## Credits: 3

## PHYS 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

PHYS 140 - Engineering Graphics I
A beginning laboratory course in technological design and drawing. Topics: lettering, scales, geometric construction, orthographic sketching, and auxiliary views.

Credits: 2
Term(s) Typically Offered: Offered Fall Terms Odd

## PHYS 141 - Engineering Graphics II

An advanced laboratory course in technological drawing and implementation. Topics: Vectors, graphing, nomography, isometric pictorials, technical illustration, computer graphics, and working drawings.

Prerequisite: PHYS $140^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 1
Term(s) Typically Offered: Offered Spring Terms

## PHYS 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## PHYS 195-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## PHYS 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
PHYS 201 - Elements of Physics I with Lab
Introduction to physics at the algebra/trigonometry mathematical level. Topics include: mechanics, fluids, oscillations, waves, and sound. Course is especially designed for students enrolled in health science majors. This course must be taken with Elements of Physics Lab PHYS021.

Credits: 4
Term(s) Typically Offered: Offered Fall, Spring, \& Summer Enrollment limited to students with department of Exercise \& Rehabilitative Sci.

## PHYS 202 - Elements of Physics II/ Lab

Introduction to physics at the algebra/trigonometry mathematical level.
Topics include: thermal physics, optics, electricity and magnetism, and nuclear physics. Course is especially designed for health science majors. This course must be taken with Elements of Physics II Lab PHYS022.

Prerequisite: PHYS $201^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 4
Term(s) Typically Offered: Offered Spring \& Summer Terms
Enrollment limited to students with department of Exercise \& Rehabilitative Sci.

## PHYS 204 - Environmental Biophysics

An introductory course covering the energy problem and alternative solutions; radiation and its effects on man; the eye and vision; the ear, hearing and noise pollution; electrical power production alternatives and the environmental costs; some instruments used in biophysics and medicine.

Credits: 3

## PHYS 211-General Physics I with Lab

Introduction to physics using calculus and including extensive problem solving. Topics include mechanics statics, kinematics, kinetics, workenergy, rotational motion, and impulse-momentum. This course must be taken with General Physics Lab PHYS011.

Prerequisite: MATH 225 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 4
Term(s) Typically Offered: Offered Fall \& Spring Terms

## PHYS 212-General Physics II with Lab

This is a calculus based course, which follows PHYS 211. It develops the concepts of electric and magnetic fields. Topics covered are Gauss' Law, Ampere's Law, Biot's Law, Faraday's Law, electric charges and their dynamics, capacitance, resistance inductance, etc. Offered fall semester only. Includes a lab.

Prerequisites: MATH $225^{\mathrm{D}}$ and PHYS $211^{\mathrm{D}}$ and MATH 230 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms

## PHYS 213-General Physics III/ Lab

Covers fluids, hydrostatics and hydro-dynamics, heat transfer and measurements, laws of thermodynamics, vibrating bodies, wave motion, light lenses and optical instruments, interference and diffraction, polarization. This course must be taken with General Physics III Lab PHYS023. Offered spring term only.

Prerequisite: PHYS $211^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 4
Term(s) Typically Offered: Offered Spring Terms

## PHYS 216 - University Physics 1 with Lab

First of a two semester calculus based introduction to physics sequence for science, engineering, and mathematics students. Students will acquire knowledge of fundamental physics principles and their applications as well as problem solving skills and laboratory and data acquisition experience. Topics covered: kinematics, dynamics, momentum of particles and rigid bodies, work and energy, gravitation, simple harmonic motion, and waves. This course must be taken with University Physics 1 Lab.

Prerequisite: MATH 225 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 4

## PHYS 217-University Physics 2 with Lab

Second of a two semester calculus based introduction to physics sequence for science, engineering, and mathematics students. Students will acquire knowledge of fundamental physics principles and their applications as well as problem solving skills and laboratory and data acquisition experience. Topics Covered: Fluids, Thermodynamics, Electricity and Magnesium, Circuits, and Optics. This course must be taken with University Physics 2 Lab.

Prerequisites: PHYS $216^{\text {D }}$ and MATH 230 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 4

## PHYS 271 - Astronomy

This course is designed for the general student. Recent findings in astronomy are discussed, i.e., black holes, quasars, etc. Other topics of interest are the evolution of stars, galaxies, and the universe since the big bang. No math required.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): The Future, Revolutions, Transfer Thread Completion Course

## PHYS 290-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## PHYS 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## PHYS 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
PHYS 301 - Physical Chemistry I
Thermodynamics and chemical kinetics. Cross listed as CHEM301.
Prerequisites: CHEM $108^{\mathrm{D}}$ and CHEM $112^{\mathrm{D}}$ and (PHYS $212^{\mathrm{D}}$ or PHYS $213^{\text {D }}$ ) and MATH $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 312 - Modern Physics 1

An introductory course that focuses on the transition from classical physics covered in the calculus based introductory physics sequence to contemporary physics. Topics include: Grief overview of special relativity, experimental and theoretical developments that led to the discovery of the atomic structure, early quantum mechanics, Schrodinger's equation and its application and a brief introduction to solid state physics.

Prerequisites: PHYS $212^{\text {D }}$ and PHYS $213^{\text {D }}$ and MATH $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 314- Statics

Includes the application of equilibrium conditions to structures, trusses, frames and machines, and beams with concentrated and distributed loads.

Prerequisites: PHYS $211^{\text {D }}$ and MATH 230 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 315- Dynamics

Integrates the subject content of kinematics and kinetics that deal respectively with the description of motion of bodies and the causes for their motion.

Prerequisites: PHYS $314^{\text {D }}$ and ENGR $210^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 317 - Space Science

Introductory course in space exploration. It emphasizes the evolution of the earth with respect to its neighbors in the solar system. Other topics covered are the earth's ionosphere, magnetosphere, hazards of satellite communication, and orbital dynamics.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): The Future, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 325-Analog \& Digital Electronics

An introductory analog and digital electronics course designed primarily for science students. The course will start with an analysis of AC and DC circuits using Kirchhoff's laws and complex numbers. The analog part will include a study of discrete components including diodes, transistors, and SCRs as well as linear integrated circuits. The digital part will include basic gates as well as MSI and LSI circuits and will be center around interfacing computers to experiments.

Prerequisite: PHYS $212^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 331 - Mathematical Methods of Physics

Applications in physical science and engineering of the following: vector analysis, complex variables, Fourier and Laplace transforms, linear algebra, and some boundary value problems. Cross-linked as MATH 331. This course may be counted as a physics course or as a mathematics course, but not both.

Prerequisites: MATH $240^{\mathrm{D}}$ and PHYS $211^{\mathrm{D}}$ and MATH 231 (may be taken concurrently) ${ }^{D}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 371 - Physical Optics

This is a physical optics course dealing with the nature and transmission of light. Topics covered will include the propagation of light, coherence, interference, diffraction, Maxwell's Equations, optics of solids, thermal radiation, optical spectra and lasers.

Prerequisites: PHYS $212^{\text {D }}$ and PHYS $213^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 375 - Thermal Physics

This is an introductory course in thermodynamics and statistical mechanics, with appication to both physics and engineering.

Prerequisites: PHYS $213^{\text {D }}$ and MATH $231^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 381 - Advanced Physics Laboratory

Selected experiments in all branches of physics that are of a more advanced grade than those given at the general or intermediate level. Each experiment will be an extended piece of careful, thorough work, culminating in a detailed report.

Prerequisites: PHYS $211^{\text {D }}$ and PHYS $212^{\text {D }}$ and PHYS $213^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 2
Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

PHYS 382-Optics Laboratory
This course will provide in depth experience in laboratory techniques, data acquisition and analysis in the field of Optical Physics. Experiments are of a more advanced grade than those given at the general or intermediate level. Each experiment will be an extended piece of careful, thorough work, culminating in a detailed report. Appropriate for students majoring in the Biological, Earth, Environmental, Health, Mathematics and Physical sciences.

Prerequisites: PHYS $211^{\mathrm{D}}$ and PHYS $212^{\mathrm{D}}$ and (PHYS $213^{\mathrm{D}}$ or PHYS $201^{\mathrm{D}}$ ) and PHYS $202^{\text {D }}$ and (MATH $225^{\text {D }}$ or MATH $230^{\text {D }}$ or MATH $231^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 2

Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## PHYS 385 - Computational Physics

An introduction to scientific computational methods and their application in physics. A range of numerical and symbolic computing techniques will be explored, including numerical integration, matrix methods, differential equations, random walks, and Monte Carlo simulations. These techniques together with visualization methods will be used to solve problems taken from different physics topics, such as classical mechanics, electricity and magnetism, thermodynamics, quantum mechanics, and biophysics.

Prerequisites: PHYS $213^{\mathrm{D}}$ and MATH $240^{\mathrm{D}}$ and CPSC $140^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 410 - Electricity and Magnetism

Electric fields and potentials of charge distributions and polarized materials, magnetic fields and vector potentials of current distributions and magnetized materials; electric and magnetic energies and application of Maxwell's equations.

Prerequisites: PHYS $212^{\text {D }}$ and PHYS $331^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 412 - Modern Physics 2

This course explores the applications of Quantum mechanics and relativity. Topics covered will include atomic physics, quantum statistics, solid state physics, nuclear physics, astrophysics and cosmology.

Prerequisites: PHYS $312^{\mathrm{D}}$ and MATH $231^{\mathrm{D}}$ and PHYS 331 (may be taken concurrently) ${ }^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 1
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 421 - Materials Safety and Equipment Overview for Nanofabrication - NMT 311

This course provides an overview of basic nanofabrication processing equipment and materials handling procedures with a focus on safety, environment, and health issues. Topics covered include: cleanroom operation, environmental, safety, and health issues, vacuum pump systems operation, environmental safety and health issues (covering direct drive mechanical, roots blowers, turbomolecular, and dry mechanical systems); thermal- processing equipment operation, safety, environmental, and health issues (covering horizontal, vertical, rapid thermal annealing tools); chemical vapor deposition system operation, safety, environmental, and health issues (covering gas delivery, corrosive and flammable gas storage and plumbing, regulators, and mass flow controllers); and vacuum deposition/etching system operation, safety, environment, and health issues (covering microwave and RF power supplies and tuners, heating and cooling units, vacuum gauges, valves, and process controllers). Specific materials handling issues include those arising from using deionization water, solvents, cleansers, organic materials, ion implementation sources, diffusion sources, photoiesists, developers, metal dielectrics and toxic, flammable, corrosive and high purity gases as well as packaging materials.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 422 - Basic Nanofabrication Processes - NMT 312

The course provides an overview of basic processing steps used in all applications of nanofabrication. Both top-down and bottom-up nanofabrication are included. The majority of the course details a step-by-step description of the equipment and processes needed to fabricate devices and structures such as bio- chips, CMOS transistors, power devices, microelectromechanical (MEM) devices, and opto-electronic structures. Students learn the similarities and differences in both the equipment and process flows needed in fabricating all of these various structures.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 423 - Thin Films in Nanofabrication - NMT 313

This course covers thin film deposition and etching practices in nanofabrication. The deposition techniques addressed in the first part of the course include atmospheric, low pressure, and plasma enhanced chemical vapor deposition and sputtering, thermal evaporation, and beam evaporation physical vapor deposition. Also included are self-assembling molecule based techniques. Materials considered include organics, dielectrics (e.g., nitrides, oxides), polysilicon (doped and undoped), metals (e.g., aluminum, tungsten, copper), adhesion promoters and diffusion barriers. The second part of the course focuses on etching processes and emphasizes reactive ion etching (single wafer, batch), high-ion-density reactors, ion beam etching and wet chemical etching. Students receive hands-on experience in depositing and etching dielectric, semiconductor, and metal materials using state-of-the-art tools and experience practicing the steps critical to micro- and nanofabrication of structures used in a variety of fields from biotechnology and the biomedical fields to microelectronics.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 424 - Advanced Lithography and Dielectrics Nanofabrication NMT 314

This course covers all aspects of lithography from design and mask fabrication to pattern transfer and inspection. The course is divided into three major sections. The first section describes the lithographic process from substrate preparation to exposure. The second section examines the processes from development through inspection (both before and after pattern transfer). This section introduces optical masks, aligners, steppers and scanners. In addition, critical dimension (CD) and profile control of photoresists are investigated. The last section discusses advances in optical lithographic techniques such as phase shifting masks and illumination schemes as well as molecular ruler, e-beam, $x$-ray, EUV, and ion beam lithography.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 425 - Materials Modification in Nanofabrication - NMT 315

This course covers in detail the processing steps used in modifying material properties in nanofabrication. Included are chemical reaction, growth and annealing processes. The impact of thermal processing and thermal processing on defects, gettering, and impurities and overall electrical, mechanical, optical, and chemical properties are studied. The student grows and measures gate and field oxides, implants and activates source and drain regions, and evaluates thermal budget requirements using state-of-the-art tools. Included also are other modification technologies such as ion implantation, diffusion and chemical surface preparation and treatment. Substrate preparation processing such as slicing, etching, polishing and epitaxial growth are also covered.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 426 - Characterization, Packaging and Testing of Nanofabrication Structures - NMT 316

This course examines a variety of measurements and techniques essential for controlling micro- and nanofabrication processes. Monitoring techniques such as residual gas analysis (RGA), optical emission spectroscopy (OES) and end point detection are discussed. Characterization techniques such as scanning electron microscopy x-ray photoelectron spectroscopy, atomic probe methods advanced optical microscopy, optical thin film measurements, ellipsometry, and resistivity/conductivity measurements are introduced and tied to process control. Basic measurements for yield analysis and process control are also stressed. These include breakdown measurements, junction testing, and capacitance-voltage and current voltage characterization. In addition, the characteristics of some simple bio-chip structures and MEMs devices are obtained and discussed. The student learns about the manufacturing issues involved in interconnects, materials compatibility and final device assembly. Aluminum, refractory metals and plastic fabrication techniques and characterization are discussed in detail along with topics such as diffusion barriers, contact resistance, electro migration, corrosion, and adhesion. The importance of planarization techniques such as deposition/etchback and chemical/mechanical polishing are emphasized. Lastly, procedures such as die separation, bonding, and sealing and final test for both conventional Cs and MEMs and biomedical devices are examined.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 450 - Internship

Supervised placement and research in selected public and private agencies.

## Credits: 1-12

Term(s) Typically Offered: Offered as Needed

## PHYS 480 - Quantum

In this introductory course in quantum mechanics, the foundations and origins will be covered. Other topics will include wave packets, the uncertainty principle, the Schroedinger equation, operator formalism, eigen functions, spherically symmetric systems, angular momentum, spin and scattering theory.

Prerequisites: PHYS $331^{\mathrm{D}}$ and PHYS $411^{\mathrm{D}}$ and MATH $240^{\mathrm{D}}$ and MATH $301^{* D}$ (may be taken concurrently).
${ }^{D}$ Requires minimum grade of $D$. Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 490 - Independent Study

Investigation of the theoretical or experimental area following a plan or proposal initiated by the student and approved by the major advisor. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 495-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PHYS 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Political Science (POLS)

## POLS 101 - American National Government

A survey of American national politics, emphasis on the constitution, parties, interest groups, elections, organization and structure of government.

## Credits: 3

Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): Transfer Thread Completion Course

## POLS 103- International Relations

An overview of the politics of various governments; the nature of relations among nations; a study of problems such as terrorism and multinationals as political participants.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Transfer Thread Completion Course

## POLS 110 - Foundations of Political Science

This course introduces students to contemporary political problems and how political scientists think about those problems. Students will learn the language of political science including the big themes, concepts, and models that span centuries of political science literature and provide insight into global and domestic political conflict. Students will use the lens of political science to explore concepts such as liberty, equality, justice, rights, individual autonomy, democracy and representation, identity and tolerance, the appropriate role and limits of government, and sovereignty of states in the international system. Although nondemocratic forms of governance will be examined, this course will focus on democratic governance - why we chose it, what political practices and reforms can improve it, and how citizens through engagement and dialogue can help to strengthen it. This course will emphasize the relevance of the core concepts of political science in relation to important contested political issues in the US and the global community today.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd
Thematic Thread(s): Global Citizenship, Comparative Perspectives of Justice \& Society, Fighting Social Problems, Transfer Thread Completion Course

## POLS 139-University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## POLS 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## POLS 195 - Workshop

Special topics of interest to undergraduates and selected members of the community. A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## POLS 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## POLS 200-State and Local Government

Examines state levels of government. Emphasis is on constitutions, parties and interest groups, elections, organization and structure of government.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even

## POLS 215 - Introduction to Political Theory

An introduction to classical and modern theories of politics, governments and ideologies.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Thematic Thread(s): Transfer Thread Completion Course

## POLS 220 - Foreign Policy

The study of selected instruments of foreign policy, how it is formulated and implemented; the focus is on the U.S.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Thematic Thread(s): Global Citizenship, International Business, Sustainable International Development, Transfer Thread Completion Course
POLS 223- Law and Courts
An introductory examination of the structure of the judicial branch of government; what we mean when we talk about the "law"; how our understanding of what is law has developed and changed throughout our history; how our state and federal courts are administered and structured; the nature of legal education; the work of the Supreme Court, judges, and lawyers; how the criminal justice system chooses juries, tries defendants, negotiates justice through plea bargaining, and depends on its judiciary; and the role of the legal system in resolving private disputes.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd
Thematic Thread(s): Becoming America, Transfer Thread Completion Course

## POLS 235 - Civil Discourse and Democracy

This course is an introduction to civil discourse, or the practice of constructive dialogues and deliberation, based in mutual respect, which ultimately seeks to advance the public interest. Students will use the lens of political science to explore contemporary political problems and how to approach, discuss, and analyze them.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## POLS 255 - Introduction to Public Policy

This course introduces students to the idea that private actions create problems for communities that citizens and community leaders must work together to solve. Students learn a universal framework for overcoming community problems as well as the skills needed to recognize the moral and democratic dilemmas inherent in these problems. Students hone their knowledge by gathering evidence, researching, and addressing real community issues.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): 21 st Century Healthcare, African-American Studies, Building a Healthy Society, Being American, Comparative Perspectives of Justice \& Society, Civil Rights \& Social Movements, Demystifying Crime \& Justice, Environmental Problems Toolkit, Fighting Social Problems, Revolutions, Transfer Thread Completion Course

## POLS 263 - Introduction to Comparative Politics

The stress is on descriptions and conceptions of the state and political institutions in the non-Western and Western worlds; with attention on policy-making, national issues, and systems.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even
Thematic Thread(s): Comparative Perspectives of Justice \& Society, Revolutions, Sustainable International Development, Transfer Thread Completion Course

## POLS 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## POLS 295 - Workshop

Special topics of interest to undergraduates and selected members of the community. A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## POLS 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## POLS 301-Organized Political Action

Political parties and interest groups provide crucial linkages between citizens and their government. This course will investigate the nature and origins of organized political groups in American politics, seeking to understand what it takes for political parties and interest groups, which are informal players of American politics, to survive, thrive, and develop a powerful voice in the national political dialogue. While the course focuses on American parties and interest groups, they will be explored in the global and comparative context.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Thematic Thread(s): African-American Studies, Civil Rights \& Social Movements, Environmental Problems Toolkit, Political Arts, Revolutions, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 303 - Seminar in Democracy

In response to waning public trust in American public institutions and democracy, it is imperative to understand how political systems fail. In this course, students will define democracy, discuss what happens when democracies break down, identify the causes of the breakdown, and find solutions to these problems. Students will also identify those characteristics and behaviors democracy requires of citizens for the system to work well.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd
Thematic Thread(s): African-American Studies, Civil Rights \& Social Movements, Sustainable International Development, Transfer Thread Completion Course

## POLS 306 - Campaigns \& Elections

Elections are the cornerstone of democracy. Without free, fair and frequent elections, there is no popular governance. The United States holds more elections for more public offices and governments than any other nation in the world. The purpose of this course is to examine the key issues, questions, and controversies surrounding campaigns and elections in the United States and compare to campaigns and elections held in other democracies around the world.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Thematic Thread(s): Being American, Transfer Thread Completion Course Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 310 - Research Methods

An examination of the foundations of systematic research, techniques of data collection and methods of data analysis.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 321 - The Presidency

The study and evaluation of executive leadership in modern governments; the roles, functions and types of presidential leaders.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 322 - The United Nations and International Law

An examination of the development, structure, and operations of the United Nations system and the fundamentals of public international law.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Environmental Problems Toolkit, Transfer Thread Completion Course, Violence
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 325 - The Congress

The study of legislative structures, functions and organizations; focus on legislative elections, committees, and decision-making.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Thematic Thread(s): Becoming America, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 327 - Public Opinion and Political Attitudes

An examination of the nature, origins, and structures of political attitudes.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Thematic Thread(s): Leadership Development, Transfer Thread
Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 328 - Assessing Public Opinion

Many careers rely on individuals who have the capacity to create and implement public opinion surveys, and analyze the results of public opinion polls. Urban planning, public administration, and public policy professionals use surveys for program evaluation and democratic accountability, while lobbyists, nonprofit, campaign, and corporate government relations professionals use surveys for assessing public problems and the political environment. Students will gain experience building and fielding surveys that accurately assess public opinion, often while helping community stakeholders with real-world needs.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 329 - Political Learning

The course examines the process by which the transmission of political values, attitudes, perceptions and behaviors are undertaken in different political systems.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 333 - The Political Film

The Political Film will be presented as an expression of social concerns in our society. Individual films will be evaluated as vehicles, which can influence people by disseminating ideas, convey points of view and comment on matters of political controversy.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Political Arts, Transfer Thread Completion Course Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 349 - Utopian Experiments: Issues of Gender and Power

This course will examine the various alternative plans for the intentional restructuring of society as exhibited in the works of utopian theorists.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 350 - Transnational Terrorism

An examination of politics and practice of transnational terrorism, as well as alternative policy responses to transnational terrorism. topics will include an overview of the history and theory of terrorism as a political tactic, the issues motivating its use by contemporary terrorist organizations, the structure and tactics of terrorist networks, and the connections between states, terrorist networks, and transnational organized crime.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even
Thematic Thread(s): Transfer Thread Completion Course, Violence Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 351 - Politics of Race

This course is an exploration of the politics and policy issues that disproportionately affect racial and ethnic minorities in the United States. A key objective of this course is to help students understand how the past racial history of the US shapes political and policy outcomes in the US today across a range of issues including income and wealth, employment, education, health, housing, and criminal justice. Students in this course will think and write critically about how the US got to this point and how we can get out of this pattern of persistent racial disparities. Students will be challenged throughout the course to apply concepts of racial justice.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): African-American Studies, Becoming America, Being American, Comparative Perspectives of Justice \& Society, Civil Rights \& Social Movements, Demystifying Crime \& Justice, Environmental Problems Toolkit, Fighting Social Problems, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 354 - Seminar in Religion and Politics

This course is intended to help students understand the variety of religious voices in American politics and to acquaint students with the significance and variability of religious influence on contemporary American political life, i.e. public policy and individual political choices. The term "religion" is defined broadly to include formal theological creeds as well as the social beliefs, organizations, and subcultures associated with various religious communities. The central goal of this course is to understand how religion affects politics (and vice versa). Specifically, the course will explore the effects of the diverse religious traditions in America on American political history, voting, lobbying, political mobilization, political culture, and international engagement. A sampling of questions to be addressed follows: What has been the relative impact of various religions on American politics? How do religious actors translate their values into action? In what ways is the impact of religion direct? Indirect? How does the nature of the environment (domestic and international) affect the ability of religious actors to wield influence?

Credits: 3
Term(s) Typically Offered: Offered Fall Terms Odd
Thematic Thread(s): Civil Rights \& Social Movements, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 356 - Gay and Lesbian Politics

This course will seek to understand how and why the battle over gay rights has come to occupy such a prominent place in our society and what this battle tells us about politics more generally. Although the course is centered on the politics of gay rights in the American context, we will also compare the American experience to those of other nations.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even
Thematic Thread(s): Civil Rights \& Social Movements, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 357 - Civil Liberties and Civil Rights

A survey of current controversies regarding the rights and freedoms guaranteed to American citizens by the U.S. Constitution.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Thematic Thread(s): African-American Studies, Building a Healthy Society,
Being American, Civil Rights \& Social Movements, Transfer Thread
Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 359 - Policy Analysis and Evaluation

An examination of the ethical, theoretical and practical issues associated with the application of analytic and evaluative techniques to selected public policy problems and programs.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Thematic Thread(s): Building a Healthy Society, Environmental Problems Toolkit, Fighting Social Problems, Transfer Thread Completion Course Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 364 - Using Evidence to Solve Public Problems

Public decision makers increasingly call for evidence-based solutions to public problems. In this course, students will learn to assess and use data and evidence to help solve community problems. These skills provide the foundation of government relations, public service, nonprofit, and other careers relying on data-driven decision-making.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Thematic Thread(s): Comparative Perspectives of Justice \& Society, Civil Rights \& Social Movements, Demystifying Crime \& Justice, Fighting Social Problems, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 365 - International Political Economy

The in-depth analysis of the political relationships among nation-states.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Thematic Thread(s): International Business, Sustainable International
Development, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 367 - National and International Security: Problems and Issues

National security problems combine aspects of American government, international relations, game theory, and logistical problems derived from research development priorities, economics. The course introduces the major issues of our time such as arms control, disarmament, the nature of war, the reality of decision-making and various case studies.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 369 - Politics of Developing Areas

A developmental approach to the comparative study of the primary functions, structures and capabilities of various industrializing political systems such as India, China, Mexico, Brazil, Tanzania.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms Odd
Thematic Thread(s): Sustainable International Development, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 370 - Latin American Politics and Development

This is an interdisciplinary course designed to give students a broad understanding of the historical, contemporary social (including gender, race, ethnicity, religion, etc.), economic, and in particular, political forces that shape Latin America. A number of different perspectives will be utilized to understand and explain the current state of Latin American political and economic development.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 372 - Campaign Management \& Strategy

This course will provide a very practical, hands-on blueprint for students who wish to run effectively and successfully for public office, or for students who hope to be effective and successful campaign managers or staffers. This course will consider campaigning from the perspective of both the candidate and the campaign manager, with a focus on developing and implementing a comprehensive campaign strategy.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 375 - Women and Politics

The course will examine the effect of socialization and the impact of culture on women, gender differences in patterns of political participation; legal, political and social rights of women; and the effects of the political system upon the lives of women and their families.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Thematic Thread(s): Civil Rights \& Social Movements, Gender and Diversity, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 395-workshop

Special topics of interest to undergraduates and selected members of the community. A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 403 - Constitutional Law

The case study and analysis of the development and growth of constitutions through judicial interpretation.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 444 - Capstone: Political Analysis

An examination of the theoretical and practical issues associated with the application of analytic and evaluative techniques to selected political institutions, behaviors, or policies. Students will be assessed on their accomplishment of outcomes expected of Political Science graduates.

Prerequisite: POLS $310^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

POLS 450 - Internship
Varies

Credits: 1-12
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 451 - Harrisburg Internship

Assignment as an intern with a governmental agency in the state capital in Harrisburg, Pa. Open to all students at Slippery Rock University.

Credits: 1-9
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 452 - Harrisburg Internship Project

A research project developed by the intern and approved by the Harrisburg internship coordinator on some aspect of government activities or public policy.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## POLS 454 - Harrisburg Internship Seminar

Weekly seminar composed of all interns in the program and taught by the Harrisburg internship coordinator. Speakers from state government will address the seminar and the seminar will participate in several exercises designed to increase skills in governmental processes.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 490 - Independent Study

In-depth reading and research in an area of particular interest to the student, with the guidance of a faculty member. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 495 - Workshop

Special topics of interest to undergraduates and selected members of the community. A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## Credits: 1-6

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## POLS 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Psychology (PSYC)

## PSYC 105 - Introduction to Psychology

This course serves as an introduction to the science of psychology. Psychological theory, concepts, and research spanning the breadth of the discipline are explored. Content will provide an introduction to research methods and ethics and include selected topics from each of the five domains of psychological inquiry: Biological, Cognitive, Developmental, Social and Personality, and Mental and Physical Health. Students will explore questions involving four themes that arise across the domains: Cultural and Social Diversity, Ethics, Variations in Human Functioning, and Applications. A grade of $C$ or higher is required to remain in the major. Students may only repeat this course one time.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Transfer Thread Completion Course

## PSYC 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## PSYC 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## PSYC 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## PSYC 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## PSYC 205 - Environmental Psychology

Man's interference with the environment, including over-population, isolation, social institutions as environments, noise, housing, community design, behavioral effects of pollutants and behavior genetics.

Prerequisite: PSYC $105^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Transfer Thread Completion Course, Violence

## PSYC 208 - Personality

Review of the major historical and contemporary theoretical approaches to the study of personality, including their antecedents, underlying assumptions, research/evidential basis, influence on the field and relevance to the theory and practice of psychology.

Prerequisite: PSYC $105^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Transfer Thread Completion Course, Who Do We Think We Are

PSYC 221 - Introduction to Behavioral Statistics
Introduction to descriptive and inferential statistics used in evaluation and reporting of behavioral research.

Prerequisites: PSYC $105^{\text {C }}$ and (MATH $152^{\text {C }}$ or STAT $152^{\text {C }}$ )
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Enrollment is limited to students with a program in Psychology,
Psychology, Psychology-Developmental, Psychology-Neuroscience or Psychology-Pre PA-SRU 3+2.

## PSYC 231 - Psychological Science I: Research Methods

This project-based course introduces students to research methods and designs used in psychology. The course prepares students to evaluate published reports of psychological research and to design and conduct research studies in Psychology. Each student will apply concepts learned in a class to design and write a formal research proposal of an original experiment, which will be written in APA style.

Prerequisites: PSYC $105^{\circ}$ and (MATH $152^{\text {C }}$ or STAT $152^{C}$ ) and ENGL $102^{\text {C }}$ and (INDS $110^{\mathrm{C}}$ or LIBR $110^{\circ}$ )
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment is limited to students with a program in Psychology,
Psychology, Psychology-Developmental or Psychology-Neuroscience.

PSYC 232 - Psychological Science II: Statistical Applications
This is a project-based course in which students apply knowledge of descriptive and inferential statistics to answer research questions in psychology. Topics include selection of appropriate descriptive and inferential statistics to use with descriptive, correlational, predictive, and experimental designs; planning statistical analysis; using statistical software to organize data and conduct analyses; interpreting results, and writing formal reports of research in APA style. Students will apply knowledge and skills learned in the course to write an APA style lab report of a quantitative study.

Prerequisites: PSYC $105^{\circ}$ and ENGL $102^{\text {C }}$ and (MATH $152^{\text {C }}$ or STAT $152^{\text {C }}$ ) and (INDS $110^{C}$ or LIBR 110 ) and PSYC $231^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Requires minimum grade of .
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment is limited to students with a program in Psychology,
Psychology, Psychology-Developmental or Psychology-Neuroscience.

## PSYC 233 - Sensation \& Perception

This combined lecture and lab covers the basic anatomy, physiology and role of the sensory systems in perception and sensation.

Prerequisite: PSYC $105^{\text {C }}$
${ }^{C}$ Requires minimum grade of C .
Credits: 3

## PSYC 240 - Human Sexual Behavior

Examines personal sociocultural factors in sexual functioning.
Motivational, developmental, personality and clinical implications are explored.

Prerequisite: PSYC $105^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Body and Self, Gender and Diversity, Revolutions, Transfer Thread Completion Course, Violence

## PSYC 244 - Developmental Psychology

Human development from conception to senescence with emphasis on the theoretical and practical implications.

Prerequisite: PSYC $105^{\text {C }}$
${ }^{C}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): 21 st Century Healthcare, Fighting Social Problems, Mind \& Brain, Transfer Thread Completion Course, Who Do We Think We Are

PSYC 276 - Introduction to Abnormal Psychology
Introduction to the field of abnormal behavior, including DSM
classification and examination of major categories of mental disorders.
Prerequisite: PSYC $105^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Comparative Perspectives of Justice \& Society,
Transfer Thread Completion Course

## PSYC 289 - Positive Psychology

In this course, students will explore human flourishing - defined as a life of deep meaning, fulfillment and service to others. Students will be taught about human flourishing through the lens of science and their own experience. Through exposure to diverse scientific theories and research on the skills associated with flourishing and to a variety of reflective and applied practice, and laboratory experiences, students will develop conceptual knowledge, experiential insight, and practical skills related to living a "good life".

Prerequisite: PSYC $105^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Mind \& Brain, Transfer Thread Completion Course

## PSYC 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## PSYC 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## PSYC 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## PSYC 300 - Psychology of Women, Gender and Culture

Overview of psychological perspectives and current research concerning the field of the psychology of women and gender. Topics related to the role of culture in the social construction of gender will be emphasized. Topics include similarities and differences between women and men, gender development, emotions, relationships, sexuality, education and work, health and fitness, psychological distress, and social roles. CAPP Prerequisites: A grade of C or higher in PSYC 105 or any gender studies course or permission from the instructor.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Being American, Gender and Diversity, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 302 - Psychology of Criminal Behavior

The study of how individual criminal behavior is acquired, evoked, maintained and modified.

Prerequisite: PSYC $105^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Demystifying Crime \& Justice, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 303 - Learning

This lecture/lab course will facilitate a deeper understanding of the basic mechanisms of learning, which are expressed as changes in behavior that are altered by experience.

Prerequisite: PSYC $231^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 4
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 304 - Theories of Counseling

This course will examine the major approaches to psychotherapy through critical review of the theoretical assumptions, historical influences, process and outcome research, techniques of intervention and relevant context for the major theoretical paradigms. Professional and ethical issues, contemporary topics and issues of fundamental conceptualization skill development will be addressed. This course does not prepare students to function as counselors; rather it is designed to provide meaningful preparation for pursuit of post-Baccalaureate training.

Prerequisites: PSYC $208^{\text {D }}$ and PSYC $276^{\text {D }}$ and PSYC $105^{\text {C }}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 306 - Introduction to Psychological Testing

Includes the historical, theoretical and statistical foundations of testing; exposure to ability (aptitude, achievement and intelligence) and personality tests; and the settings in which psychologists administer these tests.

Prerequisites: PSYC $105^{\text {C }}$ and (PSYC $221^{\text {C }}$ or PSYC $232^{\text {C }}$ )
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

PSYC 310 - Introduction to Industrial-Organizational Psychology
The application of psychological theory, techniques, and research to business, industry, and other organizational behavior. Subjects include employee recruitment and selection, retention and promotion; job satisfaction; job evaluation/performance measures; training; motivation; stress; and human factors.

Prerequisite: PSYC $105^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 311- Introduction to Behavioral Neuroscience

This lecture/lab course will help you to develop knowledge of the biological basis of human behavior and learn to design and conduct research to study brain structure, function, and behavior. Topics may include neuroanatomy, neutral communication, development of the nervous system, genetics, sensory and motor systems, emotion, learning and memory, language, sexual behavior, consciousness and neurological and psychological disorders.

Prerequisite: PSYC $232^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 4
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students with department of Psychology.

## PSYC 315 - Psychology of Sexual and Gender Diversity

Overview of psychological perspectives and current research concerning the field of lesbian, gay, bisexual, transgender and queer psychology. The course takes a life-span developmental perspective and examines the diversity of gender and sexual identities. Topics include theories of sexual orientation and gender identity, oppression and discrimination, history of the Queer community and the coming out process. CAPP Prerequisites: A grade of C or higher in PSYC 105 or any gender studies course or permission from the instructor.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Transfer Thread Completion Course, Who Do We Think We Are
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 318 - Psychopathology of Childhood and Adolescence

An overview of clinical practice with children, adolescents and their families with advanced study of the emergence, diagnosis and treatment of psychological disorders in children and adolescents. Coursework includes theories of normal and abnormal child development, etiology of disorders, current DSM diagnosis, and an overview of assessment and intervention methods relevant to children and adolescents.

Prerequisites: PSYC $105^{\text {C }}$ and PSYC $276^{\text {D }}$ and PSYC $244^{\text {D }}$
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

PSYC 320 - Introduction to Clinical Psychology
Introduction to the field of clinical psychology. Includes an overview of training, similarities, and differences among various mental health service providers. Students will be introduced to interviewing skills, approaches to psychotherapy, assessment, treatment planning, and areas of specialization and application within the field. Emphasis is placed on consideration of issues that tend to arise when working with individuals from diverse backgrounds, including differences in racial and ethnic background, sex and gender, age, sexual orientation, religious background, and those with mental and physical disabilities.

Prerequisites: PSYC $105^{\text {C }}$ and (PSYC $221^{\text {C }}$ or PSYC $232^{\text {C }}$ ) and (PSYC $325^{\text {C }}$ and PSYC $326^{\text {C }}$ or PSYC $231^{\circ}$ ) and PSYC $276^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 321 - Drugs and Behavior

Psychoactive drugs and their action on the human nervous system; legal and sociocultural aspects of drug abuse.

Prerequisite: PSYC $105^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Fighting Social Problems, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Psychology,
Psychology, Psychology-Developmental, Psychology-Neuroscience or Psychology-Pre PA-SRU 3+2.

## PSYC 325 - Introduction to Experimental Psychology

This course will teach students how to design, conduct, and report psychological research. Topics include the nature of science, formulation of hypotheses, research methods and design, and ethical issues in using human and nonhuman subjects. Emphasis will be given to experimental design techniques, evaluation of published research in psychology, and the writing of research reports. The course will also focus on the teaching of library research skills and producing formal research reports in APA manuscript style

Prerequisites: INDS $110^{\mathrm{D}}$ and ENGL $102^{\mathrm{C}}$ and PSYC $105^{\mathrm{C}}$ and PSYC $221^{\mathrm{C}}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
${ }^{C}$ Requires minimum grade of $C$.
Corequisite(s): PSYC 326
Credits: 3
Students with a semester level of Freshman 1 or Freshman 2 may not enroll.
Enrollment is limited to students with a program in Psychology,
Psychology, Psychology-Developmental, Psychology-Neuroscience or Psychology-Pre PA-SRU 3+2.

## PSYC 326 - Experimental Psychology Laboratory

A laboratory experience to accompany PSYC 325 in which students will conduct a series of literature searches, design and execute laboratory experiments, perform and interpret statistical analyses of data collected, and report experimental findings in APA style.

Prerequisites: PSYC $105^{C}$ and PSYC $221^{C}$ and INDS $110^{D}$ and ENGL $102^{C}$
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Corequisite(s): PSYC 325
Credits: 1
Students with a semester level of Freshman 1 or Freshman 2 may not enroll.
Enrollment is limited to students with a program in Psychology,
Psychology, Psychology-Developmental, Psychology-Neuroscience or Psychology-Pre PA-SRU 3+2.

## PSYC 334 - Health Psychology

An overview of the field and of the role of psychology in health. Topics include health-enhancing and health-compromising behaviors; the effects of stress, coping, and personality on health; psychoneuroimmunology; treatments of specific problems and disorders; and interacting with health care services.

Prerequisite: PSYC $105^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Healthy Body, Mind \& Environment, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 338 - Cognitive Psychology

A survey of theories and facts related to complex information processing and conscious experience in humans. Topics covered will include attention, memory, problem solving, symbolic processes and human consciousness.

Prerequisite: PSYC $105^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 350 - Contemporary Topics in Psychological Science

Contemporary topics In Psychology are critically examined. Specific topics will vary within the major subfields of Psychology: Clinical/ Counseling; Cognitive; Developmental; Environmental; Experimental/ Quantitative; Forensic; Gender/Sexual Identity; Health; Industrial Organizational; Multicultural; Neuroscience; Positive; Rehabilitation; Social; Sport/Performance.

Prerequisite: PSYC $105^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Psychology.

## PSYC 355 - Topical Seminar in Neuroscience

Topical Seminar in Neuroscience will focus on reading, evaluating, and presenting primary literature. This course will provide students with an opportunity to read and discuss primary literature related to Neuroscience. Through reading and discussing primary literature students in this course will explore a breadth of career paths and neuroscience techniques while developing methodological and content knowledge in the foundations of neuroscience, and will gain skills in the ability to critically evaluate primary literature. Students may repeat the course once for credit.

Prerequisite: PSYC $105^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 360 - History of Psychology

A review of the philosophical and natural science antecedents to the science of psychology and the development of psychological paradigms from our origins to the present, including attention to the interactive influence of world events/psychology. The historical perspective allows students to understand the relationships between different fields in psychology.

Prerequisite: PSYC $105^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## PSYC 364 - Child and Adolescent Development

Intensive study of the biosocial, cognitive, and psychosocial aspects of development of children and adolescents.

Prerequisite: PSYC $105^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Demystifying Crime \& Justice, Transfer Thread
Completion Course, Well-Being of Children and Youth
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 365 - Psychology of Aging

Psychosocial, clinical and developmental aspects of aging, implications of optimal developmental and effective management of problems confronting the aged.

Prerequisites: PSYC $105^{\text {C }}$ and (PSYC $325^{\text {C }}$ and PSYC $326^{\circ}$ ) or (PSYC $232^{\text {C }}$ and PSYC $231^{\text {C }}$ ) and (PSYC $344^{\text {C }}$ or PSYC $244^{\text {C }}$ )
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## PSYC 375 - Psychopathology of Adulthood

Advanced study of adult mental disorders, including symptoms, phenomenological aspects, diagnosis, and treatment. Students will examine the etiology, symptom constellations, and treatment of psychological disorders in depth and begin to understand what people with the disorders experience through various stages of adulthood. Psychological theory and research findings will guide the student in gaining an understanding of mental illness.

Prerequisites: PSYC $105^{\text {C }}$ and PSYC $244^{\text {D }}$ and PSYC $276^{\text {D }}$
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Psychology,
Psychology, Psychology-Developmental or Psychology-Neuroscience.

## PSYC 377-Social Psychology

The psychological implications of our social existence; a study of the social forces affecting human behavior.

Prerequisite: PSYC $105^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 392 - Cross Cultural Psychology

This course will introduce and familiarize students with the concept of cross-cultural psychology by examining the extent to which the theories, principles, and knowledge of the discipline of psychology are universally applicable to humans. The goal of exploring the psychological implications of cultural differences and of contact among members of different cultures is to consider the role which psychological research and theory can play in advancing intercultural understanding.

Prerequisites: PSYC $105^{\text {C }}$ and PSYC $377^{\text {D }}$
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 415 - Multicultural Identity Development

This course examines biological, psychological and social influences on identity formation through the lifespan with a focus on intersectionality of identities such as race, gender, sexual orientation, class and disability.
Prerequisites: PSYC $105^{\text {C }}$ and (PSYC $344^{\text {C }}$ or PSYC $244^{\text {C }}$ )
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 420 - Community Service Practicum in Psychology

160 hours of documented, relevant volunteer placement in an approved public, not for profit, or private agency. A formal paper related to the experience is required to assist the student with meaningful integration of the experience. Notes: Course grading: Pass/No Credit. Prerequisites: Declared major; Jr/Sr standing; minimum 2.5 GPA in major, 2.0 GPA overall; a grade of C or higher in PSYC 105, PSYC 231, and PSYC 232; at least 12 additional credits in Psychology; written application and departmental permission.

Prerequisites: PSYC $105^{\text {C }}$ and PSYC $232^{\text {C }}$ and PSYC $231^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## PSYC 421 - Advanced Behavioral Statistics

Intermediate forms of statistical analysis of behavioral research, their rationale, and computer applications are introduced.

Prerequisites: PSYC $105^{\text {C }}$ and PSYC $221^{\text {C }}$ and PSYC $325^{\text {C }}$ and PSYC $326^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
PSYC 428 - Social and Emotional Development Across the Lifespan
This course uses a lifespan theoretical perspective to examine social and emotional influences on social relationships (e.g., parent-child, sibling, grandparent-grandchild, romantic) with an emphasis on the sociohistorical context and the influence of intersecting identity factors (e.g., age and race).

Prerequisites: PSYC $105^{\text {C }}$ and (PSYC $244^{\text {C }}$ or PSYC $344^{\text {C }}$ )
${ }^{C}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Psychology,
Psychology, Psychology-Developmental or Psychology-Neuroscience.

## PSYC 430 - Research Practicum in Psychology

Supervised research experience with Psychology department faculty member. Students identify a mentor and work together with their mentor to develop and implement a research plan, and write an APA style paper reporting the results. Notes: Course grading: Pass/No Credit. Prerequisites: Declared major; Jr/Sr standing; minimum overall and Psychology GPA of 3.0; a grade of C or higher in PSYC 105, PSYC 231 and PSYC 232; at least 12 additional credits in Psychology; written application and departmental permission.

Prerequisites: PSYC $105^{\circ}$ and PSYC $2322^{C}$ and PSYC $231^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## PSYC 445 - Infant and Child Cognition

This course examines theories and research in cognitive development with an emphasis on infancy and early childhood. Piagetian, Vygotskian, Information-processing, and Dynamic Systems Approaches are explored while examining the development of processes including attention, perception, memory, language, and reasoning. In addition to learning about theories and research findings in the field, students will (1) become familiar with the research methods employed by psychologists to study cognitive development; (2) think critically about current cognitive developmental questions; and (3) apply cognitive developmental findings to real world contexts.

Prerequisite: PSYC $105^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 449 - Seminar in Psychology

Advanced topics will be announced in the schedule.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 450 - Field Placement Internship in Psychology

Supervised placement in selected public and private agencies at appropriate institutions. Students are required to co-register for Senior Integration Seminar (PSYC 485) in order to synthesize the experience. Notes: Course grading: Pass/No Credit. Prerequisites: Declared major; Jr/ Sr standing; minimum Overall GPA of 2.0 and Psychology GPA of 2.5; a grade of C or higher in PSYC 105, PSYC 231; and PSYC 232; at least 15 additional credits in Psychology; written application and departmental permission. Corequisite: PSYC 485.

Prerequisites: PSYC $105^{\text {C }}$ and PSYC $232^{\text {C }}$ and PSYC $231^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Corequisite(s): PSYC 485
Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students with the SPECIAL APPROVAL attribute.
Enrollment limited to students with department of Psychology.

## PSYC 451 - Research Capstone Internship

This course is designed to provide an immersion experience in undergraduate research in laboratory or clinical settings. Under supervision of a SRU psychology faculty member, the student will integrate concepts gleaned from prerequisite undergraduate courses and scientific knowledge. Psychology theory, research methods, and statistical applications will be applied to prepare students who are planning to pursue careers in research in psychology related fields or to further their education in graduate programs in all psychology related fields, neuroscience, and professional programs such as physician assistant, occupational therapy, and medical schools. Notes: Declared major; Jr/Sr standing; minimum Overall GPA of 2.0 and Psychology GPA of 3.0; a grade of C or higher in: PSYC 105 and (PSYC 231 or (PSYC 325 and PSYC 326)) and (PSYC 232 or PSYC 221); written application and departmental permission. (repeatable up to 12 credits)

Prerequisites: PSYC $105^{\circ}$ and (PSYC $231^{\text {C }}$ or (PSYC $325^{C}$ and
PSYC $326^{\text {C }}$ ) ) and (PSYC $232^{\text {C }}$ or PSYC $221^{\circ}$ )
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3-6
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.
Enrollment is limited to students with a program in Psychology-
Developmental or Psychology-Neuroscience.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## PSYC 471 - Psychopharmacology

This combined lecture and laboratory course will provide a basic introduction to psychopharmacology: the study of the effects of drugs on the brain and human behavior. Emphasis will be on drugs that effect the central nervous system and treat mental health disorders.

Prerequisite: PSYC $311^{\text {B }}$
${ }^{B}$ Requires minimum grade of $B$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 473 - Hormones and Behavior

This combined lecture and laboratory course will provide an in-depth exploration of the study of hormones and behavior, introduce students to methodologies used to study hormones and behavior, and explore the evolutionary, behavioral and social influences that can change the expression of hormones and the resulting behavioral consequences.

Prerequisite: PSYC $311^{\text {B }}$
${ }^{B}$ Requires minimum grade of $B$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 475 - Behavior Modification

Application of learning and other psychological principles in behavior therapy.

Prerequisite: PSYC $105^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 476 - Clinical Neuroscience

This course surveys the role of neural mechanisms on the development, diagnosis and treatment of psychological disorders. The biological basis of neurological and psychiatric disorders will be explored using integrative approach that includes genetics, nueroanatomy, chemistry and physiology, development, environment, behavior, culture and evolution.

Prerequisites: PSYC $276^{\text {C }}$ and (PSYC $325^{\text {C }}$ and PSYC $326^{\circ}$ ) or (PSYC $231^{\text {C }}$ and PSYC $232^{C}$ ) and PSYC $311^{B}$ and PSYC $312^{B}$
${ }^{C}$ Requires minimum grade of $C$.
${ }^{B}$ Requires minimum grade of $B$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students with department of Psychology.

## PSYC 477 - Developmental Neuroscience

This course explores the biology of behavioral development and the integration of organismic and environmental process that regulate the development of the brain and behavior. Topics will include phases of ontogeny including prenatal, perinatal, early childhood, adolescent, adult and aging brain development, sensitive and critical periods, the role of environment, genetics and child-parent interactions on brain development and implications of neuroscience research on assessment and intervention.

Prerequisites: PSYC $276^{\text {C }}$ and (PSYC $325^{\text {C }}$ and PSYC $326^{\circ}$ ) or (PSYC $231^{\text {C }}$ and PSYC $232^{\text {C }}$ ) and (PSYC $344^{C}$ or PSYC $244^{C}$ ) and PSYC $311^{\text {B }}$
${ }^{C}$ Requires minimum grade of $C$.
${ }^{B}$ Requires minimum grade of $B$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students with department of Psychology.
PSYC 480 - Behavior Management
Principles, methods and ethics of behavior management in community, industrial and/or congregate facilities.

Prerequisites: PSYC $105^{\circ}$ and PSYC $303^{\text {D }}$
${ }^{C}$ Requires minimum grade of $C$.
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 485 - Senior Integration Seminar

This course integrates knowledge and skills acquired through the psychology curriculum and during the Field Placement Internship in Psychology with didactic experiences that facilitate learning and synthesis of information. Students are required to be co-enrolled with Field Placement Internship in Psychology (PSYC 450).

Prerequisites: PSYC $105^{C}$ and (PSYC $221^{C}$ or PSYC $232^{C}$ ) and (PSYC $325^{C}$ and PSYC $326^{C}$ or PSYC $231^{\text {C }}$ )
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment is limited to students with a program in Psychology,
Psychology, Psychology-Developmental, Psychology-Neuroscience or Psychology-Pre PA-SRU 3+2.
Enrollment limited to students with the SPECIAL APPROVAL attribute.

## PSYC 490 - Independent Study

Propose and complete a supervised project, either historical, theoretical or experimental. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## PSYC 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Recreational Therapy (RCTH)

RCTH 120 - Disability, Community Inclusion, and Diversity

This course is designed to introduce the student to inclusive leisure services. The course reviews attitudes regarding people with disabilities, barriers to inclusion, enabling terminology, and legislative initiatives, which promote inclusion. The ADA will be highlighted along with information on various disabling conditions. The goal of this course is to facilitate an increased awareness of people with disabilities and considerations for providing inclusive services.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Building a Healthy Society, Civil Rights \& Social Movements, Gender and Diversity, Healthy Body, Mind \& Environment, Transfer Thread Completion Course

## RCTH 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## RCTH 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## RCTH 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## RCTH 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

RCTH 220 - Recreational Therapy Services
Introduces students to the general field of recreational therapy and provides an introduction to various disabilities and how the RT process applies.

Prerequisites: PREE $120^{\mathrm{D}}$ or RCTH $120^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
RCTH 232 - Recreational Therapy for People with Physical Disabilities This course will provide information on various physical disabilities and the potential application of Recreational Therapy services with individuals with physical disabilities. The incidence, prevalence, etiology and treatment for each disability will be presented along with implications for RT practice.

Prerequisites: PREE $120^{\mathrm{D}}$ or RCTH $120^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$. Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
RCTH 233 - Recreational Therapy for People with Psychosocial and Mental Disorders

This course will provide information on various mental health impairments and addictive and social disorders. The incidence, prevalence, etiology and treatment for each condition will be presented along with implications for Recreational Therapy practice.

Prerequisites: PREE $120^{\mathrm{D}}$ or RCTH $120^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
RCTH 252 - Equine Assisted Activities and Therapies
An introduction to equine assisted activities including basic safety skills, lesson preparation, benefits for individuals with disabilities, tack/equine selection, and certification procedures. Students will gain practical experience through riding horses and assisting individuals with disabilities during lessons.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## RCTH 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## RCTH 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## RCTH 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## RCTH 305 - Animal-Assisted Therapy for Diverse Populations \& Settings

This course is designed to provide students with an overview of the various populations that can potentially benefit from Animal-Assisted Interventions (AAI) and Animal-Assisted Therapy (AAT). The focus will be on how these potential benefits of AAT can be incorporated into various settings of service. Students will learn the different approaches to using animals as a partner in facilitating therapeutic outcomes. Students will be exposed to research evidence that supports AAT with populations generally served by health and human services areas. The design of program/treatment plans to facilitate outcomes will be incorporated into the course as well as practical application of AAT.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Animal-Assisted Interventions.

## RCTH 314 - Clinical Aspects of Recreational Therapy

This course provides a more in-depth look at Recreational Therapy including professional standards of practice, health care accreditation, documentation methods and application of activity analysis in treatment planning. Lab experiences are incorporated into the course.

Prerequisites: PREE $220^{\mathrm{D}}$ or RCTH $220^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RCTH 317 - Organization and Management of Recreational Therapy

 PracticeThis course is designed to provide recreational therapy (RT) majors with the knowledge and skills requied to effectively supervise and manage resources within various health and human service settings. Emphasis is placed on accreditation standards, legislative and regulatory requirements, public relations and marketing, strategic planning and decision making, quality improvement and risk management practices, fiscal planning and budgeting and human resource management.

Prerequisites: PREE $220^{\circ}$ or RCTH $220^{\circ}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Therapeutic Recreation Serv, Recreational Therapy or Therapeutic Recreation.

## RCTH 319 - Client Assessment in Recreational Therapy

This course designed to facilitate the development of student knowledge and skills related to the RT assessment process. The course will expose students to information and activities to enhance understanding of the importance of assessment,the various domains of assessment and the various techniques used in the assessment process. Skills will be developed in the areas of selecting and designing assessments, interviewing clients, observing behaviors and documenting assessment results.

Prerequisites: (PREE $220^{\mathrm{D}}$ or RCTH $220^{\mathrm{D}}$ ) and (PREE $229^{\mathrm{D}}$ or PREE $314^{\mathrm{D}}$ or RCTH 314 ${ }^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RCTH 320 - Recreational Therapy Program Design

This course focuses on techniques of recreational therapy program planning including assessment, treatment planning, implementation and evaluation. Students will implementate interventions using various leadership strategies to meet the needs of persons with disabilities and disorders and the document results. A lab experience is included in this course.

Prerequisites: (PREE $220^{\mathrm{D}}$ or RCTH $220^{\mathrm{D}}$ ) and (PREE $229^{\mathrm{D}}$ or PREE $314^{\mathrm{D}}$ or RCTH $314^{\mathrm{D}}$ ) and (PREE $319^{\mathrm{D}}$ or RCTH $319^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RCTH 351 - Recreational Therapy Practicum

Observation and participation in an agency or program serving individuals with disabling conditions.Cross listed as RCTH352.

Credits: 3
Term(s) Typically Offered: Offered Summer \& Winter Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RCTH 352 - Practicum in Therapeutic Recreation

Observation and participation in an agency or program serving individuals with disabling condition. Cross listed as RCTH351.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## RCTH 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## RCTH 395-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RCTH 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RCTH 415 - Challenges and Trends in Recreational Therapy

An integrative course for detailed study of current issues in health care and human services with emphasis on unique and imaginative solutions to the challenges facing the recreational therapy profession. Must be a senior to enroll.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

## RCTH 420 - Recreational Therapy for Older Adults

An overview of the aging process as it relates to recreational therapy service provision and leisure participation. Focus is on the developmental issues, including psychosocial, biological and economic issues in later life. The course reviews the various settings of service and care continuums available to serve the older adult populations. Legilative and regulatory influences regarding the provision of services to older adults will be discussed.

Prerequisites: (PREE $220^{\mathrm{D}}$ or RCTH $220^{\mathrm{D}}$ ) and (PREE $120^{\mathrm{D}}$ or RCTH $120^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RCTH 422 - Recreational Therapy Interventions I

An investigation of the historical, philosophical, psychological and educational foundations of leisure education and stress management at RT treatment modalities. The functions of leisure education, including a variety of instruments and techniques appropriate for a veriety of publics, are examined. The functions of stress management treatments, as well as a variety of techniques appropriate for a variety of publics, is also examined.

Prerequisites: (PREE $220^{\mathrm{D}}$ or RCTH $220^{\mathrm{D}}$ ) and (PREE $229^{\mathrm{D}}$ or PREE $314^{\mathrm{D}}$ or RCTH $314^{\mathrm{D}}$ ) and (PREE $319^{\mathrm{D}}$ or RCTH $319^{\mathrm{D}}$ ) and (PREE $320^{\mathrm{D}}$ or RCTH $320^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RCTH 423 - Recreational Therapy Interventions II

This course will offer an overview of several different Recreational Therapy interventions and techniques, with emphasis on evidence-based practice specific to the areas of community reintegration and its many components, including areas such as social skills, mobility training, and money management (as examples).

Prerequisites: (PREE $220^{\mathrm{D}}$ or RCTH $220^{\mathrm{D}}$ ) and (PREE $229^{\mathrm{D}}$ or PREE $314^{\mathrm{D}}$ or RCTH $314^{\mathrm{D}}$ ) and (PREE $232^{\mathrm{D}}$ or RCTH $232^{\mathrm{D}}$ ) and (PREE $233^{\mathrm{D}}$ or RCTH $233^{\mathrm{D}}$ ) and (PREE $319^{\mathrm{D}}$ or RCTH $319^{\mathrm{D}}$ ) and (PREE $320^{\mathrm{D}}$ or RCTH 320 ${ }^{\circ}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RCTH 450 - Internship

A supervised off-campus work experience in an appropriate aspect of recreational therapy work. Open only to RCTH majors with advanced standing.

Credits: 1-12
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RCTH 490 - Independent Study

A special study opportunity for students to investigate in-depth, approved topics in recreation or environmental studies. Topic and credit established by student and supervising instructor. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RCTH 491 - Professional Seminar

This course is designed to assist students in preparing for entry into the environmental education profession. Topics will include career planning, employment opportunities, employment seeking skills, and discussions centering on areas of interest to the student.

Credits: 1
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## RCTH 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RCTH 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Russian (RUSS)

RUSS 101 - Russian Language and Culture I
This course is the first in a three course series which will provide an introduction to the Russian language.

Credits: 3
Thematic Thread(s): Being American, Transfer Thread Completion Course

## RUSS 102 - Russian Language and Culture II

This course is the second in a three course series which will provide an introduction to the Russian language.

Prerequisite: RUSS $101^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Thematic Thread(s): Being American, Transfer Thread Completion Course

## RUSS 103-Russian Language and Culture III

This course is the third in three course series which will provide an introduction to the Russian language.

Prerequisite: RUSS $102^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Thematic Thread(s): Being American, Transfer Thread Completion Course

## RUSS 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

## RUSS 195-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

## RUSS 198-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
RUSS 201- Third Crse Russian
After a review of basic principles this course continues to develop understanding and skill in using more complex elements of the Russian language and in recognizing and mastering their use in both written and spoken form. Taught through distance education.

Credits: 3

RUSS 202-Intermediate Russian I
Comprehensive review of Russian grammar with emphasis on developing the students' abilities for proficient oral and written accomplishments.

Prerequisite: RUSS $103^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

RUSS 210-Russian Literature in Translation
A study of representative Russian literary works from its origins to 1917.
Course is taught in English; no knowledge of Russian required.

## Credits: 3

## RUSS 270 - Study in the Republic of Russia

This course is designed for students who desire to study modern Russia first-hand. Students will study modern Russian economy, housing, the political system, history, and information on Russia while traveling in the Republic of Russia.
Prerequisite: ENGL $102^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 1-3

## RUSS 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

## RUSS 295-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

## RUSS 298-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

## RUSS 301 - Advanced Russian 1

A detailed course designed to give the student a valid structural knowledge of Russian. A study of the finer points of modern Russian usage.
Prerequisite: RUSS $202^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RUSS 302-Advanced Russian 2

An advanced course in the study of Russian grammar designed to improve vocabulary, idiomatic useage, reading skills, and individual style.

Prerequisite: RUSS $301{ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RUSS 305-Russian Civilization via Film

A comprehensive analysis of Russian civilization through the media of Russian film. Russian films with subtitles present all major aspects of Russian civilization: the Tatar yoke, Russian expansion, the rise of Muscovy, the social-economic-political conflicts at various levels of tsarism, communication and post-communism. No prerequisite

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RUSS 306 - The Challenge of Russian Legacy

A broad study of the social, political, historical, economic, and cultural situations of modern Russian from 1917 to the present. Course is offered in English and is open to all interested students.

## Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RUSS 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RUSS 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## Credits: 1-6

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RUSS 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RUSS 490 - Independent Study

Students have an opportunity to study selected areas in greater concentration. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RUSS 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## RUSS 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Safety Management (SAFE)

## SAFE 118 - Introduction to Safety

Examines basic safety practices, incident causal factors, and preventative measures.

## Credits: 3

Term(s) Typically Offered: Offered Every Term

## SAFE 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## SAFE 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Enrollment is limited to students with a major in Safety Management.

## SAFE 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Enrollment is limited to students with a major in Safety Management.

## SAFE 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Enrollment is limited to students with a major in Safety Management.

## SAFE 205 - First Aid and Safety

Emphasizes prevention, protection from further harm and correct response to common emergencies resulting from trauma and/or illness confronting the citizen. Provides opportunity to earn certification in American Red Cross First Aid and American Red Cross CPR or American Health Association CPR.

Credits: 3
Term(s) Typically Offered: Offered as Needed
SAFE 218 - Legislative Compliance-General Industry
Examines workplace hazards as they relate to the Occupational Safety and Health Act and promulgated standards (Labor).

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1 may not enroll.
Enrollment is limited to students with a major in Safety Management.

## SAFE 228 - Motor Transportation Fleet Safety

Focuses on the essential elements of a comprehensive motor transportation fleet safety program as they relate to protecting and conserving enterprise resources.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment is limited to students with a program in Safety Management
SAFE 248 - Hazardous Materials \& Waste Management
Examines the recognition, evaluation, control, and legislative compliance of hazardous materials and waste through effective safety management.

Prerequisites: CHEM $104^{\text {D }}$ or CHEM $107^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment is limited to students with a program in Safety Management
SAFE 258 - Construction Safety
Safety requirements and responsibilities for the construction industry.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment is limited to students with a program in Safety Management
SAFE 290 - Experimental
A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1 may not enroll.
Enrollment is limited to students with a major in Safety Management.
SAFE 295 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic

## SAFE 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1 may not enroll
Enrollment is limited to students with a major in Safety Management.
SAFE 318 - Principles of Industrial Hygiene
Concentrates upon the recognition, evaluation and control of employeerelated workplace health hazards. Course includes an instrumentation component.

Prerequisites: CHEM 104 (may be taken concurrently) ${ }^{\text {D }}$ or CHEM $107^{* D}$ (may be taken concurrently).
Requires minimum grade of $D$
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Safety Management.
SAFE 319 - Principles of Industrial Hygiene II
Concentrates upon the recognition, evaluation and control of employeerelated workplace hazards. Course includes an instrumentation component. Courses is a continuation of SAFE 318.

Prerequisite: SAFE 318 ${ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

Enrollment is limited to students with a major in Safety Management.
SAFE 328 - Comprehensive Emergency Management and Fire Services
Examines comprehensive emergency management and fire services as they relate to preparing, preparing, protecting, and preserving resources.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

Enrollment is limited to students with a major in Safety Management.
SAFE 338 - Ergonomics and Human Factors
Examines workplace design adversities as well as their remediation by the safety function.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

Enrollment is limited to students with a major in Safety Management.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1 may not enroll.
Enrollment is limited to students with a major in Safety Management.

## SAFE 368 - Injury and Damage Incidents Evaluation

Focuses on the investigation, analysis, and evaluation of injury and property damage incidents. Includes Workers' Compensation and insurance variations.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Safety Management.

## SAFE 378 - Energy Exploration and Generation

This course examines the safety management of energy exploration and energy generation safety.
Prerequisites: SAFE $118^{\mathrm{D}}$ and SAFE $218^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Summer \& Winter Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Safety Management.
SAFE 385 - Safety Measurement, Evaluation, and Research
This course introduces safety management students to applied safety research utilizing analysis of evaluative data and statistical procedures applicable to the safety field. The course includes discussions on databases, sampling techniques, and statistical and survey tools. This course will introduce students to data interpretation and how to prepare applied safety research documents.

Prerequisites: SAFE $118^{C}$ and SAFE $218^{C}$ and SAFE $258{ }^{C}$ and SAFE $318^{*}{ }^{\circ}$ and SAFE $319^{* C}$ and STAT 152 (may be taken concurrently) ${ }^{\text {C }}$ (may be taken concurrently).
${ }^{\mathrm{C}}$ Requires minimum grade of C .

## Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1 or Senior 2.
Enrollment limited to students with department of Safety Management.

## SAFE 388 - Insurance Risk and Loss Control Management

Examines Risk as it applies to Occupational Safety and Health in an evolving world with a focus on risk assessment and treatment through Insurance and Loss Control Management.

## Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1, Senior 2 or Sophomore 2.
Enrollment limited to students with department of Safety Management.

## SAFE 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Safety Management.

## SAFE 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Safety Management.

## SAFE 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Safety Management.

## SAFE 408 - Contemporary Safety Topics and Issues

Examines emerging issues and topics in the field of safety. Must be taken the semester prior to internship.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Safety Management.

## SAFE 418 - Security in the Workplace

Examines security in relation to protecting assets and resources within an enterprise.

Credits: 3
Term(s) Typically Offered: Offered Every Term
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SAFE 448 - Management and Integration of Safety

Involves the development, integration, evaluation, management, and cost containment strategies of the safety function within an enterprise.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Safety Management.
SAFE 450 - Internship
Provides opportunity to apply theory and develop competencies through a work-related experience in an appropriate cooperating enterprise.
Summers only.
Credits: 3-12
Term(s) Typically Offered: Offered Summer Terms
Students with a semester level of Freshman 1, Freshman 2, Junior 1,
Sophomore 1 or Sophomore 2 may not enroll.
Enrollment is limited to students with a major in Safety Management.

## SAFE 478 - Environmental Permitting and Sustainability

This course examines the role of Safety Management in assessment of environmental regulations and permitting and application of sustainability practices.

Prerequisites: SAFE $118^{\mathrm{D}}$ and SAFE $218^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$
Credits: 3
Term(s) Typically Offered: Offered Summer \& Winter Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Safety Management.
SAFE 488 - Safety Training and Development
Examines workplace safety training and development as they relate to employer work task performance at all levels of an organization.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Safety Management.
SAFE 490 - Independent Study
Students study under the supervision of a professor on a specific and significant topic. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment is limited to students with a major in Safety Management.

## SAFE 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

Enrollment is limited to students with a major in Safety Management.

## SAFE 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment is limited to students with a major in Safety Management.

## Science (SCI)

SCI 101 - Science of Life

A one semester foundational science course intended to provide students with: 1. An understanding of the scientific process; 2. Fundamental sclentific literacy; 3. Background knowledge in biological and chemical concepts; 4. An understanding of how to collect, analyze, and interpret scientific data. This course is a combined lecture and lab course that will cover contemporary issues dlrectly within the fields of biology and chemistry.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## SCI 102 - Understanding the Physical World

A one semester foundational science course intended to provide students with: 1. An understanding of the scientific process; 2.Fundamental scientific literacy; 3. Foundational knowledge in geology, environmental science, space science, and physics concepts; 4. An understanding of how to collect, analyze, and interpret scientific data. A combined lecture and lab course that will explore contemporary issues directly related to geology, environmental science, space science, and physics.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

# Secondary Education/Foundations Education (SEFE) 

## SEFE 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## SEFE 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## SEFE 195-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## SEFE 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## SEFE 200 - Introduction to Education, Teaching Methods and Field

This course is designed to introduce the student to the field of education.
Topics covered include: the role of the teacher, structure and organization of schooling, and current issues and concerns relating to education.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Education, Transfer Thread Completion Course
SEFE 230 - Production and Utilization of Instructional Technology
Selection, utilization and production of instructional materials. Equipment operation via self-instruction in the Media Lab.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms

## SEFE 245 - Middle Level Learning Theory

This course provides pre-service teachers with a knowledge base of the learning theories, with a special focus on the application of the psychological learning theories to the teaching and learning of the adolescent learner.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.
SEFE 250 - Pre, Early, \& Adolescent Development
An analysis of the physical, social, emotional, cognitive, moral, and other developmental processes which occur during the pre-adolescent/ adolescent years, and affect his/her learning.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.
SEFE 251 - Teaching Reading in the Content Areas Grades 4-8
This course is designed to introduce the middle level teaching candidate to reading across the content areas.

Credits: 3
Term(s) Typically Offered: Offered Every Term
Enrollment is limited to students with a program in Mid Level-Engl\&Lang Arts (4-8), Mid Level-Mathematics (4-8), Mid Level-Social Studies (4-8) or Middle Level-Science (4-8).

## SEFE 280-Cultural Minorities in Education

A study of multi-cultural issues in American education with emphasis on the theory and practice relating to race, religion, ethnicity, social class, gender, age, and exceptionality.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): African-American Studies, Civil Rights \& Social Movements, Education, Fighting Social Problems, Transfer Thread Completion Course, Well-Being of Children and Youth

## SEFE 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## SEFE 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## SEFE 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## SEFE 300 - Middle Level Cognitive Development

This course provides pre-service teachers with a knowledge base of the various factors which affect the learning, cognition, and cognitive development of the pre-adolescent learner.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SEFE 311 - Teaching of Mathematics in the Middle School

Students will explore curriculum models, teaching materials, technology and best teaching practices for enhancing middle school students" mathematical understanding.

Credits: 3
Term(s) Typically Offered: Offered Every Term
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SEFE 319 - Teaching of Social Studies in Secondary Schools

The development and refinement of teaching competencies particularly related to the teaching of secondary school social studies: history, political science, economics, geography and sociology/anthropology. The course will emphasize the development of social studies in the school, teaching methodology (post and current), the unit approach to teaching social studies, media uses and preparation of media materials, teaching techniques, professional organizations, and teaching aids and materials such as computers, television and simulation programs.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SEFE 320 - Teaching of Language Arts in Secondary Schools

The development and refinement of teaching competencies particularly related to instruction in secondary school language arts, including English. The course also emphasizes English curriculum, teaching strategies and methodologies and the use of media in content presentation.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER
CANDIDACY attribute.

## SEFE 323 - Teaching World Languages

Theory and methodology for teaching world languages throughout the K -12 curriculum.

Prerequisite: SEFE $200^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SEFE 324 - Methods for Teaching English as a Second Language and Bilingual Education

A course designed to acquaint the prospective teacher at any level with the methodology used to teach English to native speakers of other languages. Also acquaints students with the specialized procedures used when teaching in bilingual classrooms (any two languages) on any level.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

SEFE 325 - Teaching in the Middle Level Grades
Focusing on middle school teaching in grades 4 through 8 , this course examines the organization, curriculum, instructional strategies, classroom management techniques, and teaching methods for working with young adolescents. Also covered are middle level guidance, exploratories, scheduling, and parent-school relations.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SEFE 326 - ELL Strategies and Practice

A course designed to acquaint the prospective teacher at any level with the methodology used to teach English Language Learners. Topics include linguistic and cultural diversity, standard-based instruction, assessment, and professionalism.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SEFE 329 - Methods of Instruction in Secondary Content Areas

This course is designed to provide prospective secondary teachers with the opportunity to design and teach lessons using basic instructional models and teaching strategies. The role of reading, writing, and oral communication in the teaching/learning of secondary content is also addressed. Following microteaching episodes, students reflect upon and analyze the teaching processes to clarify instructional values and to encourage critical inquiry.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SEFE 335 - Teaching Middle Level Social Studies

Designed for pre-service middle school teachers, focusing on grades 4 through 8, this multifaceted course compiles well-researched and essential information on social studies education. The course uses the standards recommended by the National Council for the Social Studies and the Pennsylvania Department of Education as a foundation, thoroughly discussing the core disciplines and thematic strands of social studies. The knowledge base is packed with useful information on an all-encompassing range of teaching methods and tools, including lesson planning, skills development, assessment, multiple intelligences, determining one"s personal philosophy of education, and utilizing information technology.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER
CANDIDACY attribute.

## SEFE 337 - Teaching Middle Level Language Arts

This course provides pre-service upper elementary and/or middle-level teachers, focusing on grades 4 through 8, with the relevant teaching strategies and content for English pedagogy.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER
CANDIDACY attribute.

## SEFE 338 - Standards-Based Instruction \& Assessment in the Inclusionary Classroom

Assessment skills, extensive practice, and the application of assessment results to design effective individualized interventions are essential middle level teaching skills. Successful demonstration of these abilities is an expected outcome through the PDE 430, Pennsylvania Statewide Evaluation Form for Student Professional Knowledge and Practice. Assessment knowledge has an important role in the standards and rubrics adopted by the National Middle School Association (NMSA). The "Assessment in a Standards Aligned System" section of this document has an overview of the types of assessments used in the Pre K-12 settings and competencies for all professional education candidates.

## Credits: 3

Term(s) Typically Offered: Offered Spring \& Winter Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SEFE 342 - Educational Psychology for Diverse Learners

This course provides the knowledge-base of (behavior, social learning, cognitive, constructivist and humanistic) learning theories, as applied in the context of diverse teaching and learning environments. The content also includes the topics of assessment, evidence-based research methods, motivational theories, and classroom management skills to enable the pre-service teacher to create effective learning environments for diverse learning contexts.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SEFE 349 - Teaching of Science in the Middle School

Students will explore curriculum models, teaching materials, technology and best teaching practices for enhancing middle school students' understanding in science.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER
CANDIDACY attribute.

SEFE 370 - Educational Measurements, Assessment and Evaluation Objectives for testing and evaluation; construction and analysis of classroom tests for evaluative and diagnostic purposes; construction and application of non-test tools for assessment, including portfolios; statistical analysis of testing and measurement data; use of standardized tests in the classroom; and the use of computers.

Prerequisite: SEFE $200^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SEFE 375 - Language Across the Secondary Curriculum

An examination of the language processes and their connection to learning content in secondary school. Based on the understanding of language and learning processes, future secondary teachers learn to employ teaching strategies that both enhance learning and improve reading, writing, speaking, and listening skills. Required of all secondary majors.

## Credits: 2

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SEFE 380 - History and Philosophy of Education

Critical exploration of the philosophical issues and historical antecedents that form the bases for past and current American educational practice in a multicultural society.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SEFE 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SEFE 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## Credits: 1-6

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SEFE 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SEFE 401 - Education and American Activism

This course examines the connections between the American education system and social activism in the United States. This includes
contrasting theories relating to the purpose of public education, historical analysis of cases in which the education system played an active role either in supporting social change or in reinforcing social order, and a critical reflection upon current education reforms in the United States.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): Education, Fighting Social Problems, Transfer Thread Completion Course
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

## SEFE 420 - American Education in the Twenty-First Century: A

 Comparative PerspectiveAmerican educational policies and practices are viewed within a global context. Undergraduate students, who will become parents and taxpayers, are introduced to the core social and educational institution in developed or developing societies: the school.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Education, Transfer Thread Completion Course Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SEFE 422 - Practicum in the Middle-Level Grades

Designed to give middle-level majors a pre-student teaching field experience in the middle level grades under the supervision of a University faculty member.

Credits: 1
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SEFE 426 - Practicum in Middle-Level \& Secondary Education

Designed to give secondary education majors a pre-student teaching field experience in a secondary classroom under the supervision of a university faculty member.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

SEFE 439 - Issues in the Diverse Secondary Content Area Classroom This course is designed to help secondary teachers apply theoretical models to classroom management and to the teaching of reading and writing in content area classrooms. Additionally, the principles of school law as they apply to classroom teachers will be examined. Finally, the course will be taken concurrently with student teaching to facilitate the integration of theory with practice.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SEFE 455 - Student Teaching - Secondary Education

Under the guidance of a cooperating teacher and university supervisor, students engage in two eight- week assignments on a full-time basis in specified school districts and attend scheduled seminars. Supervisors assign additional requirements.

Credits: 3-12
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SEFE 456 - Student Teaching - Middle Level Grades

Under the guidance of a cooperating teacher and university supervisor, teacher candidates engage in two eight-week assignemnts on a fulltime basis in specified school districts at the middle level and also attend scheduled seminars. University supervisors assign additional requirements.

Credits: 12
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SEFE 490 - Independent Study

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SEFE 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SEFE 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Social Work (SOWK)

## SOWK 105 - Human Diversity

An orientation to living and working with diverse populations within modern American society, including examination of the strengths and stresses associated with diversities.

Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): 21 st Century Healthcare, Education, Transfer Thread Completion Course

## SOWK 107 - Cultural Competency and Human Services

This course is designed for Social Work and Criminology/Criminal Justice majors to develop their understanding of how cultural differences among client populations require differential applications generic (professional) skills.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## SOWK 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## SOWK 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## SOWK 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## SOWK 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
SOWK 200 - Introduction to Child Welfare
Provides an overview of the child welfare system in the United States, including the history of the development of child welfare policies, programs, and services; exploring best practices in child welfare; and examining current and future issues and problems in this field.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Transfer Thread Completion Course, Well-Being of Children and Youth

## SOWK 230 - Social Justice and Equality

This course provides an overview of Frederick Douglass' perspectives on injustice and racial prejudice, which will be examined from his life experiences as a former slave who became the pre-eminent voice of the liberation struggle. The historical context of Douglass' life will be compared and contrasted to contemporary issues of race, ethnicity, freedom and diversity awareness.

Credits: 3
Term(s) Typically Offered: Offered Winter, Spring\&Summer
Thematic Thread(s): African-American Studies, Transfer Thread Completion Course

## SOWK 251 - Introduction to Social Work

An orientation to the field of social work and social work activities in the community. Includes service learning.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## SOWK 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## SOWK 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
SOWK 298 - Selected Topics
A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## SOWK 300 - Crisis Intervention

This course focuses on practice skills to effectively recognize and intervene in crises. This course examines factors influencing the development of crises, identification of potential crises and use of deescalation skills. This course will focus on developing effective crisis intervention skills and techniques for a variety of crisis situations.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Building a Healthy Society, Transfer Thread Completion Course
Students with a semester level of Freshman 1 or Freshman 2 may not enroll.

## SOWK 310 - Animal Assisted Interventions

This course is designed to provide students with an understanding of the human-animal bond and how this relationship can foster interventions in the human service and health care fields. Students will learn several animal-assisted interventions, beneficial effects and how they are implemented with diverse groups in various practice settings.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1 or Freshman 2 may not enroll.

SOWK 311 - Clinical and Academic Documentation for Social Work
This course will assist students in developing strong clinical documentation skills for social work practice. Students will be exposed and practice various types of clinical documentation. Additionally, students will enhance their clinical and academic writing by creating a portfolio of various documents.

Credits: 3
Term(s) Typically Offered: Offered Summer Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SOWK 318 - Research Methods

Major methods and procedures used in social work and sociological research

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Social Work.

## SOWK 319-Statistical Methods

Introduction to basic statistical concepts and research techniques used in social research. Also listed as PROF 317

Prerequisite: SOWK $318^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment is limited to students with a program in Social Work.

## SOWK 321 - Forensic Social Work

This course applies social work principles to various aspects of the legal system. Students will address legal rights, policies and practice in various forensic settings and with clients involved with the law and legal system.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SOWK 328 - Human Behavior and the Social Environment

Covers the biophysical, psychological, and social dimensions assessing social functioning during pregnancy, birth, newborn, infancy, and early childhood, middle childhood and adolescence, young and late adulthood.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Social Work or Social Work.

## SOWK 334 - Clinical Perspectives on DSM Diagnoses

Course content related to taxonomy, etiology, and diagnostic impressions of psychiatric disorders will be presented. Social Work services will be analyzed in relation to the disorders.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Criminology \& Criminal Justice or Social Work.

## SOWK 340-Social Welfare Institutions

An introductory analysis of social welfare policies, issues, and institutions.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Social Work.

## SOWK 355-Social Work Practice with Individuals

Principles and practice of interviewing processes as applied to casework methods. Grade of C or better is required in this course.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Social Work.
SOWK 356 - Social work Practice with Groups \& Families
Expands knowledge and skills base to include social work practice with family and group systems. Grade of C or better is required in this course.

Prerequisite: SOWK $355^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Social Work.

SOWK 357-Social Work Practice with Organizations and Communities
Expands knowledge and skills base to include social work practice in communities and larger social systems. Grade of $C$ or better is required in this course.

Prerequisites: SOWK $340^{\text {D }}$ and SOWK $356^{\text {C }}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.
Enrollment is limited to students with a major in Social Work.

## SOWK 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## SOWK 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## SOWK 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## SOWK 407 - Social Policy Issues

Problems and issues associated with social policy including the politics of welfare policy.

Prerequisites: SOWK $251^{\mathrm{D}}$ and SOWK $340^{* D}$ (may be taken concurrently).
${ }^{D}$ Requires minimum grade of $D$

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a major in Social Work.

## SOWK 450 - SOWK Internship

A Social Work Internship.

Corequisite(s): SOWK 460
Credits: 1-12
Term(s) Typically Offered: Offered Spring \& Summer Terms Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a major in Social Work.

## SOWK 460 - Social Work Integrative Seminar

This senior level course integrates a four year social work curriculum with emphasis on knowledge base and skill acquisition for working in micro, mezzo, macro and research practice. This course will be a corequisite with SOWK 450 (Internship)

Corequisite(s): SOWK 450
Credits: 3
Term(s) Typically Offered: Offered Spring \& Summer Terms
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a major in Social Work.

## SOWK 490 - Independent Study

Independent research under the guidance of a faculty member.
Prerequisite: Permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. (repeatable up to 6 credits) Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## SOWK 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## SOWK 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Spanish (SPAN)

## SPAN 101 - Spanish Language \& Culture I

This course is the first in a three-course series that offers an introduction to the Spanish language and cultures of the Spanish-speaking World.

Credits: 3
Term(s) Typically Offered: Offered Fall, Spring, \& Summer
Thematic Thread(s): Becoming America, Being American, Global
Citizenship, Food, Wellness \& Environment Across Cultures, International Business, Transfer Thread Completion Course, Transnational Culture

## SPAN 102 - Spanish Language \& Culture II

This is the second in a three-course series that offers an introduction to the Spanish language and cultures of the Spanish-speaking World.

Prerequisites: minimum score of 15 in 'Placement in SPAN102' or SPAN $101^{D}$ or SPAN $110^{D}$ or SPAN $121^{D}$ or SPAN $131^{D}$ or minimum score of 234 in 'Placement in SPAN102'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): Becoming America, Being American, Global Citizenship, Food, Wellness \& Environment Across Cultures, International Business, Transfer Thread Completion Course, Transnational Culture

SPAN 103 - Spanish Language \& Culture III
This course is the third in a three-course series that offers and introduction to the Spanish language and cultures of the Spanishspeaking World.

Prerequisites: minimum score of 25 in 'Placement in SPAN103' or SPAN $102^{\text {D }}$ or minimum score of 312 in 'Placement in SPAN103'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): Becoming America, Being American, Global Citizenship, Food, Wellness \& Environment Across Cultures, International Business, Transfer Thread Completion Course, Transnational Culture

## SPAN 104-Situational Spanish

This course provides the opportunity to learn practical application Spanish phrases and cultural aspects relevant to future careers in fields that have direct contact with the public, depending on situations specific to the different professional fields.

Prerequisite: SPAN $102^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3

## SPAN 110-Spanish for Educators

This course provides an introduction and essential tools for communicating with Spanish-speaking students, parents/guardians and school personnel to pre-service and in-service educators.

## Credits: 3

Thematic Thread(s): Education, Transfer Thread Completion Course Enrollment is limited to students with a program in Early Childhood Ed (PK-4), Health and Physical Education, Early Child/Spec Ed(PK-4)PK-8), Sec Education-English(7-12), Sec Education-French (K-12), Mid LevelEngI\&Lang Arts (4-8), Mid Level-Mathematics (4-8), Mid Level-Social Studies (4-8), Middle Level-Science (4-8), Sec Ed-Social Stud-Hist (7-12), Secondary Educ-Spanish (K-12), SPED Transition Programming, Music Education (K-12) or K-12 Art Teacher Preparation.
Enrollment limited to students in the College of Education or College of Liberal Arts colleges.

## SPAN 121 - Spanish for Health Professionals

This course will explore occupational Spanish specializing in Health Care Professionals. This course provides an introduction and essential tools for communicating with Spanish-speaking patients. The course's context is health professions and communicative aspects within the field of Health. The topics presented are carefully selected/designed to help health care professionals manage various situations within the field while addressing Spanish-speaking patients. This course has no prerequisites. This course satisfies the prerequisite for Span 102.

Credits: 3
Term(s) Typically Offered: Offered Winter Terms
Thematic Thread(s): 21 st Century Healthcare, Food, Wellness \&
Environment Across Cultures, Transfer Thread Completion Course
Enrollment limited to students in a Bachelor of Science degree.

## SPAN 131 - Spanish for the Business World

This course is intended for students who wish to acquire knowledge of Spanish for use in a practical business context. This course provides an introduction and essential tools for communicating with Spanishspeaking clients and partners as well as culture background to succeed in a cross-cultural environment. The topics presented are carefully selected/designed to help business professionals manage various situations within the field while addressing Spanish-speaking clients and partners. This course has no prerequisites.

Credits: 3
Thematic Thread(s): International Business, Transfer Thread Completion Course
Enrollment limited to students in a Bachelor of Science degree.

## SPAN 139-University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## SPAN 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## SPAN 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## SPAN 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## SPAN 200 - Writing in Spanish for the Professions I

This course provides a review of basic Spanish grammar with an emphasis on developing writing skills for the professions.

Prerequisites: minimum score of 35 in 'Placement in SPAN200 level' or SPAN $103^{\text {D }}$ or minimum score of 384 in 'Placement in SPAN200 level' or SPAN $104^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms

## SPAN 201-Speaking in Spanish for the Professions I

A functional course in speaking and writing Spanish, stressing everyday vocabulary and sentence structure. Some grammar review.

Prerequisites: SPAN $103^{\mathrm{D}}$ or SPAN $104^{\mathrm{D}}$ or minimum score of 35 in 'Placement in SPAN200 level' or minimum score of 384 in 'Placement in SPAN200 level'
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms

## SPAN 215 - Topics in Hispanic Culture

This course provides insight into Hispanic cultures by examining the practices and traditions of the different countries that comprise the Hispanic world. This course is taught in English.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Transfer Thread Completion Course
SPAN 220 - Understanding Hispanic Cultures Through Reading
In this course students develop a deeper understanding of the cultural diversity of the Hispanic World through a variety of texts and media related to different disciplines.

Prerequisites: SPAN $200^{\text {D }}$ or minimum score of 35 in 'Placement in
SPAN200 level' or minimum score of 384 in 'Placement in SPAN200 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms

## SPAN 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## SPAN 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## SPAN 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## SPAN 300 - Writing in Spanish for the Professions II

This course reviews intermediate-level grammar concepts while at the same time focusing on writing skills with an emphasis on developing writing proficiency for the professions.

Prerequisites: minimum score of 45 in 'Placement in SPAN300 level' or minimum score of 457 in 'Placement in SPAN300 level' or SPAN $200^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 301 - Speaking in Spanish for the Professions II

This course is the second in a three-course sequence that focuses on developing students' oral proficiency, including fluency and functional competence.

Prerequisites: SPAN $201^{\mathrm{D}}$ and (SPAN $200^{\mathrm{D}}$ or SPAN $220^{\mathrm{D}}$ ) or minimum score of 457 in 'Placement in SPAN300 level'
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
SPAN 302 - Communication in Spanish for the Elementary Classroom This course is designed to offer the elementary education major specific language skills necessary for effective communication in the elementary education classroom. (open only to Ed majors).

Prerequisites: SPAN $201^{\text {D }}$ or minimum score of 45 in 'Placement in SPAN300 level' or minimum score of 457 in 'Placement in SPAN300 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a minor in Spanish (Elem Ed).
Enrollment limited to students in the following programs:

- BSED11
- BSED1100
- BSED1189
- BSED1192
- BSED1231
- BSED1233
- BSED1234
- BSED1235
- BSED1284

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## SPAN 303 - Developing Communicative and Cultural Competence for the Workplace

This course is designed to teach students the necessary skills to interact effectively in Spanish in a professional setting.

Prerequisites: SPAN $200^{\mathrm{D}}$ and SPAN $201^{\mathrm{D}}$ and SPAN $220^{\mathrm{D}}$ or minimum score of 45 in 'Placement in SPAN300 level' or minimum score of 457 in
'Placement in SPAN300 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 305-Spain Today

A study of the history of Spain and of important components of its culture, such as art, architecture, and daily life.

Prerequisites: (SPAN $200^{\mathrm{D}}$ or SPAN $201^{\mathrm{D}}$ ) and SPAN $220^{\mathrm{D}}$ or minimum score of 45 in 'Placement in SPAN300 level' or minimum score of 457 in 'Placement in SPAN300 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 307 - U.S. Latino Cultures

A study of the cultural background of the members of the Spanishspeaking minorities in the United States, especially the Chicanos, Puerto Ricans and Cubans.

Prerequisites: SPAN $220^{\mathrm{D}}$ and (SPAN $200^{\mathrm{D}}$ or SPAN $201^{\mathrm{D}}$ ) or minimum score of 457 in 'Placement in SPAN300 level'
${ }^{D}$ Requires minimum grade of $D$
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 309 - Hispanic Civilization for the K - 12 Classroom

This course, designed for the Elementary Education major, focuses on themes of Hispanic civilization and culture appropriate for inclusion in the K -12 classroom. Open to Spanish education majors only.

Prerequisites: (SPAN $200^{\mathrm{D}}$ or SPAN $201^{\mathrm{D}}$ ) and SPAN $220^{\mathrm{D}}$ or minimum score of 45 in 'Placement in SPAN300 level' or minimum score of 457 in 'Placement in SPAN300 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Elementary Education (K-6), Early Childhood Ed (PK-4), Early Child/Spec Ed(PK-4)PK-8), Mid Level-EngI\&Lang Arts (4-8), Mid Level-Mathematics (4-8), Mid Level-Social Studies (4-8), Middle Level-Science (4-8), Secondary Educ-Spanish (K-12) or Spanish (Elem Ed).

## SPAN 315 - Spanish Study Abroad

This course is designed for students who wish to study the Hispanic society firsthand. Students will study the culture, literature, history, art, and other issues concerning the country where the program is offered.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 318 - Hispanic Children's Literature for the K-12 Classroom

Students will read legends, fables, poems which are part of the Hispanic tradition and which are told to or read by young children and younger adolescents.

Prerequisites: (SPAN $200^{\mathrm{D}}$ or SPAN $201^{\mathrm{D}}$ ) and SPAN $220^{\mathrm{D}}$ or minimum score of 45 in 'Placement in SPAN300 level' or minimum score of 457 in 'Placement in SPAN300 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a minor in Spanish (Elem Ed). Enrollment limited to students in the following programs:

- BSED11
-BSED1100
-BSED1189
- BSED1192
- BSED1231
- BSED1233
- BSED1234
- BSED1235
- BSED1284


## SPAN 326 - The Civilization of Spanish America: Precolumbian to 19th

 CenturyA study of the development of the civilization of Spanish America from Precolumbian times to the 19th century, including important aspects of their culture, such as art, architecture, and daily life.

Prerequisites: (SPAN $200^{\mathrm{D}}$ or SPAN $201^{\mathrm{D}}$ ) and SPAN $220^{\mathrm{D}}$ or minimum score of 45 in 'Placement in SPAN300 level' or minimum score of 457 in
'Placement in SPAN300 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 328 - Latin American Today

A study of the development of the civilization of Spanish America from the 19th century to the present, including important aspects of their culture, such as art, architecture, and daily life.

Prerequisites: (SPAN $200^{\mathrm{D}}$ or SPAN $201^{\mathrm{D}}$ ) and SPAN $220^{\mathrm{D}}$ or minimum score of 45 in 'Placement in SPAN300 level' or minimum score of 457 in
'Placement in SPAN300 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 330 - Spanish Literature 1800 to Present

A study of major writers genres and literary movements of Spain in this period.

Prerequisites: SPAN $220^{\mathrm{D}}$ and (SPAN $200^{\mathrm{D}}$ or SPAN $201^{\mathrm{D}}$ ) or minimum score of 45 in 'Placement in SPAN300 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 332-Spanish American Literature - 19th Century to Present

A study of major writers genres and literary movements of Latin American in this period.

Prerequisites: SPAN $220^{\mathrm{D}}$ and (SPAN $200^{\mathrm{D}}$ or SPAN $201^{\mathrm{D}}$ ) or minimum score of 45 in 'Placement in SPAN300 level' or minimum score of 457 in
'Placement in SPAN300 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 335 - Women in Hispanic Literature

A study of Hispanic women authors and of Hispanic women as literary characters in Hispanic literature.

Prerequisites: SPAN $220^{\mathrm{D}}$ and (SPAN $200^{\mathrm{D}}$ or SPAN $201^{\mathrm{D}}$ ) or minimum score of 457 in 'Placement in SPAN300 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 340 - Introduction to Translation

This course provides hands-on experience translating different types of texts to further develop Spanish language skills and intercultural competence.

Prerequisites: SPAN $300^{\mathrm{D}}$ or minimum score of 45 in 'Placement in SPAN300 level' or minimum score of 457 in 'Placement in SPAN300 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 350 - The Sounds of Spanish

In this course students will work on their Spanish pronunciation skills and will also learn about dialectal variations in the Spanish-speaking world.

Prerequisites: SPAN $200^{\mathrm{D}}$ and (SPAN $201^{\mathrm{D}}$ or SPAN $220^{\mathrm{D}}$ ) or minimum score of 45 in 'Placement in SPAN300 level' or minimum score of 457 in 'Placement in SPAN300 level'
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 390-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## SPAN 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 400 - Writing in Spanish for the Professions III

This course provides an overview of intermediate- and advanced-level Spanish grammar with an emphasis on research and advanced writing skills.

Prerequisite: SPAN $300^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 401 - Speaking in Spanish for the Professions III

This course is the third in a three-course sequence that focuses on developing students' oral proficiency, including fluency and functional competence.

Prerequisite: SPAN $301^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 431 - Exploring Spanish Culture through Media

A study and analysis of the most important works of representative Spanish authors of this period.

Prerequisites: SPAN $300^{\mathrm{D}}$ and $\left(\operatorname{SPAN} 305^{\mathrm{D}}\right.$ or SPAN $307^{\mathrm{D}}$ or SPAN $326^{\mathrm{D}}$ or SPAN $328^{\mathrm{D}}$ ) and (SPAN $330^{\mathrm{D}}$ or SPAN $332^{\mathrm{D}}$ or SPAN $318^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## SPAN 432 - Exploring Latin American Cultures through Media

A study and analysis of the most important works of representative Spanish-American authors of this period.

Prerequisites: SPAN $300^{\mathrm{D}}$ and (SPAN $305^{\mathrm{D}}$ or SPAN $307^{\mathrm{D}}$ or SPAN $326^{\mathrm{D}}$ or SPAN $328^{\mathrm{D}}$ ) and (SPAN $330^{\mathrm{D}}$ or SPAN $332^{\mathrm{D}}$ or SPAN $318^{\mathrm{D}}$ )
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 490 - Independent Study

Students have an opportunity to study selected areas in greater concentration. The nature of the topic selected and its treatment are determined in consultation with the instructor. credits) Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPAN 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Special Education (SPED)

## SPED 121-Overview of Special Education

The purpose of this course is to provide a broad overview of the terminology, strategies, and issues commonly encountered when addressing the needs of exceptional individuals. This course takes a multidisciplinary approach that begins with an introduction to the history of special education and important legislation, followed by discussion of individual areas of exceptionalities. Emphasis will be placed on etiology, identification, assessment treatment and social issues and concerns.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## SPED 122 - Low Incidence Disabilities

This course will examine best practice and policies relating to the educational consequences of low-incidence disabilities. An emphasis on deafness, blindness, deaf-blindness, severe disability and multiple disability will occur. Placement and accommodation issues in integrated educational settings will also be a focus.

Prerequisite: SPED $121^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
SPED 139-University Seminar
University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world..

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## SPED 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## SPED 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## SPED 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## SPED 220 - The Nature and Needs of Autism Spectrum Disorders

This course will focus on an understanding of the characteristics of Autism Spectrum Disorders (ASD) and the implications for individual's lifespan. The course will explore the latest research on potential causes, best practices for assessment and intervention, as well as current legal and ethical issues related to autism services.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms

## SPED 222 - Introduction to Special Education Law

In this course, students will discuss genesis of special education by way of litigation and resulting legislation as rooted in the Civil Rights Movement of the 1960's, PL 94-142, and the inception of IDEA Part A-D. An overview of PA Chapter 14 and its relation to IDEA, Chapter 15 and ADA, along with Chapter 16. Students will also explore LRE, compliance, and professional ethics and standards.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
SPED 230 - Early Intervention Practices for Students with Disabilities In this course, students will identify the critical components of an educational program for early learners with disabilities and medical diagnosis including: curricular areas, early interventions and effective teaching techniques, use of appropriated materials, transition to school age regarding Part C of IDEA, related services and personnel, parental involvement, assistive technology and inclusionary practices.

Prerequisite: SPED $121^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3

## SPED 245 - Technology in Special Education

Candidates will develop the use of technologies to assist in the teaching, remediation, assessment and enrichment of students with special needs in inclusive traditional and/or cyber classrooms. The goal is to help pre-service teachers iimplement instructional and assistive technology effectively. This course will also provide a framework for utilizing educational technology to meet the individualized needs of students.

Prerequisite: SPED $121^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1 or Freshman 2 may not enroll.

## SPED 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## SPED 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## SPED 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## SPED 302 - Developmental Disabilities

The learner will identify the critical components of an educational program for persons who have mental retardation classified as moderate, severe, or profound including: curricular areas, effective teaching techniques, appropriate materials, team approaches, ancillary services, parental involvement and inclusionary practices. Includes a lab of three contact hours per week with students who have severe and/or multiple disabilities.

Prerequisites: (SPED $202^{\mathrm{D}}$ or SPED $122^{\mathrm{D}}$ ) and (SPED $203^{\mathrm{D}}$ or SPED $121^{\mathrm{D}}$ or SPED $100^{\mathrm{D}}$ ) and (SPED $204^{\mathrm{D}}$ or SPED $230^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

SPED 315 - Special Education Issues in Diverse Secondary Classrooms This course is designed to familiarize secondary education majors with the various behavioral problems they may encounter in the inclusive classroom. Suggestions are given for ameliorating these problems, as well as successfully organizing the classroom and classroom routine. Three units of study will be explored. The three units are: 1) Classroom management with a focus on dealing with students with special needs, 2) Legal issues for secondary teachers, 3) Impact of exceptionalities in inclusive settings.

Corequisite(s): SPED 455
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPED 341 - Transition Across the Lifespan

This course is designed to provide students with a life management perspective for educating persons with disabilities in an inclusive etting. this course prepares students to apply the foundational principles of special education for meeting the major developmental needs of persons with disabilities from early infancy to adulthood. This course is designed to provide the undergraduate student with a foundation for the understanding of the major developmental needs and community requirements for individuals with disabilities.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPED 342 - Building Community Partnerships

This course focuses on the multi-dimensaional role of service provider to individuals with disabilities. In addition to hands-on experiences with service agencies, students enrolled in this course will interact with service providers, supervisors, related service personnel parents and caretakers. Students will learn how to take on all roles of a service provider and implement effective programming to address all the needs of a client(s). Students will become skilled in matching student needs with appropriate transtion programming as well as identifying personnel key in providing necessary services.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Comm Prgrms Amer with Disabil, Comm Prg Am Dis-Adap Phys Actv, Comm Prg Am Dis-NonPrft Mgmt or SPED Transition Programming.

## SPED 343 - Americans with Disabilities

This course will provide background for understanding how disabling conditions may handicap a person in terms of jobs, marriage, and family life, housing and transportation and citizenship. The course stresses how everyone is involved in determining the success or failure of the disabled in society. An historical overview of society's treatment of the disabled will be contrasted with recent legislation and the emerging roles of the disabled in American society. The impact of special education on the disabled person, the parents, siblings, employers, neighbors, and peers will be presented.

Credits: 3
Term(s) Typically Offered: Offered Fall, Winter, \& Spring
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPED 346 - Assessment in Transition Planning

This course introduces the student to the assessments utilized for evaluation of students at all levels of transition planning, spanning from school readiness assessments to transition planning for the secondeary level. Students will learn to identify appropriate assessment based on student needs as well as how to administer and score evaluation data. In addition, the course will guide students in reviewing and interpreting assessment data to determine appropriate transition planning to address student needs. The course will also indentify the major litigation and legislation that have sigificantly influenced the nature of service to exceptional populations in the area of transition planning and assessment of their needs.

Prerequisites: SPED $121^{C}$ and SPED $122^{\circ}$ and SPED $230^{\circ}$ and SPED $341^{C}$ and SPED $342^{\text {C }}$ and SPED $343^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment is limited to students with a program in SPED Transition
Programming

## SPED 347 - Management \& Leadership

This is an advanced level course that expands students' knowledge in skills necessary to take on leadership and management roles in the secondary transition planning level. Students will be required to engage in professional organizations at the state and local level. Students will learn to identify how to develop an effective system for service delivery to clients. Additional, an emphasis will be placed on current funding sources in the nation and state as well as how to manage necessary paperwork for obtaining funding necessary to run appropriate transition programs for children and adults of transition age.

Prerequisites: SPED $121^{\mathrm{C}}$ and SPED $122^{\mathrm{C}}$ and SPED $230^{\mathrm{C}}$ and SPED $341^{\mathrm{C}}$ and SPED $342^{\text {C }}$ and SPED $343^{C}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment is limited to students with a program in SPED Transition Programming.

## SPED 350 - Universal Intervention

In this course, student will identify the critical components of Tier 1 in the Multi-Tiered System of Support (MTSS) for learners with and without disabilities including: universal interventions, best practices, screening, progressing monitoring, classroom management, PBIS, collaboration, coteaching, SDI and accommodations and inclusionary practices.

Prerequisite: SPED $121^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Corequisite(s): ELEC 311
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SPED 353 - Teaching in an Area of High Need

In this course, we will discuss the problem of over representation of individuals from diverse backgrounds in special education and the racial, cultural, and economic concerns of school systems and communities (both domestically and abroad) trying to narrow the opportunity/ achievement gap for students. During the semester, students will be analyzing some of the historical, socioeconomic, and political factors school systems in areas of high need confront.Specifically, students will investigate effective instructional and organizational practices, examine home-school connections, and identify possible disparities in available resources for urban and rural schools.

Credits: 3
Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Sophomore 1 or Sophomore 2.

SPED 360-Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners
In this course, students will identify the critical components of Tier II in the Multi-Tiered System of Support (MTSS) for learners with and without disabilities including: data-based decision making, evidenced based practices, supplemental and intensive programming, differentiated instruction and assessment. These concepts will be explored within the scopes of academic and behavioral supports for exceptional learners.

Corequisite(s): ELEC 420
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Early Childhood Ed
(PK-4), Early Child/Spec Ed(PK-4)PK-8), Special Education (PK-12) or Exceptionalities.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SPED 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPED 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPED 398-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPED 410 - Transition Practicum

The practicum course focuses on developing skills in collaboration, consultation and teaming to prepare pre-service Transition Specialist students for entry into a multi-disciplinary and multi-dimensional role of services provider to individuals with disabilities. In addition to handson experience with service agencies, Transition Specialist students enrolled in this course will interact with clients, service providers, agency supervisors, related service personnel and care takers.
Prerequisites: SPED $121^{\mathrm{D}}$ and SPED $122^{\mathrm{D}}$ and SPED $230^{\mathrm{D}}$ and SPED $341^{\mathrm{D}}$ and SPED $342^{\mathrm{D}}$ and SPED $343^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPED 431 - Intense Behavioral and Emotional Interventions for Neuro-

 Diverse LearnersIn this course, students will identify the critical components of Tier III Emotional and Behavioral Interventions within the Multi-Tiered System of Support (MTSS) for learners with and without disabilities including: overview of severe behavior. Functional Behavioral Assessment (FBA), use of evidenced based interventions to support challenging behavior, develop more age appropriate social and emotional skills, application of effective preventative and environmental planning to limit problem behaviors as well as understanding the acting out cycle, trauma informed care and legal implications surrounding challenging behaviors in today's schools.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SPED 432 - Intensive ELA Interventions for Neuro-Diverse Learners

This course in Special Education is designed for the teacher candidate seeking certification in K-12 Special Education. This course will focus on reading and writing interventions. Students will gain experience with a variety of strategies and interventions to use with various levels of special education needs in the regular education classroom \& in pull-out placements. This course will examine effective instructional practices and delivery methods for intensive levels of special education support (K-12) in both the inclusionary and resource settings.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SPED 433 - Assessment Strategies in Special Education

This course is designed to provide undergraduate students with the skills and knowledge necessary to conduct educational assessment of diverse students and interpret assessment results in order to plan an educational program (i.e., determine elegibility and develop an individualized education program).

Prerequisites: SPED $121^{\mathrm{D}}$ and SPED $122^{\mathrm{D}}$ and SPED $230^{\mathrm{D}}$ and (SPED $325^{\text {D }}$ or SPED $350^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SPED 434 - Professional Collaboration and Ethical Practices

This course focuses on skills in consultation, collaboration and learning to prepare the pre-service teacher for the multidimensional role of today's special educator. In addition to hands-on experience in classrooms, students enrolled in this course will interact with special educators, parents, general educators, and resource personnel among others. Application of teaching techniques with children with disabilities under faculty and host teacher supervision will provide the pre-service teacher with an opportunity for experience in the special education classroom as well as inclusive settings prior to the student teaching experience.

Prerequisites: SPED $121^{\mathrm{D}}$ and SPED $122^{\mathrm{D}}$ and SPED $230^{\mathrm{D}}$ and (SPED $325^{\mathrm{D}}$ or SPED $350^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER
CANDIDACY attribute.

## SPED 435 - Processes and Procedures in Special Education

In this course, we will discuss special education legal documentation, including referral forms relating to Tier 1-3 interventions, the evaluation process, ER, IEP, procedural safegaurds, NOREPs, and Transition. Emphasis will be placed on legally defensible IEP writing, mediation, due process, objective tone, and data collection.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER
CANDIDACY attribute.

## SPED 436 - Intensive Mathematics Interventions for Neuro-Diverse

## Learners

In this course, we will discuss instructional interventions and strategies that can be utilized in an intensive, Tier 3 type, setting to assist neurodiverse learners in understanding mathematics concepts/topics.
Particular emphasis will be placed on topics and remediation strategies frequently encountered within the Grade 4 to Algebra/Grade 9 levels.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SPED 440 - Seminar in Special Education

The purpose of this seminar is to help pre-service special education teachers understand some of the challenges encountered during the first year of teaching, and provide strategies to help prepare them to overcome these challenges as they begin their first year of teaching.

Corequisite(s): SPED 455
Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPED 450 - Transition Internship

This 12 credit internship course focuses on advancing skills in collaboration, consultation and teaming to prepare pre-service students for entry into a multi-disciplinary and multi-dimenstional role of services provider to individuals with disabilities. Students set up their own internship sites with guidance and approval from their advisor. This hadns-on experience with service agencies makes up 480 hours of time in the field. Transition Specialist students enrolled in this course will interact with clients, service providers, agency supervisors, related service personnel and care takers.

Prerequisites: SPED $121^{\mathrm{D}}$ and SPED $202^{\mathrm{D}}$ and SPED $203^{\mathrm{D}}$ and SPED $204^{\mathrm{D}}$ and SPED $212^{\mathrm{D}}$ and (SPED $311^{\mathrm{D}}$ or SPED $313^{\mathrm{D}}$ ) and SPED $400^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3-12
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPED 455 - Student Teaching - Special Education

Under the guidance of a cooperating teacher and university supervisor, students engage in two eight- week assignments on a full-time basis in specified school districts and attend scheduled seminars. Supervisors assign additional requirements.

Prerequisites: SPED $202^{\mathrm{D}}$ and SPED $203^{\mathrm{D}}$ and SPED $204^{\mathrm{D}}$ and SPED $212^{\mathrm{D}}$ and SPED $314^{\mathrm{D}}$ and SPED $302^{\mathrm{D}}$ and SPED $306^{\mathrm{D}}$ and SPED $311^{\mathrm{D}}$ and SPED $312^{\mathrm{D}}$ and SPED $400^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3-12
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

## SPED 490 - Independent Study

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPED 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPED 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Sport Management (SPMT)

## SPMT 139-University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## SPMT 150-Sport Management Practicum

The SPMT practicum is designed to provide the student with a realistic experience at at level and in a setting similar to that in which he/she wishes to obtain employment. The practicum experience is a 50 -hour learning opportunity in which the student assists in a particular aspect of an organization in the sport industry. SPMT 150 may be repeated to a maximum of 4 credits in 4 different experiences, and each should be with a different organization.

Prerequisite: SPMT $194^{\text {C }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 1
Term(s) Typically Offered: Offered Every Term
Enrollment limited to students with department of Sport Management.

## SPMT 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## SPMT 194- Introduction to Sport Management

This course is an introduction to the field of sport management. Career options and managerial content will be reviewed. Foundation studies of sport, including history, philosophy, and professional skills, will be discussed. Must achieve at least a C grade before progressing to other SPMT courses.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment is limited to students with a program in Sport Management or Sport Management.

## SPMT 195-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## SPMT 196-Global Sport Management

As the economy has shifted from a domestic to a globally competitive marketplace, the demand has grown for sport managers who can function effectively in the international environment. This course develops a framework for understanding the international aspects of sport management. It provides future sport managers with a broad view of the factors underlying international sport competition, sport economics, sport marketing, sport management, and sport governance. Emphasis is on environmental dynamics, cultural and economic constraints, multinational sport business organizations, unique international sport events and international sport operations, strategy and policy.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms

## SPMT 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## SPMT 269-American Sport in the $\mathbf{2 1}$ st Century

This course is designed to give the students an understanding of the internal and external factors that shape sport in American culture. This course will analyze how sport mirrors societal changes and how sociological phenomena affect participation and behavior.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Summer Terms Enrollment limited to students with department of Sport Management.

## SPMT 286-Sport Communication and Technology

This course is intended to provide students with a comprehensive understanding of communication and communication techniques that managers use to achieve excellence in sport organizations. Focus will be placed on public relations, as well as techniques for improving the communication skills of each student in an organized sport setting. Students will receive in-depth exposure to, (a) theories underlying the use of public relations in sport, (b) new technologies in sport communication, (c) desktop publishing in sport organizations, (d) sport organizational communication techniques, and (e) sport media relations.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Enrollment limited to students with department of Sport Management.

## SPMT 290-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## SPMT 294-Sport Management and Ethics

This course is designed to integrate the concepts learned from the foundation courses in management as they apply to management areas of sport and sport agencies. The ethical strategies of sport management will be emphasized in all management decisions.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with department of Sport Management.
SPMT 295 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## SPMT 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## SPMT 301 - The Fan Experience

This course will demonstrate how the fan experience in a sport venue is impacted by marketing, promotions, the venue staff, venue design, technology, and other factors. Students will understand the customer journey and be able to identify and eliminate friction points in the fan experience.

Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPMT 315 - Diversity Issues in Sport Management

This course is designed to explore the persistent causes of pervasive racism and sexism in sport as it relates to the sport management field.

Prerequisites: SPMT $194^{\text {C }}$ and SPMT $196^{\text {D }}$ and SPMT $269^{\text {D }}$
${ }^{\mathrm{C}}$ Requires minimum grade of C .
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1 or Freshman 2 may not enroll.
Enrollment limited to students with department of Sport Management.

## SPMT 369 - Sport Budgeting and Finance

The focus of this course is on budgeting and financial principles in the sport industry. Major components of the course include analyzing budgets from youth, community, recreational, interscholastic, intercollegiate, professional, and international sport organizations, as well as studying the financial composition and impact of the sport industry, Students will also learn to construct various types of budgets used by sport organizations.

Prerequisites: SPMT $194^{\mathrm{D}}$ and SPMT $196^{\mathrm{D}}$ and SPMT $269^{\mathrm{D}}$ and SPMT $286^{\text {D }}$ and SPMT $294^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPMT 386 - Leadership in Athletic Administration and Sport Management

The major emphasis is on the preparation of athletic administrators and sport managers within collegiate university, high school, community and youth sport organizations. Information presented in this course will examine leadership theoretical concepts to help prepare students pursuing a career in athletics management/administration. Through critical thinking component and practical application exercises, the student will apply leadership theories, principles and concepts. Ultimately, the student will develop essential leadership competencies and skills for today's athletic administrators.

Prerequisites: SPMT $150^{\text {D }}$ and SPMT $194^{\text {C }}$ and SPMT $294^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students with department of Sport Management.

## SPMT 390-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPMT 394-Sport Marketing

Sport Marketing is designed to apply marketing principles to the area of sport, sport events and sport products. Marketing strategies including sales, promotions and advertising of sport will be emphasized.

Prerequisites: SPMT $150^{\mathrm{D}}$ and SPMT $194^{\mathrm{C}}$ and SPMT $196^{\mathrm{D}}$ and
SPMT $286^{\text {D }}$ and SPMT $294^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
${ }^{C}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Fall \& Winter Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Sport Management.

## SPMT 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPMT 396-Selling in the Sport Industry

This course examines the skills required for a successful career in sport sales, including personal selling, social media, and electronic sales. Students will learn sales strategies for single game tickets, season tickets, group tickets, and premium tickets and will be involved in selling tickets for a sport organization.

Prerequisites: SPMT $150^{\mathrm{D}}$ and SPMT $194^{\mathrm{C}}$ and SPMT $196^{\mathrm{D}}$ and SPMT $286^{\text {D }}$ and SPMT $294{ }^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring \& Winter Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students in the BS 2150 program.
Enrollment limited to students with department of Sport Management.

## SPMT 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPMT 406-Sport Fundraising and Event Management

The course content will include multiple aspects of creating, funding, and executing a variety of sports events. Topics include event planning, staffing, managing, and evaluating. Students will plan, develop, and execute their own event. In addition, the various aspects of athletic development and fundraising, particularly at the intercollegiate level, will be explored.

Prerequisites: SPMT $150^{\mathrm{D}}$ and SPMT $194^{\mathrm{C}}$ and SPMT $196^{\mathrm{D}}$ and
SPMT $286^{\text {D }}$ and SPMT $294^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Sport Management.

## SPMT 450-Sport Management Internship

This course provides students with the opportunity to apply sport and fitness career-oriented skills in public, commercial, and private agencies. The internship is designed to be an in-depth experience. This is a Theory and Technique Course. All Sport Management coursework must be completed before enrolling in SPMT 450.

Prerequisites: SPMT $150^{\mathrm{D}}$ and SPMT $194^{\mathrm{C}}$ and SPMT $196^{\mathrm{D}}$ and
SPMT $269^{\mathrm{D}}$ and SPMT $286^{\mathrm{D}}$ and SPMT $294^{\mathrm{D}}$ and SPMT $315^{\mathrm{D}}$ and
SPMT $394^{\mathrm{D}}$ and SPMT $396^{\mathrm{D}}$ and SPMT $406^{\mathrm{D}}$ and SPMT $486^{\mathrm{D}}$ and
SPMT $494^{\text {C }}$ and SPMT $499^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1-12
Term(s) Typically Offered: Offered Summer Terms
Students with a semester level of Freshman 1, Freshman 2, Junior 1,
Junior 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students with department of Sport Management.

## SPMT 486-Sport Law and Facilities

The course will demonstrate how various aspects of law and the legal system apply to the sport industry, with a particular emphasis on risk management, and sport facility operations. In addition, the course will provide a fundamental overview of the US court system.

Prerequisites: SPMT $150^{\text {D }}$ and SPMT $194^{\text {C }}$ and SPMT $196^{\text {D }}$ and SPMT $286^{\mathrm{D}}$ and SPMT $294^{\mathrm{D}}$ and SPMT $269^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{\text {C }}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Spring \& Summer Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Sport Management.

## SPMT 490 - Independent Study

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPMT 494-Sport Management Senior Seminar

This course is designed for the senior Sport Management student, this course will examine topics dealing with sport finance management, sport law, sport facility management, and time and stress management. Field trips to sport agencies will be required. This course must be taken in the academic semester prior to SPMT 450 (Internship).

Prerequisites: SPMT $150^{\mathrm{D}}$ and SPMT $194^{\mathrm{C}}$ and SPMT $196^{\mathrm{D}}$ and SPMT $269^{\mathrm{D}}$ and SPMT $286^{\mathrm{D}}$ and SPMT $294^{\mathrm{D}}$ and SPMT $315^{\mathrm{D}}$ and SPMT $394^{\text {D }}$ and SPMT $396^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2, Junior 1,
Junior 2, Sophomore 1 or Sophomore 2 may not enroll.
Enrollment limited to students with department of Sport Management.

## SPMT 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

## Credits: 1-6

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPMT 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## SPMT 499 - Sport Management Research Methods

A study of research methodology and terminology in Sport Management entailing a critical analysis of available research. Specific attention is directed to formal written communication and oral presentation skills.

Prerequisites: SPMT $150^{\mathrm{D}}$ and SPMT $194^{\mathrm{C}}$ and SPMT $196^{\mathrm{D}}$ and SPMT $269^{\mathrm{D}}$ and SPMT $286^{\mathrm{D}}$ and SPMT $294^{\mathrm{D}}$ and SPMT $394^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Sport Management.

## Statistics (STAT)

STAT 124 - Introduction to Survey Methods
Introduction to Survey Methods: A 100 level course that introduces students to aspects of how surveys work. Students learn about he design, and interpretation of survey data. A range of survey strategies (e.g., telephone, face-to-face, mail and internet surveys) within the broader context of a research or evaluation project are introduced. topics include formulation of research goals, developing an appropriate questionnaire design, protection of human subjects and proper conduct of research, sample size calculation and sample design, survey administration, construction of a survey report including basic data analysis techniques, and presentation of the results of a survey. Class topics are designed to convey practical knowledge of survey design.

Prerequisite: ACSD $110^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed

## STAT 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## STAT 152 - Elementary Statistics I

This is a course about how data inform every aspect of our lives. This course focuses on what data are collected, how they are collected, how they are summarized and interpreted, and how possible error in those data is quantified and understood. In this class, we will learn about ways in which statistics are used by businesses, governmental agencies, researchers, and practitioners to understand our world. Topics covered include descriptive statistics, bivariate and multivariate data, elementary probability, random variables, normal and binomial probability distributions, Central Limit Theorem, confidence intervals, hypothesis testing, and simple linear regression.

Prerequisites: (ACSD $110^{\circ}$ or ESAP $110^{\circ}$ ) or minimum score of 470 in 'SAT MATH SECTION SCORE' or minimum score of 17 in 'ACT Math' or minimum score of Y in 'WAIVE ACSD1 10 W HIGHER MATH'
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): 21 st Century Healthcare, Transfer Thread
Completion Course

## STAT 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## STAT 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## STAT 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## STAT 252 - Introduction to Statistical Modeling

What do we mean when we talk about "statistical modeling"? How can statistical models be used to provide evidence for scientific or social theories? In this course, we begin by reviewing hypothesis testing and learn how hypothesis testing is applied in a wide variety of statistical contexts. We then move on to the workhouse of statistical modeling, linear regression, and learn the complex methods used to determine the validity of regression models. We then touch on analysis of variance models, polynomial regression, and time series. $R$ will be used for data analysis, but no prior knowledge of R is assumed.

Prerequisites: STAT $152^{\text {D }}$ and ENGL $102^{\text {D }}$ and (MATH $123^{\text {D }}$ or MATH $125^{\text {D }}$ or MATH $225^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms

## STAT 254 - Nonparametric Statistics

Statistical models in nonparametric settings. Theory and practice using techniques requiring less restrictive assumptions about the distribution of the data. Nonparametric analogues of $t$ - and F-tests in one and two sample settings, ANOVA, regression and correlation will be discussed.

Prerequisites: MATH $125^{\text {D }}$ and (MATH $153^{\text {D }}$ or STAT $153^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed

## STAT 256 - Statistical Computing

Statistical computing considers how data are processed and analyzed, and how statistical models are simulated, in a computational setting.
The current landscape of the statistical computing community will be explored, including common statistical software, proprietary versus opensource statistical languages, and how statistical software packages are tailored for specific uses. Computationally intense statistical techniques will be discussed and programmed. At least one proprietary and one open-source statistical computing environment will be learned. Students will learn how to combine the functionality of different statistical packages to create and present a data analysis optimally. Prior experience with computer programming highly recommended.

Prerequisite: STAT $252{ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms

## STAT 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
STAT 295 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## STAT 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## STAT 325 - Advanced Statistical Methods

Statistics is used in computer algorithms (machine learning) to enhance computer discision-making and prediction capabilities. this course will cover a wide variety of topics in statistical learning methods. Major statistical methods used in machine learning such as linear regression, survival analysis and others will be discussed. Additional topics include unsupervised learning and supervised techniques such as principal component analysis, nearest neighbor, random forest, support vector machines and neural networks. simulation methods, such as the EM algorithm, Metropolis-Hasting algorithm and the Markov Chain Monte Carlo method will also be discussed.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment is limited to Graduate level students.

## STAT 350 - Applied Statistics

A calculus-based introduction to probability and statistical applications. Discrete and continuous probability and expected value. Confidence intervals and hypothesis testing for single populations. This course is not open to students who have credit for MATH 352. This course does not count as an upper division elective mathematics course for mathematics majors.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## STAT 352 - Mathematical Statistics I

An introduction to the mathematical foundations of probability theory including discrete and continuous probability distributions, random variables, mathematical expectation, momentuo, and moment generating functions.

Prerequisite: MATH $230^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## STAT 353 - Mathematical Statistics II

Functions of random variables, sampling distributions, introduction to mathematical theory of statistical inference, including methods of moments, estimators, maximum likelihood estimators, sufficient statistics, interval estimates, and hypothesis testing.

Prerequisites: MATH $352^{\text {D }}$ or STAT $352^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## STAT 354 - Mathematical Statistics III

Stochastic processes and statistical inference including: Type I and Type II errors, MLE, Neyman-Pearson lemma, order statistics, Poisson processes, ANOVA, nonparametric tests, comparing models and Bayesian parameter estimation.

Prerequisites: MATH $231^{\mathrm{D}}$ and (MATH $353^{\mathrm{D}}$ or STAT $353^{\mathrm{D}}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## STAT 363 - Statistical Learning

The field of statistical learning encompasses the theory and data analytic techniques developed to process and make sense of evolving data challenges arising in the fields of data science and machine learning. This course will cover the theoretical underpinnings of supervised and unsupervised learning techniques, including generalized linear models, classification, dimension reduction, and cluster analysis. R and R -studio will be used for illustrative purposes. A working knowledge of linear algebra and multivariate calculus is assumed. Previous experience suing $R$ software package is also assumed.

Prerequisites: MATH $309^{\text {D }}$ and MATH $231^{\text {D }}$ and STAT $252^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## STAT 372 - Forecasting \& Time Series

An introduction to creating, solving, analyzing and interpreting realworld time-series and forecasting models. Topics include linear, autoregressive, moving average and other forecasting and time-series techniques, transfer functions, multivariate model building, stationary an d nonstationary techniques. Applications may include all areas where forecasting is required including transportation, finance, scheduling, networks and supply chains. Appropriate software tools for analyzing forecasting models including software such as SAS and spreadsheet software will be taught.

Prerequisites: MATH $252^{C}$ or STAT $252^{C}$ or MATH $350^{\circ}$ or STAT $350^{\circ}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## STAT 373-Statistical Quality Control

A comprehensive coverage of modern quality control techniques including the design of statistical process control systems, acceptance sampling and process improvement.

Prerequisites: MATH $230^{\circ}$ and (STAT $252^{\text {C }}$ or STAT $311^{\text {C }}$ )
${ }^{\mathrm{C}}$ Requires minimum grade of C .
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## STAT 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## STAT 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## STAT 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## STAT 490 - Independent Study

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## STAT 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## STAT 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Theatre (THEA)

## THEA 131 - Fundamentals of Acting

An introduction to the theory and practice of acting.

## Credits: 3

Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Body and Self, Creating Art, Political Arts, Transfer Thread Completion Course

THEA 132-Stagecraft
Fundamentals of modern set construction, stage lighting, properties, and costume practice. Students assist with current productions in laboratory sessions.

Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Thematic Thread(s): Creating Art, Transfer Thread Completion Course

## THEA 139-University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## THEA 141 - Art of the Theatre

An introduction to the elements of the theatre: acting, playwriting, directing, producing, design and technology. Attention to the ways in which theatre springs from the nature of the community in historical as well as contemporary settings. A lecture course; no performance skills required.

Credits: 3
Term(s) Typically Offered: Offered Every Term
THEA 142 - Wellness for the Actor
Wellness for the Actor is a foundation class that establishes a physical, mental, and emotional wellness practice that supports advanced training in voice, movement and acting. In the course students will learn to: foster fuller breathing to connect body and mind as a practice for grounding and centering; create a stronger and more versatile physical body; learn physical conditioning practices; gain experience calming the mind and emotional body; study the practice of personal nutrition to enhance general health; and develop their ability to become attuned and connected to their physical self.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students in the BFA 5390 program.
Enrollment limited to students with department of Theatre.

## THEA 145-Musicianship for Musical Theatre

This course focuses on the development of vocal performance techniques through training in aural and sight-singing skills including solfege, rhythmic notation, ear training, tempo, meter and dictation. Students will expand their understanding of harmonic progression, body alignment, muscle memory, and technical accuracy. Basic piano skills will also be covered.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Enrollment is limited to students with a program in Musical Theatre. Enrollment limited to students in the BFA 5390 program.

## THEA 146 - Class Voice For Musical Theatre

This course focuses on musical theatre singing technique, skills, and styles for entry-level performers. In addition, the course is designed to familiarize students with industry practices in the field of professional musical theatre performance. Students become familiar with basic concepts of voice production as well as developing an understanding and awareness of vocal health issues. Additionally, students are exposed to a variety of musical theatre popular sung repertory while they are encouraged to develop perceptive listening skills by interacting and responding to their peers in class.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Enrollment is limited to students with a program in Musical Theatre.
Enrollment limited to students in the BFA 5390 program.
Enrollment limited to students in a Bachelor of Fine Arts degree.
Enrollment limited to students in the College of Liberal Arts college.

## THEA 151 - Rehearsal and Production

Supervised experience in theatre performance and stagecraft by acting or crew participation in one Department of Theatre production. Prospective actors will have to participate in a competitive audition. May be repeated for a maximum of 12 credits.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms
THEA 159- Introduction to Theatre Arts Management
This course covers the basic principles, theories, concepts, processes, and practices relating to organizations in the arts industry, with a focus on the theatre industry. Topics include the structure of arts industries, organizational structures, leadership, staffing, volunteerism, fund raising, intellectual property, grants writing, advocacy, etc.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Thematic Thread(s): Creating Art, Leadership Development, Transfer Thread Completion Course

## THEA 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## THEA 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## THEA 198-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## THEA 215 - Drawing/Drafting/CAD

Principles and techniques used for the creation and implementation of theatrical designs. Introduction to design elements and techniques, drawing, rendering, and computer-aided drafting. Emphasis on set, costume, lighting and property designs.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms Odd
Thematic Thread(s): Creating Art, Transfer Thread Completion Course

## THEA 222 - Acting II

Intermediate-level course designed to continue the actor training begun in THEA 131. Emphasis on realistic acting techniques.

Prerequisite: THEA $131^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms

## THEA 235 - Costume Technology

Basic techniques of constructing costumes for the stage, emphasizing sewing, pattern making and cutting, draping. Includes the study of fabrics, millinery, and accessories.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Creating Art, Transfer Thread Completion Course
THEA 244 - Acting for Song I
A course designed to synthesize the process of acting through song. Students will apply various acting and singing methodologies to connect to the emotional, physical and vocal requirements of both character and song.
Prerequisites: THEA $145^{\circ}$ and THEA $222^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.
Enrollment is limited to students with a program in Musical Theatre.
Enrollment limited to students in the BFA 5390 program.
Enrollment limited to students with department of Theatre.

## THEA 246 - Private Musical Theatre Voice

Students will continue to develop musicianship, sight singing and vocal skills through individualized training designed to match their vocal range and skills. Repeatable up to 6 credits.

Prerequisites: THEA $145^{C}$ and THEA $146^{C}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 1
Enrollment is limited to students with a program in Musical Theatre.
Enrollment limited to students in the BFA 5390 program.
Enrollment limited to students in the College of Liberal Arts college.

## THEA 254 - Musical Theatre Dance I

Musical Theatre Dance I will introduce the students to the fundamentals of dance for musical theatre performance, including jazz, tap, ballroom, and hip hop. Students will learn correct alignment and techniques applicable to all musical theatre genres, and apply those principles to the dance styles found within those genres.

Prerequisite: DANC $125^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 2

Term(s) Typically Offered: Offered as Needed
Enrollment is limited to students with a program in Musical Theatre.
Enrollment limited to students in the BFA 5390 program.

## THEA 269-Playwriting

An introduction to the fundamentals of playwriting, including clear storytelling, character development, scene structure and style. The particular demands of writing in a theatrical medium, as distinct from film, television or novel, will be emphasized.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): Art \& Society, Creating Art, Transfer Thread
Completion Course

## THEA 281 - Survey of Dramatic Literature I

Analysis and discussion of some of history's most celebrated works of dramatic literature, ranging from classical drama to drama of the eighteenth century. Texts will be examined within the historical context of the cultures that produced them, and in light of their respective theatrical conditions, performance styles, etc. Emphasis will also be placed on various methods of textual analysis.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms

## THEA 283 - Survey of Dramatic Literature II

Analysis and discussion of some of history"s most celebrated works of dramatic literature, ranging from the early 18 th century to the most exciting and groundbreaking contemporary drama. Texts will be examined within the historical context of the cultures that produced them, and in light of their respective theatrical conditions, performance styles, etc. Emphasis will also be placed on various methods of textual analysis.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms

## THEA 290-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## THEA 295-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## THEA 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
THEA 303-Acting III
Acting III is an advanced-level course designed to give the performer facility with the acting approach known as Meisner Technique.

Prerequisite: THEA $222^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.
Enrollment limited to students in the BFA 5390 program.
Enrollment limited to students with department of Theatre.

## THEA 304 - Acting for Song II

A continuation of Acting for Song I. Students will undergo advanced study in synthesizing the process of acting through song. Students will apply advanced acting and singing methodologies to connect to the emotional, physical and vocal requirements of both character and song.

Prerequisite: THEA $244^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.
Enrollment is limited to students with a program in Musical Theatre.
Enrollment limited to students in the BFA 5390 program.
Enrollment limited to students with department of Theatre.
THEA 322 - Acting Technique
An intensive focus on one or more of the following: role preparation, scene study, physical disciplines of acting. Approach varies from offering to offering. May be repeated for credit three times.

Prerequisite: THEA $222^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 324 - Stage Makeup

Theory, practice, and materials of stage make-up. Practical application is mandatory and extensive; students will analyze various characters and design makeup for them.

Prerequisites: THEA $131^{\text {D }}$ and THEA $151^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 328-Acting Shakespeare

An advanced-level course designed to provide the student with tools for the analysis and performance of the plays of Shakespeare.

Prerequisite: THEA $222^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 329-Shakespeare Tour

An ensemble composed of actors and technicians, selected by audition and interview, performing Shakespeare-based scripts in the community and region. May be repeated twice for credit.

Prerequisite: THEA $328^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 330 - Voice and Movement for the Actor

Introduction to disciplines of voice and movement essential for the wellprepared actor. Emphasis will be on performance rather than theory.

Prerequisite: THEA $131^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 332-Advanced Stagecraft

Advanced methods and materials of stagecraft: emphasis on furniture, metals, projected scenery, unusual rigging situations, hydraulics, computer applications, and special effects.

Prerequisite: THEA $132^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 333-Scene Design

The principles and application of design for stage, emphasizing sketches, diagrams, drafting, and model making.
Prerequisite: THEA $215^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 334-Stage Lighting

The theory and practice of stage lighting as practiced in modern theatre.
Prerequisite: THEA $215^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 335 - Costume Design and History

A survey of costume history from the ancient world to the present with an emphasis on social, political, religious, and technological conditions. The process of costume design will be explored using the principles of variety and order, character analysis, period research, and the elements of design.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even
Thematic Thread(s): Body and Self, Creating Art, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 337- Directing

The theory and practice of directing for the modern theatre.
Prerequisites: THEA $131^{\mathrm{D}}$ and THEA $132^{\mathrm{D}}$ and THEA $151^{\mathrm{D}}$ and (THEA $281^{\text {D }}$ or THEA $283^{\text {D }}$ )
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 339 - New Play Development

This course is designed for actors, directors, and designers to learn how to collaborate with a playwright on a new work and to successfully mount a production of this new work. Students participate through a collaborative process of rehearsal and design, problem-solving and experimentation. Class culminates in a public performance on campus and perhaps another local venue. Student should be a theatre major. Permission of instructor via audition or portfolio review.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students with department of Theatre.
THEA 340 - International Theatre Experience
This course is designed for actors, designers and public relations students to create,design and market a production for overseas performance. Students participate through a collaborative process of rehearsal and design, problem-solving and experimentation. Students will also have the opportunity to participate in theater activities involving international performance groups. Class culminates in a public performance both on campus and overseas. Permission of instructor via audition or portfolio review.

Credits: 3
Term(s) Typically Offered: Offered Summer Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students in the BA 592 program.

## THEA 342 - IPA/Dialects

A course designed to train actors in phonetics, diction and dialects. Students will learn the International Phonetic Alphabet and master its use for Standard American English stage diction, as well as a variety of national variants and foreign dialects, through both phonetic notation and performance of dramatic texts.

Prerequisites: THEA $143^{C}$ or THEA $353^{C}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students in the BFA 5390 program.

## THEA 344 - Auditioning

Students will learn techniques designed to develop skills in auditioning for theatre productions. Over the course of the semester, students will prepare a diverse repertoire of audition material, including classical and contemporary, as well as dramatic and comedic monologues. Cold readings, appearance and attire, and interview skills will also be covered.

Prerequisite: THEA $303^{C}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment limited to students in the BFA 5390 program.
THEA 345-Stage Management and Safety
Safe and effective production management on the modern stage. Safety education in shop, performance, and public spaces.
Prerequisite: THEA $132^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 347-Auditioning for Musical Theatre

This class will explore personal relationships between performer and song as well as develop reading skills to learn performance readiness. Active performance and application of feedback are core to this work, as well as understanding techniques and the vocabulary of a musical theatre audition. Students will learn how to choose well-suited songs and develop an audition book comprising of different styles.

Prerequisites: THEA $304^{\text {C }}$ and THEA $303^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Musical Theatre.
Enrollment limited to students in the BFA 5390 program.

## THEA 348 - Musical Theatre Repertory

Musical Theatre Repertory is an advanced-level course designed to provide the musical theatre performer with a series of individuallytailored audition pieces, while also providing a thorough grounding in the historical background and stylistic demands of the various musical theatre genres. Students will develop solo performance pieces drawn from all major musical theatre styles, including "golden age," contemporary, rock, hip-hop, etc.

Prerequisite: THEA $244^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Musical Theatre.
Enrollment limited to students in the BFA 5390 program.
Enrollment limited to students in the College of Liberal Arts college.

## THEA 351 - Movement for the Actor

Movement for the Actor is an advanced-level course designed to facilitate and develop expressive, responsive movement in the stage performer. In addition to learning a battery of stretching and strengthening exercises, the student will explore physical character development through approaches such as Feldenkrais, "authentic movement" and Chekhov Technique.

Prerequisite: THEA $303^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students with a semester level of Junior 1, Junior 2,
Senior 1, Senior 2, Sophomore 1 or Sophomore 2.
Enrollment limited to students in the BFA 5390 program.
THEA 353-Voice for the Actor
Voice for the Actor: A study of breath and vocal work that will inform explorations to develop awareness of the voice and body and how that connects to vocal energy. This will foster breath support, range and stamina. Students will learn the basics of vocal anatomy as well as develop skills for healthy vocal usage.
Prerequisite: THEA $303{ }^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Enrollment is limited to students with a program in Theatre or Acting. Enrollment limited to students in a Bachelor of Arts or Bachelor of Fine Arts degrees.
Students in the College of Liberal Arts college may not enroll.

## THEA 354 - Musical Theatre Dance II

Musical Theatre Dance II will continue the exploration of jazz, tap, ballroom and hip hop dance begun in Musical Theatre Dance I. This second level technique course will continue to refine the student's skills in performance and stylistic techniques.

Prerequisite: THEA $254^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 2
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.
Enrollment is limited to students with a program in Musical Theatre.
Enrollment limited to students in the BFA 5390 program.

## THEA 355 - Projects in Theatre

The study and performance of a major role in a Department of Theatre production, or participation in a production as a crew head with significant responsibility, or planning and execution of a study of moderate scope in the history, literature, or criticism of the theatre. May be taken for credit four times for a maximum of 6 credits. Junior standing and permission of the instructor.

Credits: 1-2
Term(s) Typically Offered: Offered Fall \& Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 359-Studies in Audience Development

An advanced-level course focusing on audience development strategies for arts institutions.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms Even
Thematic Thread(s): Art \& Society, Building a Healthy Society, Political
Arts, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 369 - Advanced Playwriting

An advanced class devoted to building upon fundamental skills learned in Playwriting (93 269), such as characterization, plot structure, exposition, etc.

Prerequisite: THEA $269^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.
Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 370 - Playwriting Genres and Styles

An advanced class devoted to exploring one or more of the following advanced topics: playing genres, devised theatre, documentary theatre, non-realistic writing, non-traditional structures and forms.

Prerequisite: THEA $369^{\text {D }}$
${ }^{\mathrm{D}}$ Requires minimum grade of D .

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore
1 may not enroll.

## THEA 372-Senior Seminar in Playwriting

An advanced-level seminar for senior playwriting majors, in which major playwriting projects are shared and developed.

Prerequisite: THEA $369^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum. Permission of instructor via audition or portfolio review.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 392-History of Musical Theatre

This survey course will explore the historical use of music in drama with a focus on the invention, development and masterworks of the American musical genre. Major genres, composers, lyricists, librettists, directors, choreographers, and performers will be discussed. The socio-historical context of various musicals will be explored through the literature of the genre.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Thematic Thread(s): Arts \& Popular Culture, Art \& Society, Being
American, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 393 - History of Theatre Design and Architecture

A review of the history and evolution of scene, costume, lighting, prop and sound design for the theatre. Course will also examine the evolution of theatre spaces, from the outdoor theatre of the Ancient Greeks to traveling wagon stages of the medieval period to modern architectural trends. The course will examine non-western forms of theatre such as aboriginal and African theatre as well as western world theatre traditions.

## Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd
Thematic Thread(s): Art \& Society, Transfer Thread Completion Course, Transnational Culture
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
THEA 394 - Theories of Acting and Directing
A history of the art, craft and theories of acting. Also, a historical investigation into the role of the "director" in pre-modern theatre and the evolution into its present predominant place in contemporary theatre.

Prerequisites: THEA $281^{\mathrm{D}}$ or THEA $283^{\mathrm{D}}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 425 - Professional Theatre Practice

A study of the working conditions of the professional actor, designer, technician, and director in the contemporary theatre. Preparation for effective career development.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

## THEA 442 - Senior Showcase

This course is designed to give each graduating BFA Acting student the opportunity to prepare for and perform in a showcase as a step towards establishing their professional career. The showcase will invite theatre professionals such as agents, producers, casting directors, and directors to attend and will be presented in a major metropolitan area and on campus. The course also builds on the foundational practices of working in professional theatre. Professional headshots will be required.

Prerequisites: THEA $344^{\text {C }}$ or THEA $347^{\text {C }}$
${ }^{C}$ Requires minimum grade of $C$.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Enrollment limited to students in the BFA 5390 program.
Enrollment limited to students with department of Theatre.
THEA 450 - Internship
Supervised placement in a working theatre situation off campus.
Extensive and successful experience in theatre performance on campus, 2.000 GPA overall and in all theatre courses attempted, and permission of the department's curriculum committee.

Credits: 1-12
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 490 - Independent Study

A faculty-supervised project in an advanced area of theatre studies carried out independently by a qualified upper-class student. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## THEA 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## Rock Integrated Studies Program

The Rock Integrated Studies Program (the RISP, or, as it is referred to on campus, "Rock Studies") at Slippery Rock University is the general education requirement for all academic majors at the University. It includes 42 credits of the required 120 minimum credits required for graduation. It therefore requires as many credits as many majors, and is just as important as a major to our students' educations. Its purpose is to reinforce connections between learning within major programs and the broader learning gained in an undergraduate curriculum.

To introduce Rock Studies we have created a video (https:// www.youtube.com/watch/?v=NDyQ2eQITg8\&feature=youtu.be) that describes the parts of the program and related academic requirements.

## The Rock Studies program replaces the former general

 education program, Liberal Studies (https://www.sru.edu/ documents/academics/academic-services/academic-records/ LIBERAL_STUDIES_QUICK_GUIDE.pdf). If you are a student who needs to find out which program you should follow, or if you are an Adviser who needs to find out whether a student should follow Rock Studies or Liberal Studies, please see the drop-down menu below for clarification.Some specific majors have been given permission to substitute courses within Rock Studies. Therefore, students should keep a current Rock Audit report (available via MySRU (https://mysru.sru.edu/)) and their prospective major's Curriculum Guide next to a Rock Studies Guide (p. 1378) while they make course selections with their Academic Advisers (https://catalog.sru.edu/academic-policies/academic-advisersundergraduate/).

Students who are seeking to transfer (https://www.sru.edu/admissions/ transfer-and-military-admissions/) to Slippery Rock, and have questions about how they might prepare for Rock Studies, should get in touch with the Admissions office (https://www.sru.edu/admissions/transfer-and-military-admissions/) for course suggestions and further guidance. As of Summer and Fall terms of 2021, transfer students will be enrolled in Rock Studies.

## Why the New Rock Studies?

A common desire expressed by students is that their learning has "relevance." They, very naturally, want to understand how what they learn relates to other knowledge they have and to their worlds.

The term we use for this process is "integration." The program's design encourages students to relate the learning they are doing among their courses, to "integrate" the knowledge and skills in one course with the learning in other courses and the world around them. The program will provide thematic interdisciplinary connections to guide students toward thinking critically and creatively, and to use knowledge from diverse places as they confront and analyze issues and problems.

In the process students will learn to synthesize their skills and knowledge in familiar areas with the learning in new areas. The ability to connect the known to the new is how new learning can be made relevant.

This does not mean that a course's relevance will always be understood in the first days or weeks of a course. The program always, however, works towards the goal of integrating cognitive aspects of learning with students' personal and professional lives. We hope that what it teaches will endure far beyond graduation as students learn to make sense of new and complex situations all of us encounter throughout our lives. Educating students to be life-long learners is part of the mission of Slippery Rock University.

The program described in these pages asks students to integrate their learning in a number of ways. Interdisciplinary learning is one kind of integration that starts during the first term, in the University Seminar. But integration is more than just connecting disciplines. Integration will occur across broad disciplinary categories and between basic skills courses and advanced courses. Learning will be enriched by high impact experiences and opportunities for experiential learning and community engagement, all of which encourage and enable holistic integration.

## Liberal Studies or Rock Studies?

SRU is changing from an older general education program, the Liberal Studies Program, to a new one, the Rock Integrated Studies Program. This page explains which students follow which program.

The following students will follow Rock Studies:

- All first-year university students, freshmen, who matriculate to University in the Summer and Fall terms of 2019 and after will enter under Rock Studies. This includes students who may be entering the University for the first time with a few college-level credits.
- All students who are undergraduate readmissions (https:// www.sru.edu/admissions/other-admissions/) will enter under Rock Studies beginning in the Fall term of 2019. According to readmission procedure (https://www.sru.edu/academics/academic-services/ readmission/), "Readmitted students are responsible for meeting all academic requirements in effect at the time they are readmitted, not at the time they were originally admitted to the university."

The following students will remain in Liberal Studies:

- Students who entered SRU before Fall, 2018 will use the Liberal Studies Guide current at the year they entered the University (contact your Adviser for information)
- Students who entered in the Fall of 2018, Winter of 2018, or Spring of 2019 will use the most recent Liberal Studies Guide (https:// www.sru.edu/documents/academics/academic-services/academicrecords/LIBERAL_STUDIES_QUICK_GUIDE.pdf).
- All new transfer students (https://www.sru.edu/admissions/transfer-and-military-admissions/) beginning Summer 2021 and Fall 2021 will enter under Rock Studies.

Because current students are following two different programs, each major will for a while need two different curriculum guides: one with the older LSP choices in the left column, and a new one with the RISP choices. Please use the index of Majors and Minors (https://www.sru.edu/academics/majors-and-minors/ \#showMinors=false\&view=expanded\&page=1) to find the Guides. Both Curriculum Guides are attached to each degree's "Major Requirements" page.

The program under which you enter is the program that you will follow through to graduation. Students may not transfer between the two programs.

## Rock Studies Program <br> The Rock

At the foundational level, The Rock, students will complete five courses:

- University Seminar is the most unique course in this section of the program. This class will teach students to consider learning to be more than just information to be used on an exam. Seminars are discussion-based and focus on specific interdisciplinary topics. The course encourages students to be intellectually curious and requires them to think critically and creatively. It will introduce students to questions that do not have ready-made answers and that require a range of knowledge and skills to address.
- Critical Writing teaches students the essential elements and tools of excellent writing and how to write for a wide variety of audiences.
- Critical Reading develops on lessons learned in Critical Writing and provides ways to gather meaning from texts in many genres and contexts.
- Quantitative Reasoning introduces mathematics and numeracy skills which can applied to personal life and careers.
- Civil Discourse teaches ways to present ideas, thoughts, and opinions to others in a courteous, respectful, and persuasive manner.

All courses in The Rock are graded A-B-C-NC (https://catalog.sru.edu/ academic-policies/course-drop-add-withdrawal/). Students may not withdraw (https://catalog.sru.edu/undergraduate/academic-policies/ course-drop-add-withdrawal/) from these courses after the drop/add period has ended.

## University Seminar

The University Seminar serves as the entry point to Rock Studies because it introduces students to the practice of integrating their learning. It will consider questions that do not have ready answers, and that therefore require students to synthesize a range of knowledge and to use a variety of skills. The course will set students along the path to
becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their places in the world.

It is taught as a seminar with strong faculty-student interaction. Several dozen different topics are offered, but in all of them students work on complex topics with professors who will ask you to be intellectually curious, to think critically and creatively, and to strive for academic excellence.

This requirement should be taken Fall term of a student's first year. Students not able to register for the course in the Fall semester must take the course in the Spring semester of the first year.

| Code | Title | Hours |
| :--- | :--- | ---: |
| SUBJ 139 | University Seminar | 3 |

*Note this course is offered in multiple subject areas, but cannot be taken in a student's first major subject area.

## Critical Writing

Critical Writing asks students to write, revise, and edit prose using the conventions of standard written English. Students will develop arguments and locate and evaluate independent research to write those arguments.
Code
Title
Critical Writing
Hours
ENGL 102 Critical Writing
3

## Critical Reading

Critical Reading refines and extends student understanding of the rhetorical principles introduced in Critical Writing, applying them to the comprehension and analysis of complex texts. Texts to be considered will be drawn from a variety of media, genres, historical periods, and cultures. Students will examine the methods authors use in developing and expressing ideas to meet the needs of particular audiences and historical moments. Keys to critical reading include extracting implied meanings; analyzing purpose, tone, and style; and assessing causal factors and rhetorical effects.
Code
Title
Hours
ENGL $104 \quad$ Critical Reading

## Quantitative Reasoning

Quantitative Reasoning includes study of mathematical and statistical techniques and logical reasoning. Students will learn how to understand, interpret, and analyze mathematical models such as formulas, graphs, tables, and schematics, how to communicate using them, and to use arithmetical, algebraic, and analytic methods to solve problems and interpret results within authentic contexts and everyday life situations.

| Code | Title | Hours |
| :--- | :--- | ---: |
| MATH 117 | Quantitative Reasoning | 3 |

*Note that some majors may have substituted a higher-level math course to replace MATH 117. If so, this will appear on the major's curriculum guide.

## Civil Discourse

Civil Discourse teaches the theory and practice of how to promote shared understanding and the common good through civil discourse, by developing and presenting oral messages. Students will be expected to develop an understanding of the principles and practices of public
speechmaking that constitute civil discourse, how the First Amendment enables it, its history and role in problem-solving, and the influence of mediated discourse on democracy.

| Code | Title | Hours |
| :--- | :--- | ---: |
| COMM 200 | Civil Discourse: Theory \& Practice | 3 |
| PHIL 110 | Ethics and Civil Discourse | 3 |
| POLS 235 | Civil Discourse and Democracy | 3 |

## Integrated Inquiry

The next part of the program, Integrated Inquiry, will develop students' ability to integrate learning that began in University Seminar and the other courses in The Rock. Students will be introduced to different ways to interpret the world through five categories of courses:

- Creative and Aesthetic Inquiry
- Social Sciences Inquiry
- Humanities Inquiry
- Physical Sciences Inquiry
- Natural Sciences Inquiry

Each of the domains above provides an array of knowledge and skills. By completing these courses, students will gain the confidence to approach subjects from a variety of angles and to experience different subject areas through different lenses of inquiry.

Note that one course (up to four credits) from Integrated Inquiry or a Thematic Thread may be used towards your first major.

## Creative and Aesthetic Inquiry

Courses in this Domain introduce students not only to artists and their creations, but also to history, cultures, values, technique, imagination, creativity, and the relevant social issues that they express. They also develop creative and aesthetic abilities. Students will gain an understanding of the creative process and how to analyze and interpret message and meaning in works of art. While the arts can bring us pleasure, they can also serve to enlighten and illuminate critical issues, lead to personal discoveries, and foster innovation in all fields. Students will learn to think critically about the arts, develop an appreciation for artistic creations, and by viewing live performances and exhibitions, become engaged audience members.

| Code | Title | Hours |
| :--- | :--- | ---: |
| ART 225 | Overview of Western Art | 3 |
| DANC 100 | Dance: Art and Culture | 3 |
| MUSI 101 | Exploring Music | 3 |
| THEA 141 | Art of the Theatre | 3 |

## Humanities Inquiry

Courses in this Domain teach methods of analysis characteristic of philosophy, literature, history, cultural studies, and language studies. Crucial to this kind of analysis is learning about how identities are formed, be they individual, cultural, historical, or otherwise. How does using this kind of analysis, these courses ask, help us to understand the social, institutional, political, and economic systems that shape us and the world we live in?

| ENGL 220 | Introduction to Literary and Cultural |  |
| :--- | :--- | :---: |
|  | Studies | 3 |
| FREN 215 | Topics in French and Francophone Culture | 3 |
| GNDR 115 | Introduction to Gender Studies | 3 |
| HIST 140 | Spotlight on the Past | 3 |
| JAPN 215 | Topics in Japanese Culture | 3 |
| MODL 105 | Introduction to Asian Civilizations | 3 |
| PHIL 101 | Philosophical Inquiry | 3 |
| PHIL 123 | Ethics | 3 |
| PHIL 140 | World Religions | 3 |
| PHIL 163 | Philosophy in Literature | 3 |
| SPAN 215 | Topics in Hispanic Culture | 3 |

## Social Science Inquiry

Courses in this Domain teach theories and models of human behavior in diverse social, political, and economic environments. Concurrently, they teach how to apply basic social scientific thinking skills needed to analyze complex and persistent public problems. By teaching this connection between learning and application, courses in the Social Science Domain provide a foundation for an informed and engaged citizenry who can contribute to the public good within their communities.

| Code | Title | Hours |
| :--- | :--- | ---: |
| COMM 110 | Communication Concepts | 3 |
| COMM 263 | Mass Media and Society | 3 |
| CPSC 102 | Collaborative Information Technology and | 3 |
|  | Society | 3 |
| CRIM 120 | Crime: Why Do We Do It? | 3 |
| CSS 100 | Modern Security | 3 |
| ECON 201 | Principles of Macroeconomics | 3 |
| ECON 202 | Principles of Microeconomics | 3 |
| GES 170 | Discover Geography | 3 |
| INDP 201 | Principles of Sociology | 3 |
| INDP 202 | Introduction to Anthropology | 3 |
| NLPA 120 | Civic Engagement and Community | 3 |
| PE 232 | Decision-Making | 3 |
| POLS 101 | Physical Activity and Wellbeing in Society | 3 |
| POLS 103 | American National Government | 3 |
| PSYC 105 | International Relations | 3 |

## Natural Sciences Inquiry

This Domain teaches skills and knowledge common to Biology and Chemistry. This course is designed to promote scientific literacy and an understanding of the scientific process through the lens of biology and chemistry. Students will learn how to apply scientific reasoning and content knowledge to address contemporary challenges in the field of science. Examples of such issues include genetically-modified organisms (GMO's), disease and treatment, and impacts of climate change on daily life.
Code Title Hours

SCI 101 Science of Life 3

| Code | Title | Hours |
| :--- | :--- | ---: |
| ARAB 215 | Topics in Arabic Culture | 3 |
| ENGL 214 | Introduction to Film Analysis | 3 |

*Note that some majors may have substituted a higher-level Biology or Chemistry course to replace SCI 101. If so, this will appear on the major's curriculum guide.

## Physical Sciences Inquiry

This Domain teaches skills and knowledge common to Geology and Physics. This course is designed to promote scientific literacy and an understanding of the scientific process through the lens of physics and geology. Students will learn how to apply scientific reasoning and content knowledge to address contemporary challenges in the field of science.

| Code | Title | Hours |
| :--- | :--- | ---: |
| SCI 102 | Understanding the Physical World | 3 |

*Note that some majors may have substituted a higher-level Physics or Geology course to replace SCI 102.If so, this will appear on the major's curriculum guide.

## Thematic Threads

The final part of the program is Thematic Threads. To complete a thread, students will complete four courses centered around a multi-disciplinary theme, issue, or question. As students move through the courses in a thread, they will broaden their knowledge about the thread's theme, and utilize higher order thinking skills to engage with the subject matter. A thread is the fullest expression of integrative learning, the core of the Rock Studies program.

## Thread Requirements

## What are the requirements to complete a Thread?

This section of the program requires 12 credits, typically four courses, within the Thread that the student has chosen. Each Thread has one or more Gateway courses which will serve as an entry point to the Thread. Additionally, each Thread includes Focused courses across eight topical categories. Students are required to complete one Gateway course and three Focused courses (from three different categories and three different departments) in their chosen Thread. Two of the four courses completed in a Thread must be 300- or 400-level courses.

## Can courses in a Thread overlap with courses in a major?

One course from either Integrated Inquiry or Thematic Threads may come from a student's first academic major area (prefix). This can assist with integration between Rock Studies and a student's academic major. (This sharing is sometimes called "double dipping.") For example: an Exploratory major might take "ECON 202 Principles of Microeconomics" for their Social Science Inquiry course and then decide to become and Economics major, in which the course is required. This course will only count once towards the 120 credits required for graduation, but will fulfill a requirement in the Rock Studies program and the Economics major.

Students may use as many Inquiry and Threads courses as they like towards second majors, minors, or certificates.

## Declaring a Thread

When and how is a Thread chosen?
Students should declare a thread after completing their Rock and Inquiry courses (if possible), typically when they have completed around 45 credits.

To declare a thread, students need to complete the online Thread Declaration and Change Form (https://forms.office.com/Pages/

ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UldNTi4u). After this form is submitted, Academic Records will add the associated Thread requirements to the student's Rock Audit (available via MySRU (https:// mysru.sru.edu/)). While a student does not need an Adviser's signature to sign up for a Thread, it is strongly recommended that a student discuss any Thread declarations or changes with their Academic Adviser (https:// catalog.sru.edu/academic-policies/academic-advisers-undergraduate/).

## May I switch to another Thread?

A student may switch to a different thread or add a second thread by submitting a new form. Note, though, that courses in one thread may not appear in another, and that not all of a thread's courses may be available every term. Ensure that you can finish your Thread before your desired graduation date.

## Category Descriptions

Each course in a thread is assigned to one of eight "Categories," defined below. These provide a way to gather courses based on similar content, academic discipline, or theme. In an effort to ensure that students get a broad education, students can take a maximum of two courses from any one Category in their chosen Thread. Any one thread might not include all eight.

- The Arts: Courses in this Category encourage students to create and interpret images, ideas, words, expressions, or performances. They can illuminate critical issues, lead to personal discovery, and foster creativity and innovation in all fields.
- Culture, Discourse, and Ideas: Courses in this Category explore ways of thinking about our diverse histories, values, ideas, words, and inspirations. These courses pose fundamental questions about the past, present, and future that ask us who we are and what our lives should mean.
- Science, Technology, and Mathematics: Courses in this Category use axiomatic systems and knowledge of the physical and material world gained through observation, experimentation, and quantitative thought. Students will learn how these disciplines let us model and apply this understanding to contemporary challenges.
- Society and Institutions: Courses in this Category study how relationships among people create social networks and institutions that reflect their values and desires.
- Self-Care and Well-Being: Courses in this Category concern choices, decisions, or activities that we make deliberately to enhance our mental, emotional, and physical health. Students will learn knowledge, skills, and values associated with building healthy lives for themselves and in their communities and will therefore need to understand the impact their life choices make upon others.
- Global Learning and Diversity: Courses in this Category present students with critical analyses of and engagement with global perspectives. Courses explore how different identities, cultures, and societies confront and resolve issues that affect them.
- Civic Knowledge and Engagement: Courses in this Category prepare graduates for their public lives as citizens, members of communities, and professionals. Students learn how actions and responsibilities as members of communities and institutions influence the lives of others in the public sphere.
- Ethical Reasoning: Courses in this Category require students to be able to assess and consider their own values and the social contexts of problems, recognize ethical issues in a variety of settings, and
think about how different ethical perspectives might be applied to moral dilemmas.


## Available Threads

- 21st Century Healthcare (p. 1356)
- African-American Studies (p. 1356)
- Art \& Society (p. 1357)
- Arts \& Popular Culture (p. 1358)
- Becoming America (p. 1359)
- Being American (p. 1359)
- Body and Self (p. 1360)
- Building a Healthy Society (p. 1361)
- Civil Rights \& Social Movements (p. 1361)
- Comparative Perspectives of Justice \& Society (p. 1362)
- Creating Art (p. 1363)
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- Food, Wellness, \& Environment Across Cultures (p. 1366)
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- Revolutions (p. 1373)
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- The Future (p. 1375)
- Transnational Culture (p. 1376)
- Violence (p. 1376)
- Well-Being of Children and Youth (p. 1377)
- Who Do We Think We Are? (p. 1377)


## Important Information

## Policy and Procedure Notes:

- Students must earn a total of 42 credits in Rock Studies.
- Students exempted from any Rock Studies category must still earn a total of 42 credits in Rock Studies.
- Students may use 4 credits from their first major's subject area (prefix) in the Rock Studies Program.
- Students may use Rock Studies courses to complete a second major, minor, or certificate.
- Pass/No Credit courses may not be used to satisfy any Rock Studies Requirement.
- Students who withdraw from the university and return are responsible for the Rock Studies requirements in effect the time of their return.
- A Liberal Studies course cannot substitute for a Rock Studies Requirement unless it has been approved by the Rock Studies Program Committee.
- Students may repeat University Seminar or Civil Discourse under a different subject, however the grade will only be replaced if the course is repeated with the same subject code.


## Graduation Requirements:

- All undergraduate degree programs require a minimum of 120 credits.
- Thirty of the final 60 credits prior to graduation must be earned at SRU. In addition, individual departments may establish residency requirements for their majors and minors. Students should check with their academic adviser to determine the requirements for the academic program.
- Students must complete a minimum of 42 credits of Rock Studies Coursework.
- Students must complete 48 credits of upper-level coursework. Thirtynine of the 48 credits must be at the 300 level or higher, the additional 9 credits may include 100 or 200 level courses requiring a 3 credit prerequisite. At least 24 of the 48 credits must be completed at SRU.
- Bachelor or Arts degrees require language proficiency at the 103 class level. Exemption by placement or examination is offered.
- Beginning with May 2021 graduates, students must complete at least 45 undergraduate credits at SRU to be considered for Latin Honors at the point of graduation.
- Students who wish to earn two degrees must complete 150 credits, all requirements for both degrees, and meet the language requirement if one of the degrees is a BA. Students only need to meet the Rock Studies requirement for the first degree/major.


## Transfer Students:

- New transfer students follow the Rock Studies Program requirements beginning in Fall 2021.
- Transfer courses valued as a percentage: 2.33, 2.5, etc. may be used to meet requirements, however, students must still earn a total of 42 Rock Studies credits.
- Students transferring 24 or more credits are exempt from University Seminar.


## Computer Competency:

All students at SRU must demonstrate computer competency through one of the following methods:

- Equivalent transfer coursework or successfully complete one of the following courses at SRU:
- CPSC 100 - Introduction to Computing
- CPSC 110 - Computer Concepts
- CPSC 130-Introduction to Computing and Programming
- PE 202 - Technology for Wellness
- Pass the SRU Computer Competency Exam - CPSC 099


## Beginning Algebra (ESAP 110):

All students must demonstrate competency through MATH SAT or ACT scores. If competency is not met, students must complete Beginning Algebra and complete 123 credits for graduation.

## Readmitted Students:

- Students readmitted to the university follow the Rock Studies Program requirements.
- Students with at least 24 or more credits are exempt from University Seminar.


## 21st Century Healthcare 21st Century Healthcare Thematic Thread

This thread takes a multidimensional approach to examining healthcare. In addition to providing students content knowledge in healthcare-related topics such as biology, physiology, and psychology, this thread also asks students to examine ethical, social, and cultural aspects of the healthcare field. This thread is intended for students in any discipline.

Faculty Liaison: George Lengyel

## Curriculum Guide

| Code | Title | Hours |
| :---: | :---: | :---: |
| Gateway Courses |  |  |
| Select one of the following: |  | 3 |
| BIOL 110 | The Human Body: Fundamentals of Structure and Physiology |  |
| CDEV 248 | Human Development and Education |  |
| HCAM 230 | US Healthcare Systems |  |
| Focused Courses |  |  |
| Select three courses from the following (must include three categories and three departments; two courses must be 300/400 level) |  | 9 |
| Civic Knowledge and Engagement |  |  |
| NLPA 200 | Empowered to Serve |  |
| POLS 255 | Introduction to Public Policy |  |
| Culture, Discourse, and Ideas |  |  |
| ENGL 327 | Healthcare Writing |  |
| HIST 364 | History of Medicine |  |
| SPAN 121 | Spanish for Health Professionals |  |
| Ethical Reasoning |  |  |
| BIOL 300 | Social and Ethical Issues in Genetics |  |
| HCAM 275 | Health Care Legal \& Ethical Foundations |  |
| PHIL 325 | Medical/Health Care Ethics |  |
| Global Learning and Diversity |  |  |
| HCAM 300 | Healthcare Systems: Global Perspectives and Analysis |  |
| HLTH 311 | International Health |  |
| SOWK 105 | Human Diversity |  |
| Science, Technology, and Mathematics |  |  |
| ERS 250 | Medical Terminology |  |
| PSYC 244 | Developmental Psychology |  |
| STAT 152 | Elementary Statistics I |  |
| Self-Care and Well-Being |  |  |
| ERS 230 | Stress Management |  |
| ERS 305 | The Truth About Weight Loss |  |
| PE 342 | Wellness through Movement |  |
| Society and Institutions |  |  |
| CDEV 251 | Mental Health in America |  |
| ECON 312 | Critical Choices in Health Care Policy |  |
| GERO 265 | Aging and the Older Person |  |
| HCAM 335 | Current Topics in Health Care |  |

Total Hours

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions
21 st Century Healthcare Thematic Thread (21HC)
Revised 12.13.2021
UCC 11.30.2021

## African-American Studies

## African-American Studies Thematic Thread

The main purpose of this thread is to help students understand how the racial history of the US shapes political and policy outcomes in the US today across a range of policy issue areas including: income and wealth, employment, education, health, housing, and criminal justice. Progress toward closing key gaps between African Americans and whites has been painfully slow. In some cases, gaps have actually worsened. This thread will enable students to think and write critically about how the US got to this point and how we can get out of this pattern of persistent racial disparities. Emphasis in this thread will be on the period since the Reconstruction.

Faculty Liaison: Cheryl Kerchis

## Curriculum Guide



Ethical Reasoning

| GES 344 | Environmental Justice |  |
| :---: | :---: | :---: |
| PHIL 336 | Philosophy of Gender and Sex |  |
| Global Learning and Diversity |  |  |
| SEFE 280 | Cultural Minorities in Education |  |
| Society and Institutions |  |  |
| HIST 323 | African American History to 1876 |  |
| HIST 324 | African American History Since 1876 |  |
| HIST 344 | The American City |  |
| INDP 340 | Social Inequality |  |
| SOWK 230 | Social Justice and Equality |  |
| Capstone Course ${ }^{1}$ |  |  |
| Select one of the following: |  | 3 |
| HIST 326 | The Long Civil Rights Movement |  |
| POLS 351 | Politics of Race |  |
| Total Hours |  | 12 |

1 This thread requires either HIST 326 or POLS 351 as a capstone. Students who choose HIST 326 may only use 3 additional credits from HIST to satisfy thread requirements. Students who choose POLS 351 may only use 3 additional credits from POLS to satisfy thread requirements

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


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PASSHE - Pennsylvania State System of Higher Education Institutions

Thematic Thread in African-American Studies (AAST)
Revised 07.31.2020
UCC 03.03.2020

## Art \& Society

## Art \& Society Thematic Thread

Artists often create works of art that take inspiration from past and current-day issues in society. Artists use their mediums to communicate and illuminate societal issues, which can serve to educate, inspire, infuriate, and reflect society back on itself. The "Art \& Society" thread asks students to consider art and society as interdependent and recognize their impact upon one another. Students may analyze a variety of artworks and determine how diverse societies had an impact on the creation of those works.

Faculty Liaison: Rebecca Morrice

## Curriculum Guide



Culture, Discourse, and Ideas

| ENGL 242 | African-American Literature |
| :--- | :--- |
| ENGL 243 | Literature of the Women's Movement |
| ENGL 244 | Native American Literature |
| ENGL 246 | U.S. Latino/a Literatures |
| ENGL 248 | Asian Literature |


| ENGL 402 | World Literature |
| :--- | :--- |
| Ethical Reasoning  <br> PHIL 171 Philosophy of Human Existence <br> Global Learning and Diversity  <br> DANC 318 Dance in the Political World <br> ENGL 314 European Film <br> ENGL 316 Asian Film <br> THEA 393 History of Theatre Design and Architecture <br> Society and Institutions  <br> DANC 305 Society and Social Dance |  |

Total Hours
1 Ensembles include: MUSI 109-409, MUSI 113-413, MUSI 114-414, MUSI 115-415, MUSI 116-416, MUSI 117-417, MUSI 118-418, MUSI 119-419, MUSI 120-420, MUSI 121-421, MUSI 122-422, MUSI 123-423, MUSI 125-425, MUSI 126-426, MUSI 192-492, MUSI 193-493, MUSI 194-494, MUSI 196-496, MUSI 233, MUSI 237, MUSI 437

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


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PASSHE - Pennsylvania State System of Higher Education Institutions
Art and Society Thematic Thread (ARSO)
Revised 07.31.2020
UCC 4.21.2020

## Arts \& Popular Culture

Arts \& Popular Culture Thematic Thread
The Arts \& Popular Culture thread will examine varying cultural elements that are consumed by the majority in any given society and have mass appeal, including, but not limited to art, music, fashion, literature, dance, film, radio, television, theatre, and the Internet.

## Faculty Liaison: Doug Strahler

## Curriculum Guide

| Code <br> Gateway Courses | Title | Hours |
| :--- | :--- | ---: |
| Select one of the following: | 3 |  |
| ART 226 | Overview of World Art |  |
| COMM 115 | Visual Literacy |  |
| DANC 125 | Experiencing Dance: Techniques and Styles |  |
| MUSI 102 | Exploring World Music |  |
| MUSI 104 | Exploring American Music |  |


| PHIL 261 | Philosophy of Art |  |
| :---: | :---: | :---: |
| THEA 131 | Fundamentals of Acting |  |
| Focused Courses |  |  |
| Choose three courses from the following (must include three categories and three departments; two courses must be 300/400 level) |  |  |
| The Arts |  |  |
| ART 105 | Basic Studio Drawing |  |
| ART 106 | Basic Studio Painting |  |
| ART 107 | Basic Studio Photography |  |
| ART 108 | Basic Studio Printmaking |  |
| ART 109 | Basic Studio Metalsmithing |  |
| ART 110 | Basic Studio Sculpture |  |
| ART 111 | Basic Studio Fiber Art |  |
| ART 112 | Basic Studio Ceramics |  |
| ART 113 | Basic Studio Graphic Design |  |
| ART 114 | Basic Studio Digital Media |  |
| ART 205 | Intermediate Studio Drawing |  |
| ART 206 | Intermediate Studio Painting |  |
| ART 207 | Intermediate Studio Photography |  |
| ART 208 | Intermediate Studio Printmaking |  |
| ART 209 | Intermediate Studio Metalsmithing |  |
| ART 210 | Intermediate Studio Sculpture |  |
| ART 211 | Intermediate Studio Fiber Art |  |
| ART 212 | Intermediate Studio Ceramics |  |
| ART 213 | Intermediate Studio Graphic Design |  |
| ART 214 | Intermediate Studio Digital Media |  |
| ART 325 | North American Art History |  |
| ART 355 | Early Modern Art |  |
| THEA 392 | History of Musical Theatre |  |
| Culture, Discourse, and Ideas |  |  |
| COMM 458 | Media Criticism |  |
| COMM 480 | The Communication Age |  |
| ENGL 315 | The Cinematic Review: Historical and Critical Writing |  |
| ERS 204 | Introduction to Esports |  |
| HIST 347 | Twentieth Century British Culture |  |
| HIST 358 | American Popular Culture, 1865 to the Present |  |
| Global Learning and Diversity |  |  |
| ENGL 314 | European Film |  |
| ENGL 316 | Asian Film |  |
| Society and Institutions |  |  |
| DANC 305 | Society and Social Dance |  |
| Total Hours |  | 12 |
| * Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for tha specific course. |  |  |

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PASSHE - Pennsylvania State System of Higher Education Institutions
Arts and Popular Culture Thematic Thread (APCU)
Revised: 10.08.2021
UCC 09.22.2021

## Becoming America <br> Becoming America Thematic Thread

This thread asks students to examine the vast range of artistic expression, natural environments, languages, practices, and histories that exist in America. Immigrant traditions, political and social institutions, popular culture, and a remembered past, have all shaped American citizens and continue to do so.

Faculty Liaison: Lia Paradis

## Curriculum Guide

| Code | Title | Hours |
| :---: | :---: | :---: |
| Gateway Courses |  |  |
| Select one of the following: |  | 3 |
| HIST 201 | Colonial America to 1815 |  |
| HIST 202 | United States, 1815-1920 |  |
| HIST 203 | U.S. History Since 1920 |  |
| PHIL 170 | American Philosophy |  |
| Focused Courses |  |  |
| Select three courses from the following (must include three categories and three departments; two courses must be 300/400 level) |  | 9 |
| Civic Knowledge and Engagement |  |  |
| HIST 453 | American Constitutional History and Law |  |
| POLS 223 | Law and Courts |  |
| POLS 325 | The Congress |  |
| Culture, Discourse, and Ideas |  |  |
| CHIN 101 | Chinese Language and Culture I |  |
| CHIN 102 | Chinese Language and Culture II |  |
| CHIN 103 | Chinese Language and Culture III |  |
| ENGL 242 | African-American Literature |  |
| ENGL 244 | Native American Literature |  |
| INDP 322 | Archaeology of the Americas |  |
| SPAN 101 | Spanish Language \& Culture I |  |
| SPAN 102 | Spanish Language \& Culture II |  |
| SPAN 103 | Spanish Language \& Culture III |  |
| Global Learning and Diversity |  |  |
| HIST 323 | African American History to 1876 |  |
| HIST 346 | Rise of Imperial Britain |  |
| HIST 353 | History of the Americas |  |
| POLS 351 | Politics of Race |  |
| Science, Technology, and Mathematics |  |  |

EGEO 100 Environmental Geology
Society and Institutions
HIST $337 \quad$ Native American History
Total Hours

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


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PASSHE - Pennsylvania State System of Higher Education Institutions
BECOMING AMERICA THREAD (AMER)
Revised: 3.25.2020

## Being American

## Being American Thematic Thread

This thread asks students to examine the vast range of artistic expression, natural environments, languages, practices, and histories that exist in America. Immigrant traditions, political and social institutions, popular culture, and a remembered past, have all shaped American citizens and continue to do so.

## Faculty Liaison: Lia Paradis

## Curriculum Guide

| Code | Title | Hours |
| :---: | :---: | :---: |
| Gateway Courses |  |  |
| Select one of the following: |  | 3 |
| HIST 201 | Colonial America to 1815 |  |
| HIST 202 | United States, 1815-1920 |  |
| HIST 203 | U.S. History Since 1920 |  |
| PHIL 170 | American Philosophy |  |
| Focused Courses |  |  |
| Select three courses from the following (must include three categories and three departments; two courses must be 300/400 level) |  | 9 |
| The Arts |  |  |
| ART 325 | North American Art History |  |
| DANC 125 | Experiencing Dance: Techniques and Styles |  |
| MUSI 104 | Exploring American Music |  |
| THEA 392 | History of Musical Theatre |  |
| Civic Knowledge and Engagement |  |  |
| HIST 326 | The Long Civil Rights Movement |  |
| POLS 255 | Introduction to Public Policy |  |
| POLS 306 | Campaigns \& Elections |  |


| POLS 357 | Civil Liberties and Civil Rights |
| :---: | :---: |
| Culture, Discourse, and Ideas |  |
| ENGL 242 | African-American Literature |
| ENGL 243 | Literature of the Women's Movement |
| ENGL 246 | U.S. Latino/a Literatures |
| HIST 313 | U.S. Manhood and Masculinities |
| HIST 358 | American Popular Culture, 1865 to the Present |
| MODL 1XX | Language and Culture I, II, or III ${ }^{1}$ |
| Ethical Reasoning |  |
| POLS 351 | Politics of Race |
| Global Learning and Diversity |  |
| INDP 106 | Race and Ethnic Diversity in the USA |
| PSYC 300 | Psychology of Women, Gender and Culture |
| Science, Technology, and Math |  |
| GES 324 | Environmental Law and Policy |
| Society and Institutions |  |
| HCAM 230 | US Healthcare Systems |
| HIST 337 | Native American History |
| HIST 344 | The American City |
| INDP 326 | Society, Culture and Self |
| Total Hours |  |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.
1 Students may select one course from:
ARAB 101, ARAB 102, ARAB 103, CHIN 101, CHIN 102, CHIN 103, FREN 101, FREN 102, FREN 103, GERM 101, GERM 102, GERM 103, ITAL 101, ITAL 102, ITAL 103, JAPN 101, JAPN 102, JAPN 103, KORN 101, KORN 102, KORN 103 RUSS 101, RUSS 102, RUSS 103, SPAN 101, SPAN 102, SPAN 103


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PASSHE - Pennsylvania State System of Higher Education Institutions
Being American Thematic Thread (BAME)
Revised 07.31.20
UCC 04.21.20

## Body and Self

## Body and Self Thematic Thread

How do our bodies shape who we are and how we experience the world? This thread asks students to think about the nature of the self from an embodied perspective, with special emphasis on how our body's interaction with its physical, cultural, and social environment affects
who we are and what we can do. Put differently, this thread is about the different ways that bodies move and express themselves, as well as how they come to express the world around them.

Faculty Liaison: Tom Sparrow

## Curriculum Guide



* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


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PASSHE - Pennsylvania State System of Higher Education Institutions
Body and Self Thematic Thread (BOSE)

Revised 12.13.2021
UCC 11.30.2021

## Building a Healthy Society Building a Healthy Society Thematic Thread

"No man is an island." John Donne's decree is a call to look outside of ourselves in order to contribute to the well-being of the whole. In a healthy society, a complex range of human needs are considered and met. Health and safety. Social justice. Environmental wellness Engagement with the arts \& humanities. This thematic thread introduces students to the roles that various disciplines play in building and maintaining healthy societies.

Faculty Liaison: Deanna Brookens

## Curriculum Guide

Code Title Hours

## Gateway Course

Select one of the following: 3

| INDP 103 | Contemporary Social Problems |
| :--- | :--- |
| PCRM 104 | Foundations in Sustainability |
| POLS 255 | Introduction to Public Policy |

## Focused Courses

Select three courses from the following (must include three categories and three departments; two courses must be 300/400
level)
The Arts

| ART 105 | Basic Studio Drawing |
| :---: | :---: |
| ART 106 | Basic Studio Painting |
| ART 107 | Basic Studio Photography |
| ART 108 | Basic Studio Printmaking |
| ART 109 | Basic Studio Metalsmithing |
| ART 110 | Basic Studio Sculpture |
| ART 111 | Basic Studio Fiber Art |
| ART 112 | Basic Studio Ceramics |
| ART 113 | Basic Studio Graphic Design |
| ART 114 | Basic Studio Digital Media |
| DANC 305 | Society and Social Dance |
| THEA 359 | Studies in Audience Development |
| Civic Knowledge and Engagement |  |
| INDP 309 | Health and Society |
| NLPA 320 | Community Change and Development |
| NLPA 325 | Social and Ethical Issues in Philanthropy and Fundraising |
| POLS 357 | Civil Liberties and Civil Rights |
| Ethical Reasoning |  |
| PHIL 324 | Environmental Ethics |
| POLS 359 | Policy Analysis and Evaluation |
| Global Learning and Diversity |  |
| INDP 321 | Minority Groups |
| RCTH 120 | Disability, Community Inclusion, and Diversity |

Society and Institutions

| CDEV 251 | Mental Health in America |
| :--- | :--- |
| CRIM 333 | Crime, Justice and Society |
| NLPA 305 | Financial Best Practices for Decision |
|  | Makers |
| SOWK 300 | Crisis Intervention |
| Total Hours |  |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course


## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

Building a Healthy Society Thematic Thread (BAHS)
Revised 12.13.2021
9 UCC 11.30.2021

## Civil Rights \& Social Movements Civil Rights \& Social Movements Thematic Thread

The main purpose of thread is to help students understand the role of recent social movements in the United States in pushing transformational ideas forward and expanding civil rights and social justice. The push for broader civil rights in the US did not end with the civil rights movement. Organizations representing African Americans have continued to press for equal justice across a variety of issues like housing, employment, education and criminal justice. Other groups facing discrimination were inspired by the civil rights movement, borrowed its tactics, and developed strategies of their own. Social movements have played a key role in advancing civil rights and social protections for disadvantaged groups including women, gays and lesbians, Native Americans, and people with disabilities. This thread will allow students to explore the role and power of human agency when harnessed collectively to bring about change and advancements in social and political justice.

Faculty Liaison: Cheryl Kerchis

## Curriculum Guide

Code Title
Gateway Courses
Select one of the following:
INDP 106 Race and Ethnic Diversity in the USA
POLS 255 Introduction to Public Policy
Focused Courses

Select three courses from the following (must include three categories and three departments; two courses must be 300/400 level)

| Civic Knowledge and Engagement |  |
| :---: | :---: |
| HIST 326 | The Long Civil Rights Movement |
| INDP 330 | Collective Behavior |
| POLS 301 | Organized Political Action |
| POLS 303 | Seminar in Democracy |
| Culture, Discourse, and Ideas |  |
| PHIL 331 | Social and Political Philosophy |
| PHIL 335 | Philosophy of Law and Justice |
| POLS 354 | Seminar in Religion and Politics |
| POLS 357 | Civil Liberties and Civil Rights |
| Ethical Reasoning |  |
| GES 344 | Environmental Justice |
| POLS 351 | Politics of Race |
| Global Learning and Diversity |  |
| HIST 337 | Native American History |
| INDP 321 | Minority Groups |
| POLS 356 | Gay and Lesbian Politics |
| POLS 375 | Women and Politics |
| SEFE 280 | Cultural Minorities in Education |
| Science, Technology, and Math |  |
| POLS 364 | Using Evidence to Solve Public Problems |
| Society and Institutions |  |
| HIST 344 | The American City |
| INDP 340 | Social Inequality |
| RCTH 120 | Disability, Community Inclusion, and Diversity |

## Total Hours

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


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PASSHE - Pennsylvania State System of Higher Education Institutions
Civil Rights and Social Movements Thematic Thread (CRSM)
Revised 07.28.2021
UCC 04.13.2021
${ }^{9}$ Comparative Perspectives of Justice \& Society

## Comparative Perspectives of Justice \& Society Thematic Thread

This thread compares justice and political systems in the United States and other countries with multi-ethnic backgrounds. It aims to deepen students' understanding of how different communities and societies address and overcome social and legal issues through various policy responses. This thread also explores the benefits and challenges of multiculturalism and specifically examines disparities that minority groups face in their communities and the criminal justice system.

Faculty Liaison: Sarah Kuehn

## Curriculum Guide

| Code | Title | Hours |
| :---: | :---: | :---: |
| Gateway Courses |  |  |
| Select one of the following: |  | 3 |
| CRIM 110 | Introduction to Criminology \& Criminal Justice Systems |  |
| INDP 103 | Contemporary Social Problems |  |
| INDP 106 | Race and Ethnic Diversity in the USA |  |
| POLS 110 | Foundations of Political Science |  |
| Focused Courses |  |  |
| Select three courses from the following (must include three categories and three departments; two courses must be 300/400 level) |  | 9 |
| Civic Knowledge and Engagement |  |  |
| CRIM 333 | Crime, Justice and Society |  |
| Culture, Discourse, and Ideas |  |  |
| CSLD 350 | Multicultural Leadership |  |
| Ethical Reasoning |  |  |
| POLS 255 | Introduction to Public Policy |  |
| POLS 351 | Politics of Race |  |
| Global Learning and Diversity |  |  |
| COMM 217 | Intercultural Communication |  |
| CRIM 327 | Criminal Justice and the Multicultural Community |  |
| INDP 321 | Minority Groups |  |
| POLS 263 | Introduction to Comparative Politics |  |
| Science, Technology, and Mathematics |  |  |
| CHEM 204 | Introduction to Forensic Science |  |
| POLS 364 | Using Evidence to Solve Public Problems |  |
| PSYC 276 | Introduction to Abnormal Psychology |  |
| Society and Institutions |  |  |
| INDP 323 | Deviant Behavior |  |
| INDP 340 | Social Inequality |  |

Total Hours

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions
Comparative Perspectives of Justice and Society (CPJS)
Revised 10.26.20
UCC 10.26.20

## Creating Art

## Creating Art Thematic Thread

All artists engage in the act of creating in order to perform and make works of art. In the "Creating Art" thread, questions may be analyzed, such as: What is creativity? Why do some people have the abilities and talents that enable them to engage in the arts? Why and how do people make art? Can anyone who has a desire to do so, be involved in art making? By studying different art forms, this thread explores both the foundations of the creative process and the practice of creating art.

## Faculty Liaison: Rebecca Morrice

## Curriculum Guide

| Code <br> Gateway Courses | Title | Hours |
| :--- | :--- | ---: |
| Select one of the following: | 3 |  |
| ART 226 | Overview of World Art |  |
| COMM 115 | Visual Literacy |  |
| DANC 125 | Experiencing Dance: Techniques and Styles |  |
| MUSI 102 | Exploring World Music |  |
| MUSI 104 | Exploring American Music |  |
| PHIL 261 | Philosophy of Art |  |
| THEA 131 | Fundamentals of Acting |  |

## Focused Courses

Select three courses from the following (must include three
categories and three departments; two courses must be 300/400
level)
The Arts

| ART 105 | Basic Studio Drawing |
| :--- | :--- |
| ART 106 | Basic Studio Painting |
| ART 107 | Basic Studio Photography |
| ART 108 | Basic Studio Printmaking |
| ART 109 | Basic Studio Metalsmithing |
| ART 110 | Basic Studio Sculpture |
| ART 111 | Basic Studio Fiber Art |
| ART 112 | Basic Studio Ceramics |
| ART 113 | Basic Studio Graphic Design |
| ART 114 | Basic Studio Digital Media |
| ART 205 | Intermediate Studio Drawing |


| ART 206 | Intermediate Studio Painting |
| :---: | :---: |
| ART 207 | Intermediate Studio Photography |
| ART 208 | Intermediate Studio Printmaking |
| ART 209 | Intermediate Studio Metalsmithing |
| ART 210 | Intermediate Studio Sculpture |
| ART 211 | Intermediate Studio Fiber Art |
| ART 212 | Intermediate Studio Ceramics |
| ART 213 | Intermediate Studio Graphic Design |
| ART 214 | Intermediate Studio Digital Media |
| MUSI XXX | Music Ensemble ${ }^{1}$ |
| THEA 132 | Stagecraft |
| THEA 215 | Drawing/Drafting/CAD |
| THEA 235 | Costume Technology |
| THEA 269 | Playwriting |
| THEA 335 | Costume Design and History |
| Civic Knowledge and Engagement |  |
| THEA 159 | Introduction to Theatre Arts Management |
| Culture, Discourse, and Ideas |  |
| ART 325 | North American Art History |
| ART 335 | The Renaissance Tradition |
| ART 345 | Foundations of Modern Art |
| ART 355 | Early Modern Art |
| ART 365 | Art Since 1945 |
| INDP 326 | Society, Culture and Self |
| CSLD 344 | Left and Right Brain: From Neuron to Culture |
| Global Learning and Diversity |  |
| DANC 318 | Dance in the Political World |
| Society and Institutions |  |
| DANC 305 | Society and Social Dance |
| Total Hours |  |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.
1 Ensembles include: MUSI 109-409, MUSI 113-413, MUSI 114-414, MUSI 115-415, MUSI 116-416, MUSI 117-417, MUSI 118-418, MUSI 119-419, MUSI 120-420, MUSI 121-421, MUSI 122-422, MUSI 123-423, MUSI 125-425, MUSI 126-426, MUSI 192-492, MUSI 193-493, MUSI 194-494, MUSI 196-496, MUSI 233, MUSI 237, MUSI 437


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PASSHE - Pennsylvania State System of Higher Education Institutions
Creating Art Thematic Thread (CRAR)
Revised 07.31.20

UCC 04.21.20

## Demystifying Crime \& Justice Demystifying Crime \& Justice Thematic Thread

The American public is fascinated by crime. Issues such as addiction, punishment, criminal minds, justice, and law are common subjects of both popular media and everyday conversation. Despite the appeal of these topics, a variety of misconceptions persist about crime, offenders, and the justice system. This thread aims to remedy those misunderstandings by challenging students' understanding of justice, deepening their appreciation for the complexity of criminal behavior and sanctions, and analyzing the factors shaping public opinion and criminal justice policy.

Faculty Liaison: Jeffrey Roth

## Curriculum Guide



* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions
Demystifying Crime and Justice Thematic Thread (DCJC)
Revised 12.13.2021
UCC 11.30.2021

## Education

## Education Thematic Thread

In this thread, students will explore questions and knowledge that connect with education in any discipline, subject, and level.

Faculty Liaison: Kathy Melago

## Curriculum Guide

| Code <br> Gateway Courses | Title | Hours |
| :---: | :---: | :---: |
| Select one of the foll | owing: | 3 |
| CDEV 248 | Human Development and Education |  |
| ELEC 100 | Early Childhood Education Theory \& Practice |  |
| MUSI 111 | Introduction to Music Education |  |
| SEFE 200 | Introduction to Education, Teaching Methods and Field |  |
| SOWK 105 | Human Diversity |  |
| Focused Courses |  | 9 |
| The Arts |  |  |
| DANC 223 | Creative Dance for Children |  |
| MUSI 118 | Marching Pride ${ }^{1}$ |  |
| MUSI 218 | Marching Pride ${ }^{1}$ |  |
| MUSI 318 | Marching Pride ${ }^{1}$ |  |
| MUSI 418 | Marching Pride ${ }^{1}$ |  |
| MUSI 288 | Music Education for Diverse Learners |  |
| Culture, Discourse, and Ideas |  |  |
| SPAN 110 | Spanish for Educators |  |
| Civic Knowledge and Engagement |  |  |
| ELEC 410 | Culture and Politics of American Education |  |
| SEFE 401 | Education and American Activism |  |
| Global Learning and Diversity |  |  |
| ELEC 405 | Overview of Global Education \& Issues |  |
| SEFE 280 | Cultural Minorities in Education |  |
| Self-Care and Well-Being |  |  |
| PE 243 | Educational Movement in Health \& Wellness |  |
| PE 342 | Wellness through Movement |  |

Society and Institutions

| CDEV 251 | Mental Health in America |
| :--- | :--- |
| SEFE 420 | American Education in the Twenty-First <br> Century: A Comparative Perspective |

## Total Hours

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.
1 Students must complete 3 credits total in MUSI 118, MUSI 218, MUSI 318, or MUSI 418


## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions
Education Thematic Thread (EDCT)
Revised 02.10.2022
UCC 02.01.2022

## Environmental Problems Toolkit <br> Environmental Problems Toolkit Thematic Thread

Global warming, access to energy and natural resources, and related environmental issues will challenge communities across the globe in the coming century. This thread introduces students to the social, political, and economic causes and consequences of these issues. Given that these challenges likely will directly affect their lives directly in the future, this thread seeks to build the students' ability to work with others to combat these challenges. At completion of the thread, students should have the base knowledge, skills, and confidence to start to work with others to address environmental concerns in a variety of contexts/roles. Topics student may choose to explore could include: global warming, energy access and consumption, pollution, water access, among many others. This thread will give students opportunities to apply their knowledge to real world problems. More than half of the courses in the thread involve opportunities to apply and develop the analytical, communication, and/or other technical skills essential to applied community improvement.

Faculty Liaison: Dave Kershaw

## Curriculum Guide

| Code | Title | Hours |
| :--- | :--- | ---: |
| Gateway Courses |  | 3 |
| Select one of the following: |  |  |
| BIOL 105 | Environmental Biology |  |
| EGEO 100 | Environmental Geology |  |
| GES 135 | Introduction to Environmental Problems |  |


| PCRM 104 | Foundations in Sustainability |
| :---: | :---: |
| Focused Courses |  |
| Select three courses from the following (must include three categories and three departments; two courses must be 300/400 level) |  |
| Civic Knowledge and Engagement |  |
| GES 324 | Environmental Law and Policy |
| GES 362 | Applications in Sustainability |
| NLPA 320 | Community Change and Development |
| POLS 255 | Introduction to Public Policy |
| Culture, Discourse, and Ideas |  |
| ENGL 205 | Introduction to Professional Writing |
| Ethical Reasoning |  |
| GES 344 | Environmental Justice |
| POLS 301 | Organized Political Action |
| POLS 359 | Policy Analysis and Evaluation |
| Global Learning and Diversity |  |
| POLS 351 | Politics of Race |
| Science, Technology, and Mathematics |  |
| GES 325 | Introduction to Geographic Information Science |
| Society and Institutions |  |
| GES 215 | Planning for Sustainable Communities |
| POLS 322 | The United Nations and International Law |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


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PASSHE - Pennsylvania State System of Higher Education Institutions

Environmental Problems and Toolkit Thematic Thread (EPTK)
Revised 07.31.2020
UCC 04.21.2020

## Fighting Social Problems

## Fighting Social Problems Thematic Thread

Drug overdoses, poor social mobility, obesity, and other social ills are often persistent and difficult to overcome. This thread seeks to help students understand the root causes and paralyzing consequences of poor community health, stagnant education, crime, and/or other social problems. At the same time, the thread seeks to demonstrate how advocates and professionals employ a diverse array of skills from a
variety of disciplines and areas to identify, understand and combat these problems. At completion of the thread, students should have the base knowledge, skills, and confidence to start work with others to address these problems in their communities. This thread will give students opportunities to apply their knowledge to real community problems. More than half of the courses in the thread involve opportunities to apply and develop the analytical, communication, and/or other technical skills essential to applied community action.

Faculty Liaison: Dave Kershaw

## Curriculum Guide

| Code | Title | Hours |
| :---: | :---: | :---: |
| Gateway Course |  |  |
| Select one of the following: |  | 3 |
| CRIM 110 | Introduction to Criminology \& Criminal Justice Systems |  |
| INDP 103 | Contemporary Social Problems |  |
| PCRM 104 | Foundations in Sustainability |  |
| POLS 101 | American National Government |  |
| POLS 255 | Introduction to Public Policy |  |
| Focused Courses |  |  |
| Select three courses from the following (must include three categories and three departments; two courses must be 300/400 level) |  | 9 |
| The Arts |  |  |
| ART 105 | Basic Studio Drawing |  |
| ART 106 | Basic Studio Painting |  |
| ART 107 | Basic Studio Photography |  |
| ART 108 | Basic Studio Printmaking |  |
| ART 109 | Basic Studio Metalsmithing |  |
| ART 110 | Basic Studio Sculpture |  |
| ART 111 | Basic Studio Fiber Art |  |
| ART 112 | Basic Studio Ceramics |  |
| ART 113 | Basic Studio Graphic Design |  |
| ART 114 | Basic Studio Digital Media |  |
| Civic Knowledge and Engagement |  |  |
| NLPA 320 | Community Change and Development |  |
| SEFE 401 | Education and American Activism |  |
| Ethical Reasoning |  |  |
| PHIL 325 | Medical/Health Care Ethics |  |
| POLS 359 | Policy Analysis and Evaluation |  |
| Global Learning and Diversity |  |  |
| POLS 351 | Politics of Race |  |
| SEFE 280 | Cultural Minorities in Education |  |
| Science, Technology and Mathematics |  |  |
| GES 325 | Introduction to Geographic Information Science |  |
| POLS 364 | Using Evidence to Solve Public Problems |  |
| PSYC 244 | Developmental Psychology |  |
| Self-Care and Well-Being |  |  |
| CDEV 248 | Human Development and Education |  |
| PSYC 321 | Drugs and Behavior |  |

Society and Institutions

| CRIM 333 | Crime, Justice and Society |
| :--- | :--- |
| HCAM 300 | Healthcare Systems: Global Perspectives <br> and Analysis |
| NLPA 220 | Introduction to Nonprofit Management |

Total Hours

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course


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PASSHE - Pennsylvania State System of Higher Education Institutions

Fighting Social Problems Thematic Thread (FSPR)

## Food, Wellness, \& Environment Across Cultures

## Food, Wellness, \& Environment Across Cultures Thematic Thread

Are we really what we eat? Is health universal? Is everyone connected to the environment in the same way around the world? Do you find topics related to food, health and sustainability intriguing? Then, Food, Wellness and the Environment Across Cultures is the thread for you! This Thematic Thread offers a fun and exciting learning opportunity where students with different perspectives can come together to apply their learning through the lens of food, health and sustainability. Students will enhance their cultural awareness and experiences in the areas pertaining to overall wellness through hands-on learning and other high-impact activities. Courses will involve working with the community, optional trips abroad, cooking and eating international food, and bringing the world into the classroom using technology. Students will select courses from several academic fields such as: Modern Languages, Geography, Parks and Conservation, Art, Dance...etc. to create an interdisciplinary experience that will have a lasting impact to students' personal and professional lives. All students must select at least 3 language credits in the Survey Courses Block or the Global learning and Diversity category in order to accomplish the cross-cultural component that is the central theme of this Thread.

Faculty Liaison: Gisela Dieter

## Curriculum Guide

| Code Title <br> Gateway Courses  | Hours |  |
| :--- | :--- | ---: |
| Select one of the following: | 3 |  |
| ARAB 101 | Arabic Language and Culture I |  |
|  |  |  |
| or ARAB 102 | Arabic Language and Culture II |  |


| or ARAB 103 | Arabic Language and Culture III |
| :---: | :---: |
| CHIN 101 | Chinese Language and Culture I ${ }^{1}$ |
| or CHIN 102 | Chinese Language and Culture II |
| or CHIN 103 | Chinese Language and Culture III |
| FREN 101 | French Language and Culture ${ }^{1}$ |
| or FREN 102 | French Language and Culture II |
| or FREN 103 | French Language and Culture III |
| JAPN 101 | Japanese Language and Culture I ${ }^{1}$ |
| or JAPN 102 | Japanese Language and Culture II |
| or JAPN 103 | Japanese Language and Culture III |
| KORN 101 | Korean Language and Culture I ${ }^{1}$ |
| or KORN 102 | Korean Language and Culture II |
| or KORN 103 | Korean Language and Culture III |
| SPAN 101 | Spanish Language \& Culture I ${ }^{1}$ |
| or SPAN 102 | Spanish Language \& Culture II |
| or SPAN 103 | Spanish Language \& Culture III |
| SPAN 121 | Spanish for Health Professionals ${ }^{1}$ |

## Focused Courses

Select three courses from the following (must include three categories and three departments; two courses must be 300/400 level)

Civic Knowledge and Engagement
INDP 309 Health and Society

Culture, Discourse, and Ideas

| ENGL 338 | Creative Writing: Creative Nonfiction |
| :---: | :--- |
| Ethical Reasoning |  |
| GES 344 | Environmental Justice |
| PCRM 104 | Foundations in Sustainability |
| PHIL 324 | Environmental Ethics |
| PHIL 371 | Ancient Western Philosophy |

Global Learning and Diversity

| ARAB 101 | Arabic Language and Culture I ${ }^{1}$ |
| :---: | :---: |
| or ARAB 102 | Arabic Language and Culture II |
| or ARAB 103 | Arabic Language and Culture III |
| CHIN 101 | Chinese Language and Culture I ${ }^{1}$ |
| or CHIN 102 | Chinese Language and Culture II |
| or CHIN 103 | Chinese Language and Culture III |
| FREN 101 | French Language and Culture I ${ }^{1}$ |
| or FREN 102 | French Language and Culture II |
| or FREN 103 | French Language and Culture III |
| JAPN 101 | Japanese Language and Culture I ${ }^{1}$ |
| or JAPN 102 | Japanese Language and Culture II |
| or JAPN 103 | Japanese Language and Culture III |
| KORN 101 | Korean Language and Culture I ${ }^{1}$ |
| or KORN 102 | Korean Language and Culture II |
| or KORN 103 | Korean Language and Culture III |
| SPAN 101 | Spanish Language \& Culture ${ }^{1}$ |
| or SPAN 102 | Spanish Language \& Culture II |
| or SPAN 103 | Spanish Language \& Culture III |
| SPAN 121 | Spanish for Health Professionals ${ }^{1}$ |
| Self-Care and Well-Being |  |
| PE 342 | Wellness through Movement |

$\begin{array}{ll}\text { PE } 393 & \begin{array}{l}\text { Nutrition for Physical Activity, Exercise, and } \\ \text { Health }\end{array}\end{array}$
Total Hours
1 Based on the Placement Test administered by the Department of Modern Languages \& Cultures, students will be placed in the appropriate 100 level course in the Gateway category. Students interested in taking more language courses at the 100 level in the same or a different language can count the second language course as part of the Global Learning and Diversity category. Students who place above the 200 level in the Placement Test administered by the Department of Modern Languages \& Cultures can still take language courses at the appropriate level in substitution of the ones listed in the Gateway Block or the Global Learning and Diversity Category. Students will need to contact the Thread Adviser for approval procedures.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


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PASSHE - Pennsylvania State System of Higher Education Institutions
Food, Wellness, and Environment Across Cultures Thematic Thread (FWEC)
Revised 05.27.2021
UCC 03.16.2021

## Gender and Diversity Gender and Diversity Thematic Thread

In an increasingly global community, it is important to understand and respect diverse perspectives in an intersectional and interdisciplinary context. The Gender and Diversity Thread invites students to learn more about privilege and oppression as systemic and structural and, in doing so, to learn more about themselves and their communities. Students will also learn about different cultural constructs which influence our values and behaviors; the power of individual agency; and opportunities to become advocates for social justice.

Faculty Liaison: Cindy Lacom

## Curriculum Guide

| Code | Title | Hours |
| :--- | :--- | ---: |
| Gateway Course |  | 3 |
| Select one of the following: |  |  |
| INDP 103 | Contemporary Social Problems |  |
| PSYC 240 | Human Sexual Behavior |  |

Focused Courses

Select three courses from the following (must include three categories and three departments; two courses must be 300/400 level)
The Arts

| ENGL 243 | Literature of the Women's Movement |
| :---: | :---: |
| GNDR 120 | Introduction to the Study of Masculinities |
| Civic Knowledge and Engagement |  |
| HIST 326 | The Long Civil Rights Movement |
| PHIL 335 | Philosophy of Law and Justice |
| POLS 375 | Women and Politics |
| Culture, Discourse, and Ideas |  |
| HIST 313 | U.S. Manhood and Masculinities |
| HIST 318 | Gender and Sexuality in European Society |
| GERO 425 | Women and Aging |
| PSYC 300 | Psychology of Women, Gender and Culture |
| Ethical Reasoning |  |
| PHIL 336 | Philosophy of Gender and Sex |
| Global Learning and Diversity |  |
| GNDR 415 | Feminist Perspectives in the Disciplines |
| INDP 339 | Gender Roles and Society |
| RCTH 120 | Disability, Community Inclusion, and Diversity |

Science, Technology and Mathematics

| EGEO 368 | Women in Science |
| :--- | :--- |
| GES 361 | Gender and the Environment |

Society and Institutions

| CDEV 251 | Mental Health in America |
| :--- | :--- |
| CRIM 380 | Women \& the Criminal Justice System |

Total Hours

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


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PASSHE - Pennsylvania State System of Higher Education Institutions
Gender and Diversity Thematic Thread (GEND)
Revised: 12.13.2021
UCC: 11.30.2021

## Global Citizenship

## Global Citizenship Thematic Thread

The Global Citizenship Thread will provide students an enhanced understanding of the interrelationship of cultures, economics, history, environment, politics, social justice and global communities. Courses

9 in this thread will deepen students' knowledge of interdependence and interconnectedness of world peoples, cultures, and nations from historical and contemporary perspectives. Students will demonstrate critical thinking, reflection, and analysis of global dynamics that better prepare them to participate in the increasingly globalized society.

Faculty Liaison: Li Pu

## Curriculum Guide

| Code | Title | Hours |
| :---: | :---: | :---: |
| Gateway Courses |  |  |
| Select one of the following: |  | 3 |
| COMM 115 | Visual Literacy |  |
| or ART 115 | Visual Literacy |  |
| HIST 151 | Ancient and Medieval World |  |
| HIST 152 | Rise of the Modern World |  |
| HIST 153 | Contemporary World History |  |
| INDP 103 | Contemporary Social Problems |  |
| MODL 1XX | Language and Culture I, II, or III |  |
| Focused Courses |  |  |
| Select three courses from the following (must include three categories and three departments; two courses must be 300/400 level) |  | 9 |
| Civic Knowledge and Engagement |  |  |
| POLS 110 | Foundations of Political Science |  |
| POLS 220 | Foreign Policy |  |
| Culture, Discourse, and Ideas |  |  |
| COMM 405 | Global Media |  |
| COMM 419 | Propaganda: Ideology, Communication Warfare, and Social Control |  |
| INDP 310 | Cultural Area Studies |  |
| PHIL 331 | Social and Political Philosophy |  |
| Ethical Reasoning |  |  |
| PHIL 338 | Ethics, Technology, and the Future |  |
| Global Learning and Diversity |  |  |
| COMM 217 | Intercultural Communication |  |
| GES 444 | World Environmental Cultures |  |
| INDP 226 | Population and Society |  |
| MRKT 303 | Issues in Global Business |  |
| Science, Technology, and Mathematics |  |  |
| GES 355 | Earth's Changing Climate |  |
| Society and Institutions |  |  |
| HCAM 300 | Healthcare Systems: Global Perspectives and Analysis |  |

Total Hours

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


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PASSHE - Pennsylvania State System of Higher Education Institutions
Global Citizenship Thematic Thread (CITZ)
Revised 06.04.2021
UCC 02.16.2021

## Healthy Body, Mind \& Environment Healthy Body, Mind \& Environment Thematic Thread

Optimizing life choices through self-care can improve well-being, enhance productivity, and benefit the greater society. Many organizations are creating a culture of wellness that maximizes the well-being of employees to strengthen themselves and their business to contribute to a healthier population and economy. Through this thread, students will examine the role individuals, consumers, and businesses play in creating a healthy and sustainable society.

Faculty Liaison: Hannah Brewer

## Curriculum Guide

| Gateway Courses ${ }^{1}$ |  |  |
| :---: | :---: | :---: |
| Select one of the following: |  | 3 |
| BIOL 102 | Human Biology |  |
| CDEV 248 | Human Development and Education |  |
| PE 115 | Yoga and Well-Being |  |
| Focused Courses ${ }^{1}$ |  |  |
| Select two courses from the following (must include two categories and two departments; one course must be 300/400 level) |  | 6 |
| The Arts |  |  |
| DANC 125 | Experiencing Dance: Techniques and Styles |  |
| Civic Knowledge and Engagement |  |  |
| PCRM 104 | Foundations in Sustainability |  |
| PE 241 | Outdoor Pursuits |  |
| Global Learning and Diversity |  |  |
| PSYC 334 | Health Psychology |  |
| RCTH 120 | Disability, Community Inclusion, and Diversity |  |
| Science, Technology, and Mathematics |  |  |
| ERS 305 | The Truth About Weight Loss |  |
| GES 135 | Introduction to Environmental Problems |  |
| GES 355 | Earth's Changing Climate |  |
| Self-Care and Well-Being |  |  |
| ERS 230 | Stress Management |  |
| ERS 304 | Current Issues in Esports Health and Society |  |
| PE 335 | Science of the Mind-Body Connection |  |
| Society and Institutions |  |  |
| HLTH 311 | International Health |  |


| Capstone Course (Required) |
| :--- |${ }^{1}$


| PE 342 | Wellness through Movement | 3 |
| :--- | ---: | :--- |

Total Hours ..... 12

1 This thread requires PE 342 as a capstone course. Students may only use 3 additional credits from PE to satisfy thread requirements.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course


## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

Healthy Body, Mind, \& Environment Thematic Thread (HBME)
Revised 09.14.2021
UCC 09.07.2021

## Innovation, Entrepreneurship, and Positive Change

## Innovation, Entrepreneurship, and Positive Change Thematic Thread

This thread is primarily concerned with empowering students to become future visionaries and thought leaders within their chosen field of study Through the courses in the Innovation, Entrepreneurship, and Positive Change Thread, students will learn to identify areas for growth and connected risk, to develop techniques for assessing multiple ways of advancing their field, and to develop the skills and dispositions necessary to become empowered to bring about change in their specific field of study.

Faculty Liaison: Jason Hilton

## Curriculum Guide

| Code Title <br> Gateway Courses  | Hours |  |
| :--- | :--- | ---: |
| Select one of the following: | 3 |  |
| ACCT 209 | Financial Accounting |  |
| FIN 100 | Personal Financial Planning |  |
| MATH 115 | Financial Mathematics |  |
| NLPA 305 | Financial Best Practices for Decision |  |
|  | Makers |  |

## Focused Courses

Select two courses from the following (must include two 6 categories and two departments; one course must be 300/400
level)
The Arts

## COMM 115 Visual Literacy

Civic Knowledge and Engagement

| NLPA 200 | Empowered to Serve |
| :---: | :---: |
| NLPA 220 | Introduction to Nonprofit Management |
| NLPA 320 | Community Change and Development |
| NLPA 325 | Social and Ethical Issues in Philanthropy and Fundraising |
| NLPA 328 | Program Design and Evaluation in Nonprofit and Governmental Organizations |
| Culture, Discourse, and Ideas |  |
| ENGL 205 | Introduction to Professional Writing |
| ENGL 429 | Grant and Proposal Writing |
| ERS 204 | Introduction to Esports |
| Ethical Reasoning |  |
| PHIL 326 | Business Ethics |
| Society and Institutions |  |
| ECON 105 | Economics of Social Issues |
| FIN 341 | Entrepreneurial Finance |
| MGMT 370 | Sustainable Entrepreneurship and Innovation |
| MGMT 459 | Sustainable Business Consulting |
| Capstone Course (Required) |  |
| HONR 492 | Innovation for Positive Change |
| Total Hours |  |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


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PASSHE - Pennsylvania State System of Higher Education Institutions
Innovation, Entrepreneurship, and Positive Change Thematic Thread (IEPC)
Revised 10.05.2021
UCC 09.21.2021

## International Business

## International Business Thematic Thread

In this International Business thread, students will understand the role of global markets and its impact on businesses. Students will have an opportunity to explore how global media structures, crosscultural environment or climate changes affect businesses. They will be able to analyze information necessary to evaluate a business, and understand that a well-managed business requires a macroeconomic view when operating internationally. Students will be aware of how national governments and international institutions like the International

Monetary Fund or World Trade Organization shape globalization and the competitive environment in which international firms conduct business. They will be able to understand and minimize the exchange rate risks that multinational enterprises are facing, be able to compare different healthcare system infrastructures, and to understand diverse aspects of global business encompassing economic, financial, technological, political, and cultural differences.

Faculty Liaison: Sunita Mondal

## Curriculum Guide

| Code | Title | Hours |
| :---: | :---: | :---: |
| Gateway Course |  |  |
| Select one of the fo | wing: | 3 |
| ACCT 209 | Financial Accounting |  |
| POLS 220 | Foreign Policy |  |
| SPAN 131 | Spanish for the Business World |  |
| ARAB 101 <br> or ARAB 102 <br> or ARAB 103 | Arabic Language and Culture I <br> Arabic Language and Culture II <br> Arabic Language and Culture III |  |
| CHIN 101 <br> or CHIN 102 <br> or CHIN 103 | Chinese Language and Culture I Chinese Language and Culture II Chinese Language and Culture III |  |
| FREN 101 <br> or FREN 102 <br> or FREN 103 | French Language and Culture I <br> French Language and Culture II <br> French Language and Culture III |  |
| JAPN 101 <br> or JAPN 102 <br> or JAPN 103 | Japanese Language and Culture I Japanese Language and Culture II Japanese Language and Culture III |  |
| KORN 101 <br> or KORN 102 <br> or KORN 103 | Korean Language and Culture I Korean Language and Culture II Korean Language and Culture III |  |
| SPAN 101 <br> or SPAN 102 <br> or SPAN 103 | Spanish Language \& Culture I <br> Spanish Language \& Culture II <br> Spanish Language \& Culture III |  |

## Focused Courses

Select three courses from the following (must include three
categories and three departments; two courses must be 300/400
level)
Civic Knowledge and Engagement
POLS 365 International Political Economy
Culture, Discourse, and Ideas

| COMM 405 | Global Media |
| :---: | :---: |
| Global Learning and Diversity |  |
| MGMT 130 | Dynamics of Global Commerce |
| CRIM 328 | Transnational Crime \& Justice |

Science, Technology and Mathematics

| CYBR 101 | Cybersecurity in the Era of Evolving <br> Technology |
| :--- | :--- |
| GES 355 | Earth's Changing Climate |
| Society and Institutions |  | | ECON 326 | International Economics <br> HCAM 300 |
| :--- | :--- |

Total Hours

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions International Business Thematic Thread (INBU)

## Leadership Development

## Leadership Development Thematic Thread

The Leadership Development Thread has been constructed to allow students seeking that additional knowledge and situational awareness when focusing on general leadership, business endeavors and athletic leadership. Classes have been selected across departments that will allow students to expand their leadership capabilities, which include organizational, communication, planning, decision making, and management skills multiple areas to overall enhance a student's abilities to be marketable when in their specific fields of study.

Faculty Liaison: Bret Rogowitz

## Curriculum Guide



PHIL 338 Ethics, Technology, and the Future

| COMM 217 | Intercultural Communication |
| :---: | :---: |
| CSLD 350 | Multicultural Leadership |
| Self-Care and Well-Being |  |
| CSLD 315 | Mindfulness and Brain |
| ERS 230 | Stress Management |
| PE 473 | Professionalism, Advocacy and Leadership in Physical Activity |
| Society and Institutions |  |
| ACCT 209 | Financial Accounting |
| HIST 453 | American Constitutional History and Law |
| MGMT 351 | Organizational Behavior |
| MRKT 230 | Principles of Marketing |
| Capstone Course (Required) ${ }^{1}$ |  |
| CSLD 352 | Self Leadership |
| Total Hours |  |

1 This thread requires CSLD 352 as a capstone course. Students may only use 3 additional credits from CSLD to satisfy thread requirements.

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


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PASSHE - Pennsylvania State System of Higher Education Institutions
Leadership Development Thematic Thread (LDRS)
Revised 06.04.2021
UCC 02.16.2021

## Mind \& Brain

## Mind \& Brain Thematic Thread

What is a mind? Do animals have minds, and will machines ever develop them? How does the mental arise in a physical world? This thread will examine the nature of mind, the relation of mind to brain, and the relation of mind to the world. The origin and nature of desires, beliefs, and experiences will be considered, along with questions related to personal identity, the persistence of the self over time, free will and moral responsibility, and the implications of emerging technologies for humanity's collective sense of self.

Faculty Liaison: Lisa Schoenberg

## Curriculum Guide



| POLS 301 | Organized Political Action |
| :---: | :--- |
| THEA 359 | Studies in Audience Development |
| Culture, Discourse, and Ideas |  |
| COMM 419 | Propaganda: Ideology, Communication <br> Warfare, and Social Control |
| PHIL 331 | Social and Political Philosophy |
| POLS 333 | The Political Film |
| Global Learning and Diversity |  |
| ENGL 242 | African-American Literature |
| ENGL 243 | Literature of the Women's Movement |
| ENGL 244 | Native American Literature |
| ENGL 246 | U.S. Latino/a Literatures |
| MUSI 301 | Women and Music |
| Society and Institutions |  |
| HIST 344 | The American City |

Total Hours

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


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PASSHE - Pennsylvania State System of Higher Education Institutions
Political Arts Thematic Thread (POAR)
Revised 06.04.2021
UCC 02.16.2021

## Revolutions

## Revolutions Thematic Thread

This thread explores revolutions broadly defined. From the Big Bang to puberty, from the Russian Revolution to the global climate crisis, examining and understanding past moments of radical change can give us wisdom when confronted with them today and in the future.

## Faculty Liaison: Lia Paradis

## Curriculum Guide

| Code | Title | Hours |
| :--- | :--- | ---: |
| Gateway Courses |  |  |
| Select one of the following: | 3 |  |
| HIST 151 | Ancient and Medieval World |  |
| HIST 152 | Rise of the Modern World |  |
| HIST 153 | Contemporary World History |  |
| HIST 201 | Colonial America to 1815 |  |
| INDP 103 | Contemporary Social Problems |  |

INDP 226 Population and Society
Focused Courses
Select three courses from the following (must include three categories and three departments; two courses must be 300/400 level)
The Arts

| ART 345 | Foundations of Modern Art |
| :---: | :--- |
| ART 365 | Art Since 1945 |
| MUSI 301 | Women and Music |

Civic Knowledge and Engagement

| HIST 326 | The Long Civil Rights Movement |
| :---: | :--- |
| POLS 255 | Introduction to Public Policy |
| POLS 301 | Organized Political Action |
| Culture, Discourse, and Ideas |  |
| COMM 480 | The Communication Age |
| CSLD 244 | Artificial Intelligence in Cognitive Studies <br> and Film |
| ENGL 312 | Introduction to Shakespeare |
| HIST 346 | Rise of Imperial Britain |
| HIST 426 | French Revolution and Napoleon |
| PHIL 372 | Modern Western Philosophy |
| Ethical Reasoning | Ethics, Technology, and the Future |
| PHIL 338 | World Literature |
| Elobal Learning and Diversity |  |
| PNGL 402 | Introduction to Comparative Politics |

Science, Technology, and Mathematics

| GES 355 | Earth's Changing Climate |
| :--- | :--- |
| PHYS 271 | Astronomy |
| Self-Care and Well-Being |  |
| PSYC 240 | Human Sexual Behavior |
| Society and Institutions |  |
| HIST 306 | Russia Since 1855 |
| HIST 352 | Latin America Since 1830 |
| HIST 464 | The Scientific Revolution of the 17th and |
|  | 18th Centuries |

Total Hours

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


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PASSHE - Pennsylvania State System of Higher Education Institutions
Revolutions Thematic Thread (REVO)

## Sustainability <br> Sustainability Thematic Thread

This thread asks students to grapple with the question of how our society can become sustainable in its use of, and impact on, our natural environment. Students will gain an understanding of the so-called "triple bottom line" of environmental stewardship, social responsibility, and economic prosperity. This thread parallels the existing Certificate in Sustainability. A student who completes this thread will be eligible to receive the certificate. Note that some courses in the certificate are not included in the thread.

Faculty Liaison: Stentor Danielson

## Curriculum Guide

| Code <br> Gateway Courses ${ }^{1}$ | Title | Hours |
| :---: | :---: | :---: |
| Select one of the following: |  | 3 |
| BIOL 105 | Environmental Biology |  |
| EGEO 100 | Environmental Geology |  |
| GES 135 | Introduction to Environmental Problems |  |
| PCRM 104 | Foundations in Sustainability |  |
| Focused Courses ${ }^{1}$ |  |  |
| Select two courses from the following (must include two categories and two departments; one course must be 300/400 level) ${ }^{1}$ |  | 6 |
| Culture, Discourse, and Ideas |  |  |
| ENGL 410 | Literature of the Environment |  |
| HIST 445 | Americans and the Environment |  |
| Science, Technology, and Mathematics |  |  |
| BIOL 322 | Conservation Biology/Lab |  |
| BIOL 401 | Ecology with Lab |  |
| EGEO 131 | Oceanography |  |
| GES 235 | Conservation |  |
| GES 355 | Earth's Changing Climate |  |
| Society and Institutions |  |  |
| $\begin{aligned} & \text { ECON } 315 \\ & \quad \text { or BUSA } 315 \end{aligned}$ | Economics of Sustainable Development Economics of Sustainable Development |  |
| GES 215 | Planning for Sustainable Communities |  |
| HEMT 114 | Sustainability in Food and Hospitality |  |
| HEMT 210 | Contemporary Travel and Tourism |  |
| Civic Knowledge and Engagement |  |  |
| GES 324 | Environmental Law and Policy |  |
| Ethical Reasoning |  |  |
| GES 344 | Environmental Justice |  |
| PHIL 324 | Environmental Ethics |  |
| Capstone Course ${ }^{1}$ |  |  |
| GES 362 | Applications in Sustainability | 3 |
| Total Hours |  | 12 |

[^27]* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


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PASSHE - Pennsylvania State System of Higher Education Institutions
Sustainability Thematic Thread (SUST)
Revised: 08.03.2020
UCC 03.03.2020

## Sustainable International Development

## Sustainable International Development

The Sustainable International Development thread explores the challenges of political and economic development around the world. Students will be exposed to fundamental problems and opportunities faced by developing countries, with a particular focus on population dynamics, health, environmental degradation, economics, democratization, and authoritarianism. Students will assess the effectiveness of policies aimed at improving the standard of living for the billions of people who live in the developing world. This thread is geared toward students who are interested in pursuing careers in international development with governmental agencies such as the United States Agency of International Development and the Peace Corps, as well as international non-profit organizations such the Amnesty International, the Bill and Melinda Gates Foundation, and Human Rights Watch.

Faculty Liaison: Nick Spina

## Curriculum Guide

| Code | Title | Hours |
| :---: | :---: | :---: |
| Gateway Course |  |  |
| Select one of the following: |  | 3 |
| BIOL 105 | Environmental Biology |  |
| EGEO 100 | Environmental Geology |  |
| GES 135 | Introduction to Environmental Problems |  |
| PCRM 104 | Foundations in Sustainability |  |
| Focused Courses |  |  |
| Select three courses from the following (must include three categories and three departments; two courses must be 300/400 level) |  | 9 |
| Civic Knowledge and Engagement |  |  |
| POLS 220 | Foreign Policy |  |
| POLS 369 | Politics of Developing Areas |  |
| Culture, Discourse, and Ideas |  |  |
| COMM 405 | Global Media |  |


| Ethical Reasoning |  |
| :--- | :--- |
| POLS 303 | Seminar in Democracy |
| Global Learning and Diversity |  |
| POLS 263 | Introduction to Comparative Politics |
| POLS 365 | International Political Economy |
| Science, Technology and Mathematics |  |
| GES 115 | Introduction to Geospatial Technologies |
| GES 362 | Applications in Sustainability |
| Society and Institutions |  |
| ECON 315 | Economics of Sustainable Development |
| ECON 326 | International Economics |
| HLTH 311 | International Health |
| INDP 226 | Population and Society |
| Total Hours |  |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


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PASSHE - Pennsylvania State System of Higher Education Institutions
Sustainable International Development Thematic Thread

## The Future

## The Future Thematic Thread

This thread will deal with challenges and opportunities associated with modern society and technology, and how people envision meeting these challenges and opportunities.

Faculty Liaison: Danette Dimarco

## Curriculum Guide

| Code | Title | Hours |
| :---: | :---: | :---: |
| Gateway Courses |  |  |
| Select one of the following: |  | 3 |
| CYBR 101 | Cybersecurity in the Era of Evolving Technology |  |
| ERS 204 | Introduction to Esports |  |
| INDP 103 | Contemporary Social Problems |  |
| Focused Courses |  |  |
| Select two courses from the following (must include two categories and two departments; one course must be 300/400 level) |  | 6 |
| The Arts |  |  |
| ART 105 | Basic Studio Drawing |  |


| ART 106 | Basic Studio Painting |
| :---: | :---: |
| ART 107 | Basic Studio Photography |
| ART 108 | Basic Studio Printmaking |
| ART 109 | Basic Studio Metalsmithing |
| ART 110 | Basic Studio Sculpture |
| ART 111 | Basic Studio Fiber Art |
| ART 112 | Basic Studio Ceramics |
| ART 113 | Basic Studio Graphic Design |
| ART 114 | Basic Studio Digital Media |
| ART 205 | Intermediate Studio Drawing |
| ART 206 | Intermediate Studio Painting |
| ART 207 | Intermediate Studio Photography |
| ART 208 | Intermediate Studio Printmaking |
| ART 209 | Intermediate Studio Metalsmithing |
| ART 210 | Intermediate Studio Sculpture |
| ART 211 | Intermediate Studio Fiber Art |
| ART 212 | Intermediate Studio Ceramics |
| ART 213 | Intermediate Studio Graphic Design |
| ART 214 | Intermediate Studio Digital Media |
| Culture, Discourse, and Ideas |  |
| CSLD 244 | Artificial Intelligence in Cognitive Studies and Film |
| Ethical Reasoning |  |
| CPSC 300 or MIS 300 | Challenges of Computer Technology Challenges of Computer Technology |
| PHIL 338 | Ethics, Technology, and the Future |
| Science, Technology, and Mathematics |  |
| PHYS 271 | Astronomy |
| PHYS 317 | Space Science |
| Society and Institutions |  |
| COMM 480 | The Communication Age |
| Capstone Course (Required) |  |
| ENGL 411 | Science Fiction |
| Total Hours |  |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


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PASSHE - Pennsylvania State System of Higher Education Institutions
The Future Thematic Thread (FUTR)
Revised 10.05.2021
UCC 09.21.2021

## Transnational Culture

## Transnational Culture Thematic Thread

This thread focuses on the ways that culture is shared and transmitted across political and geographical boundaries. Students will become aware that societies share common practices, cultural expressions, and ways of communicating, and will learn that human societies and their cultures are inter-dependent.

Faculty Liaison: Lia Paradis

## Curriculum Guide

| Code | Title Hours |  |
| :--- | :--- | :--- |
| Gateway Courses |  |  |

Select one of the following: 3

| HIST 151 | Ancient and Medieval World |
| ---: | :--- |
| HIST 152 | Rise of the Modern World |
| HIST 153 | Contemporary World History |
| MODL 1XX | Language and Culture I, II, or III |

## Focused Courses

Select three courses from the following (must include three categories and three departments; two courses must be 300/400 level)
The Arts

| ART 226 | Overview of World Art |
| :---: | :---: |
| DANC 318 | Dance in the Political World |
| Culture, Discourse, and Ideas |  |
| COMM 405 | Global Media |
| ENGL 248 | Asian Literature |
| FREN 306 | France and Francophone Identities Today |
| HIST 347 | Twentieth Century British Culture |
| THEA 393 | History of Theatre Design and Architecture |
| Ethical Reasoning |  |
| GES 344 | Environmental Justice |
| PHIL 324 | Environmental Ethics |
| Global Learning and Diversity |  |
| COMM 217 | Intercultural Communication |
| GES 303 | Asia |
| GES 444 | World Environmental Cultures |
| HIST 318 | Gender and Sexuality in European Society |
| PHIL 343 | Asian Philosophy |
| Science, Technology, and Mathematics |  |
| BIOL 120 | Plants and Society |
| EGEO 100 | Environmental Geology |
| Society and Institutions |  |
| HIST 346 | Rise of Imperial Britain |
| HIST 353 | History of the Americas |
| HIST 427 | Nineteenth Century Europe |
| Total Hours |  |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


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PASSHE - Pennsylvania State System of Higher Education Institutions
Transnational Culture (TRCU)
Revised 10.21.20
UCC 9.29.20

## Violence

## Violence Thematic Thread

This thread asks students to think broadly about what constitutes violence. By expanding our definition of violence, we can identify, confront, and hopefully eliminate patterns of destructive and unjust behavior, whether against our planet, other creatures, or ourselves.

Faculty Liaison: Lia Paradis

## Curriculum Guide

| Code <br> Gateway Course | Title | Hours |
| :--- | :--- | ---: |
| Select one of the following: |  |  |
| HIST 151 | Ancient and Medieval World |  |
| HIST 152 | Rise of the Modern World |  |
| HIST 153 | Contemporary World History |  |
| HIST 201 | Colonial America to 1815 |  |
| HIST 202 | United States, 1815-1920 |  |
| HIST 203 | U.S. History Since 1920 |  |

## Focused Courses

Select three courses from the following (must include three 9
categories and three departments; two courses must be 300/400
level)
Civic Knowledge and Engagement
POLS 350 Transnational Terrorism
Culture, Discourse, and Ideas

| ENGL 243 | Literature of the Women's Movement |
| :--- | :--- |
| ENGL 244 | Native American Literature |
| PHIL 171 | Philosophy of Human Existence |
| Ethical Reasoning |  |
| GES 344 | Environmental Justice |
| Global Learning and Diversity  <br> CRIM 302 Sexual Violence <br> CRIM 327 Criminal Justice and the Multicultural <br> Community <br> HIST 323 African American History to 1876 <br> HIST 337 Native American History |  |


| HIST 406 | Mass Killing and Genocide in the Modern World |
| :---: | :---: |
| POLS 322 | The United Nations and International Law |
| Science, Technology, and Mathematics |  |
| PSYC 205 | Environmental Psychology |
| Self-Care and Well-Being |  |
| CRIM 326 | Victimology |
| PSYC 240 | Human Sexual Behavior |
| Society and Institutions |  |
| GES 331 | Economic Geography |
| HIST 404 | Violence in Post-45 Europe |
| Total Hours |  |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


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PASSHE - Pennsylvania State System of Higher Education Institutions
Violence Thematic Thread (VIOL)

## Well-Being of Children and Youth Well-Being of Children and Youth Thematic Thread

If children are our future, then how can we ensure their well-being? This interdisciplinary approach assesses the current well-being of children and youth, surveys best practices to promote their well-being, engages SRU students in action regarding the well-being of children and youth through HIP experiences, and provides students with knowledge and tools to design initiatives which ensure the future that all children deserve. This thread will encourage students to consider individual responsibility, discipline specific best practices, and cross-sector/collaborative strategies - government, nonprofit, nonprofit, private organizations - that best address the well-being of children, youth and their families.

Faculty Liaison: Alice DelVecchio

## Curriculum Guide

Code
Gateway Course
Select one of the following:

| NLPA 200 | Empowered to Serve |
| :--- | :--- |
| NLPA 220 | Introduction to Nonprofit Management |

Focused Courses
Hours


Total Hours

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions
Well-Being of Children and Youth Thematic Thread (WBCY)
Revised 12.13.2021

What does it mean to be human? Human beings enlist science, the arts, humanities, and other disciplines to understand themselves and the human condition. Indeed, one of the defining features of our condition
is its insistence on finding an answer to the question of who we are, and arguably this is at the center of everything we do. Depending on who you ask, many and diverse answers present themselves. This thread encourages students to explore the many ways that human beings define, conceptualize, and represent themselves to themselves. Questions of personal, social, and physical identity are examined alongside others.

## Faculty Liaison: Tom Sparrow

## Curriculum Guide

| Code | Title | Hours |
| :---: | :---: | :---: |
| Gateway Courses |  |  |
| Select one of the following: |  | 3 |
| BIOL 102 | Human Biology |  |
| PHIL 171 | Philosophy of Human Existence |  |
| INDP 211 | Biological Anthropology |  |
| Focused Courses |  |  |
| Select three courses from the following (must include three categories and three departments; two courses must be 300/400 level) |  | 9 |
| The Arts |  |  |
| ART 226 | Overview of World Art |  |
| Culture, Discourse, and Ideas |  |  |
| INDP 212 | Archaeology/World Prehistory |  |
| CSLD 244 | Artificial Intelligence in Cognitive Studies and Film |  |
| PHIL 362 | Philosophy of Mind |  |
| PHIL 375 | Existentialism and Phenomenology |  |
| Ethical Reasoning |  |  |
| PHIL 336 | Philosophy of Gender and Sex |  |
| Global Learning and Diversity |  |  |
| INDP 106 | Race and Ethnic Diversity in the USA |  |
| PHIL 343 | Asian Philosophy |  |
| PSYC 315 | Psychology of Sexual and Gender Diversity |  |

Science, Technology, and Mathematics

| PSYC 208 | Personality |
| :--- | :--- |
| PSYC 244 | Developmental Psychology |


| Society and Institutions |  |  |
| :---: | :--- | :--- |
| CDEV 248 | Human Development and Education |  |
| INDP 326 | Society, Culture and Self |  |
| Total Hours |  | $\mathbf{1 2}$ |

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.


## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place alreadyearned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions
Who Do We Think We Are Thematic Thread (WDWT)
Revised 11.12.2020
UCC 04.21.2020

## Rock Studies Quick Guide

## Rock Studies Quick Guide

The Rock Studies Program at Slippery Rock University is the general education requirements for all academic majors for incoming freshman. Since some majors prescribe specific courses within each category, student should use this guide along with the curriculum guide and the My Rock Audit to make course selections in consultation with their adviser.

## The Rock ( 15 Credits)

## The Rock (15 Credits)

| Code | Title | Hours |
| :--- | :--- | ---: |
| SUBJ 139 | University Seminar | 3 |
| ENGL 102 | Critical Writing | 3 |
| ENGL 104 | Critical Reading | 3 |
| MATH 117 | Quantitative Reasoning | 3 |
| Select one of the following: | 3 |  |
| COMM 200 | Civil Discourse: Theory \& Practice |  |
| PHIL 110 | Ethics and Civil Discourse |  |
| POLS 235 | Civil Discourse and Democracy |  |

## Integrated Inquiry (15 Credits)

Creative and Aesthetic Inquiry (3 Credits)

| Code | Title | Hours |
| :--- | :--- | ---: |
| ART 225 | Overview of Western Art | 3 |
| DANC 100 | Dance: Art and Culture | 3 |
| MUSI 101 | Exploring Music | 3 |
| THEA 141 | Art of the Theatre | 3 |

Humanities Inquiry (3 Credits)

| Code | Title | Hours |
| :--- | :--- | ---: |
| ARAB 215 | Topics in Arabic Culture | 3 |
| ENGL 214 | Introduction to Film Analysis | 3 |
| ENGL 220 | Introduction to Literary and Cultural | 3 |
|  | Studies |  |
| FREN 215 | Topics in French and Francophone Culture | 3 |
| GNDR 115 | Introduction to Gender Studies | 3 |
| HIST 140 | Spotlight on the Past | 3 |
| JAPN 215 | Topics in Japanese Culture | 3 |
| MODL 105 | Introduction to Asian Civilizations | 3 |
| PHIL 101 | Philosophical Inquiry | 3 |
| PHIL 123 | Ethics | 3 |
| PHIL 140 | World Religions | 3 |
| PHIL 163 | Philosophy in Literature | 3 |
| SPAN 215 | Topics in Hispanic Culture | 3 |


| Social ScienceInquiry (3 Credits) <br> Code |  |  |
| :--- | :--- | ---: |
| COMM 110 | Title | Hours |
| COMM 263 | Communication Concepts | 3 |
| CPSC 102 | Mass Media and Society | 3 |
|  | Collaborative Information Technology and | 3 |
| CRIM 120 | Society | 3 |
| CSS 100 | Crime: Why Do We Do It? | 3 |
| ECON 201 | Modern Security | 3 |
| ECON 202 | Principles of Macroeconomics | 3 |
| GES 170 | Principles of Microeconomics | 3 |
| INDP 201 | Discover Geography | 3 |
| INDP 202 | Principles of Sociology | 3 |
| NLPA 120 | Introduction to Anthropology | 3 |
|  | Civic Engagement and Community |  |
| PE 232 | Decision-Making | 3 |
| POLS 101 | Physical Activity and Wellbeing in Society | 3 |
| POLS 103 | American National Government | 3 |
| PSYC 105 | International Relations | 3 |
|  | Introduction to Psychology | 3 |


| Natural Sciences Inquiry (3 Credits) |  |
| :--- | :--- |
| Code | Title |
| SCI 101 | Science of Life |


| Physical Sciences Inquiry (3 Credits) |  |
| :--- | :--- |
| Code | Title |
| SCI 102 | Understanding the Physical World |

## Thematic Threads (12 Credits)

## Thematic Threads ( 12 Credits)

- Students should declare a thread in consultation with their academic adviser.
- Select 12 credits from at least 3 categories; no more than 6 credits from 1 department; 6 credits must be 300-level or above.
- Thematic Thread Categories:
- The Arts
- Culture, Discourse, and Ideas
- Science, Technology, and Mathematics
- Society and Institutions
- Self-Care and Well-Being
- Global Learning and Diversity
- Civic Knowledge and Engagement
- Ethical Reasoning


## Available Thematic Threads

To view a listing of all available Thematic Threads, visit the Thematic Threads (p. 1354) page

## Campus Resources and Services

Each student is a person of dignity, worth and responsibility who has elected to attend the university for the purposes of attaining an education and to grow and mature through additional learning experiences outside of the classroom.

The goal of Academic and Student Affairs is to assist in the total development of each student by providing appropriate, life-centered educational programs and services. Primary concerns of the various departments focus on helping students to develop leadership skills, decision-making competencies, self-discipline, respect for others, skills of self-evaluation, and the learning and development of social responsibility and human relations skills.

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- Athletics (p. 1380)
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## Academic Honor Societies

Slippery Rock University offers a number of academic and professional honor societies (https://www.sru.edu/life-at-sru/student-activities/ clubs-and-organizations/honor-societies/) that recognize students who excel academically, or in their leadership, within specific disciplines. Honor society membership provides opportunity to interact with other students with similar academic and professional interests, as well as a co-curricular experience to enhance professional development. Log into CORE (http://sru.edu/core/) to view a listing of SRU's active
honor societies (https://sru.campuslabs.com/engage/organizations/? categories=12980). For more information contact the Office for Student Engagement and Leadership at 724-738-2092 or leadership@sru.edu.

## Athletics

For information about the intercollegiate Athletics programs at SRU, please visit the Athletics Website (https://rockathletics.com/).

## Bailey Library

Bailey Library supports the mission of Slippery Rock University by developing collections and services that make the Library integral to the learning process, both within and beyond the classroom. The University has completed a multi-phased renovation of Bailey Library to enhance the facility and better serve the needs of the 21 st century academic student.

## Services and resources include (but are not limited to):

- Personal Librarians
- Holdings which include print and electronic books, government documents, print and electronic journals, newspapers, DVDs, audio books, archival records and special collections
- Group and individual learning spaces for scholarly work and recreational reading
- Interlibrary loan and document delivery services
- The Technology Learning Center (TLC)
- The Instructional Materials Center (IMC)
- University Archives and Special Collections Room

For specific details and information, visit the Bailey Library website at http://www.sru.edu/academics/bailey-library (http://www.sru.edu/ academics/bailey-library/).

Library hours of operation are posted on the Bailey Library web page (https://www.sru.edu/academics/bailey-library/library-hours/).

Bailey Library Faculty provide university faculty and students with research and references services for all courses and subjects in the Academic Catalog. Information on how to contact them may be found on the library website, or via Bailey Library's Ask A Librarian portal: http:// sru.libguides.com/aalportal (http://sru.libguides.com/aalportal/).

## Bailey Library Contact Information

724-738-2058 (Main office)

## Campus Recreation

Campus Recreation facilities include the Aebersold Student Recreation Center (ARC), McFarland Outdoor Recreation Complex (MAC), Ski Lodge, Disc Golf Course, Campground, High Rope and Low Rope Courses. The ARC has a fitness center, 5 gymnasiums, indoor track, indoor climbing wall, swimming pool, group fitness studios, and pool patio. The MAC has 4 multi-purpose fields, 2 softball fields, and exterior lightning. The ski lodge has seating for 100 people and inside and outside fire pits. The campground has 5 sites with picnic tables and fire rings. These facilities are used for informal recreation and structured programming. Some of the major programs offered are personal training, group fitness, outdoor adventures, aquatics, intramurals, sport clubs, and REACH programming (high rope and low rope elements). For more information, please visit the

Campus Recreation Website (https://www.sru.edu/life-at-sru/health-and-wellness/campus-recreation/).

# Career Education and Development 

108 Bailey Library<br>724-738-2028<br>\section*{Director}<br>John Rindy<br>\section*{Associate Director}<br>Renee Coyne<br>Senior Career and Scholarship Coach<br>Jesse DeFazio

## Secretary

Lisa Theodorson
The Office of Career Education and Development encourages a fouryear career development continuum so that students are developing professionally in their employment documents, their transferable skills, and their work related learning experiences, while they develop academically in the classroom. Ultimately, career staff members engage students in building their level of professionalism and self-knowledge, guiding them on a pathway to a meaningful and joy filled career. Basic services include major and career exploration, resumes, cover letters, interview preparation, graduate school applications, and professional network development. Extended support is available on topics such as personal budgets, understanding benefits, negotiating salary, relocating to a new area and understanding employment contracts. The career office also oversees the McKay Testing Center, a computer-based testing center which administers exams such as Praxis, MAT, and the GRE Subject tests. The career office provides access for all students to the Handshake career management system. Through Handshake students can schedule career appointments, register for the many job fairs and learning events led by the career team, search for full time jobs and internships, and search for on-campus jobs (which are managed by the Office of Payroll and Student Employment). The Office of Career Education and Development Website (http://www.sru.edu/life-at-sru/ career-education-and-development/) provides more details about services and staff.

## Dining Services

The dining program at Slippery Rock University offers a variety of services throughout the campus for students and their guests. Food service is available at locations on campus from 7:00 a.m. to 12:00 midnight (Sunday through Thursday) and 8:00 a.m. to 10:00 p.m. (Friday and Saturday). Boozel Express is open $24 / 7$ when school is in session.

Weisenfluh Hall, located across from the North Hall parking lot, features The Restaurants at Weisenfluh, developed to offer the campus community and guests an innovative dining experience. Butter \& Honey features a variety of pastries, sandwiches, specialty coffee drinks and smoothies. Sear and Sizzle offers gourmet burgers and other grill favorites. Bento offers Asian cuisine and sushi. Revolve Kitchen offers a rotating restaurant menu. Dine in or purchase food to go. The facility provides lounge and table seating, wireless environment, student gathering spaces, and meeting rooms.

Boozel Dining Hall, located on the lower end of campus, provides a variety of menu options in a restaurant-style atmosphere. Food stations with
open kitchens offer made-to-order items along with home-style and international entrees, vegan/vegetarian and healthy choice options, deli and grille sandwiches, pizza and pasta, soup/salad, and a variety of desserts and beverages. True Balance provides daily menu features that avoid top allergens. This all-you-care-to-eat facility also features special events and holiday celebrations throughout the year. Boozel Express, located in the lobby of Boozel Dining Hall, offers quick-serve take-out options $24 / 7$ when classes are in session.

Robert M. Smith Student Center, located on lower campus, houses the following food service operations:

- Starbucks - a full-service store featuring breakfast items, pastries, sandwiches, Starbucks full beverage line, and merchandise.
- Rocky's - a food court offering Mexican cuisine, pizza/pasta, wraps, chopped salads, hoagies, and grab-n-go items.
- Quaker Steak \& Lube - Western PA regional favorite, featuring their signature wings, burgers, and appetizers.

Starbucks We Proudly Serve, a coffee shop located in Bailey Library, features a selection of Starbucks beverages and various pastries and grab-n-go items. A walk-up window provides quick service for those students hurrying through the quad.

Flatz at Watson Hall, located in the residential village, offers a variety of to-go food items and beverages

Campus Drive Grille, adjacent to North Hall, provides food truck favorites.
There are a number of meal plan options available to Slippery Rock University students. Students residing on-campus in either the traditional halls or residential suites are required to participate in the meal plan program with one of the designated on-campus meal plans. Meal contracts are optional for off-campus/commuter students and Rock Apartments residents.

For more information, please visit www.sru.edu/dining

## Disability Services

105 University Union
724-738-4877

Director, Office of Disability Services
Dr. Natalie E. Burick

## Assistant Director, Office of Disability Services

Kim Coffaro

Secretary
Suzanne Sandrock

## Email

disabilityservices@sru.edu
The Office of Disability Services provides accommodations and services to ensure equal access to education as intended by Section 504 of the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act of 1990 (ADA) for students with disabilities including but not limited to learning, physical, hearing, vision or psychological disabilities. At Slippery Rock University we want all students to achieve academic success and are interested in making every effort to accommodate and serve students with disabilities. To be eligible for services, appropriate documentation must be provided. Documentation may include medical diagnosis, psychological evaluations, etc. Upon
acceptance to Slippery Rock, students with disabilities are encouraged to make an appointment with the Director to schedule a personal interview. Also, students wishing to receive accommodations can start by filling out the public request link at:
https://sru-accommodate.symplicity.com/public_accommodation/

## Exploratory Studies and Academic Progress (ESAP)

| Chair | Secretary | Location | Department <br> Phone |
| :--- | :---: | :---: | :---: |
| Musiette Clay | Jennifer Stroup | 109 Bailey Library $724-738-2012$ |  |

## ACADEMICS SUPPORT RESOURCES COLLEGE SKILLS WORKSHOP

During the fall, the Tutorial Center offers an array of workshops designed to help students succeed in college. All students are eligible to participate in the workshops on such topics as managing time, taking effective class notes, reading texts, building a strong memory, and increasing test-taking skills.

## TUTORIAL CENTER

Slippery Rock University’s Tutorial Center provides undergraduate students with academic support through free peer individual and group tutoring services. Tutoring is offered for most Rock Studies Program courses. Tutorial services at Slippery Rock University are personalized and tailored to individuals' academic needs.

Tutoring services also include the proactive Supplemental Instruction (SI) model for academic assistance. Students hired as leaders attend assigned classes and work closely with enrolled students to assist with course content. Leaders facilitate group-tutoring sessions emphasizing cooperative learning activities.

Individual tutoring sessions for students are scheduled by appointment or on a drop-in basis, whereas group and SI sessions are scheduled to accommodate the greatest number of interested students.

## ADVISEMENT RESOURCES

## ACADEMIC ADVISEMENT

Academic Advisement is perhaps the most important faculty/student relationship outside the classroom. The University's academic advisement system is comprised of two primary organizational structures that include First Year Studies advisement and upper-class student/transfer student advisement.

## ADVISEMENT DEVELOPMENT

Exploratory Studies and Academic Progress is responsible for developing adviser and student advising resources, conducting adviser training and first year student advising informational workshops, and maintaining its involvement in retention-related and first-year research activities.

## FIRST YEAR STUDIES (FYRST) ADVISEMENT

The mission of the first-year student experience is to provide personalized support by ensuring that every student receives a high
standard of academic advisement services from pre-enrollment to orientation, and throughout the student's first year.

During the student's enrollment in FYRST seminar, he/she should develop a more thorough understanding of his/her own purpose and goals in college as well as those of the university. If a new freshman has declared a major, advisement will be provided by a faculty member selected from the major department. If no major has been declared, the student will be actively involved in the Exploratory Program and advised by a selected faculty member who has volunteered to work with students. First-year student academic progression will be assisted by the faculty adviser; however, it is the student's responsibility to see that he/she meets all requirements of the degree granting college so that upon completion of the first year of study, the student has attained the minimum number of credits, the specified courses and the minimum grade point average required by the major department.

## UPPER-CLASS STUDENT/TRANSFER STUDENT ADVISEMENT

If an upper-class student has declared a major, they will receive advisement from a faculty member in their major department. If an upperclass student has not declared a major, they will receive advisement from an Exploratory Studies and Academic Progress faculty member, who will help them in their academic progression toward fulfilling their degree requirements and will assist them in declaring an academic major.

Upon entrance into the university, new transfer students are assigned academic advisers from their major program.

## EXPLORATORY (UNDECLARED) PROGRAM

Incoming first-year and transfer students who are undeclared will participate in the Exploratory Studies Program. These students are advised by faculty members in the Exploratory Studies and Academic Progress Department as part of this program.

The Exploratory Studies Program includes engaging activities and support, such as:

- College Success Workshops
- Majors \& Minors Exposition
- Designing Your Life and Major Exploration with Career Education and Development
- Developmental Advisement
- Assistance with Transition to New Major


## FRESHMAN SEMINAR (FYRST SEMINAR)

The FYRST Seminar is a one-credit hour course designed especially and exclusively to assist the first-year student with adjusting to college life at Slippery Rock University. This course provides, you, the student, with an opportunity to become integrated into the university's community of learners by exploring the purpose and value of higher education, addressing academic, personal and social transition issues, utilizing campus resources, refining academic skills and learning strategies, developing academic and career goals, and implementing strategies for maintaining personal wellness and overcoming barriers to success.

## LEARNING COMMUNITY CLUSTERS

The university implemented a learning community cluster program which includes a freshman seminar for the purpose of improving students' academic and social integration and establishing an educational
environment that maximizes both student-student interaction, studentfaculty and student-professional staff interaction. The transition to university life can be challenging and even stressful. The academic and social advantages provided by joining a learning community cluster and freshman seminar initiative can help reduce that stress. By enrolling in the same classes, students are encouraged to meet new people, make friends easily, form study groups, participate in class discussions, and become engaged with their professors.

Research has shown that the more students connect to the university, the more successful they are in their college experience. Our research shows that by enhancing a student's sense of community and involvement, the freshman seminar and learning community clusters contribute to higher retention rates. Because both freshman seminars and learning communities promote active learning and foster collaboration and cooperation, students who participate are higher achievers and more involved in their classes.

## FACULTY

Christa Brahler
Instructor
Exploratory Stud \& Acad Prog
M.A., Slippery Rock University
B.A., Indiana University

## Musiette Clay

Instructor
Exploratory Stud \& Acad Prog
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Exploratory Stud \& Acad Prog
M.S., Columbia University
B.S., University of Pittsburgh

## Annette Salsovic

Instructor
Exploratory Stud \& Acad Prog
M.S., Indiana University of Pennsylvania
B.S., Slippery Rock University

## COURSES

## ESAP COURSES

ESAP 109 - Developmental Mathematics
This course covers basic arithmetic skills necessary for successful completion of basic algebra. Topics include basic operations using whole numbers, fractions and decimals, ratios and proportions, percents, and solving equations. Students not exempted from ACSD 109 must successfully complete this course before enrolling in ACSD 110. Students must pass a standard proficiency exam to pass this course. Course grading: A, B, C, or NC. Credit earned in this course will not count toward the university's 120 credit hour minimum required for graduation.

Credits: 3
Term(s) Typically Offered: Offered as Needed

## ESAP 110 - Beginning Algebra

An overview of introductory algebra concepts, this course covers topics such as: simplifying variable expressions, solving equations and applications problems, simplifying polynomials, factoring, algebraic fractions, graphing linear equations, solving systems of linear equations, and simplifying radical expressions. Students who are placed into this course are expected to possess certain minimum competencies in arithmetic skills, and they must pass a standard proficiency exam to pass this course. Course grading: A, B, C, or NC. Prerequisite: ACSD 109 or exemption from ACSD 109. Credit earned in this course will not count toward the university's 120 credit hour minimum required for graduation.

Credits: 3
Term(s) Typically Offered: Offered Fall, Spring, \& Summer

## ESAP 139 - University Seminar

University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21 st century education while they learn about themselves and their place in the world.

## Credits: 3

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

## ESAP 190-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## ESAP 195-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## ESAP 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ESAP 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## ESAP 295-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## ESAP 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

## Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## ESAP 390-Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ESAP 395-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1, Freshman 2 or Sophomore 1.

## ESAP 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ESAP 490 - Independent Study

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ESAP 495 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## ESAP 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

## INDS COURSES

## INDS 101 - FYRST Seminar

The FYRST Seminar provides students with an opportunity to become integrated into the university's community of learners by exploring the purpose and value of higher education, participating in the teaching/ learning process, addressing academic and social transition issues, utilizing campus programs, services, and technology, and developing academic skills and learning strategies during the student's first semester at Slippery Rock University. This course is a one credit hour course designed to especially and exclusively assist first year students in their adjustment to college life at Slippery Rock University. No prerequisite. Enrollment by advisement. Open to first year students only. The credit earned in this course counts for graduation requirements.

Credits: 1
Term(s) Typically Offered: Offered Fall \& Spring Terms

## INDS 102 - Learning Strategies

Students will develop effective learning strategies, goals, and decisionmaking skills with a view toward implementing a plan to remove their probationary status and become a student in "good academic standing. This course is primarily for students on academic probation (other students may enroll with the permission of the instructor). Credits earned count for graduation as an elective.

Credits: 1
Term(s) Typically Offered: Offered as Needed

INDS 103 - Major and Career Exploration
This course will examine various decision making models as they are applied to choosing an academic major and/or career. Through a variety of in-class and out-of-class activities students will integrate selfknowledge and knowledge about majors and the world of work.

Credits: 1
Term(s) Typically Offered: Offered as Needed
INDS 121 - Freshman Research and Mentoring
The FRAME Seminar introduces students to academic research skills. Students will collaborate with faculty mentors, peers and professionals to develop skills in methodologies, analyses and dissemination of scholarly work. The seminar course is intended for second semester freshman.

Prerequisite: INDS $101^{\text {D }}$
${ }^{D}$ Requires minimum grade of $D$.

## Credits: 1

Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

## Global Engagement

002 Spotts World Culture Building (Ground Floor)
724-738-2057
Office for Global Engagement (http://www.sru.edu/offices/global-engagement-office-for/)

## Vision

The vision of the Office for Global Engagement is a Slippery Rock University community of students, faculty, staff, and alumni who see beyond national borders and cultural differences, embrace the rich diversity of the world for educational and personal growth, and contribute to the greater good of our global society.

## International Student Services

In recognition of the unique needs of students who are not US citizens/ permanent residents, the Office for Global Engagement coordinates the recruitment, admission, and support services for international students such as orientation to the United States and Slippery Rock University; immigration and legal matters (documentation for visas, passport renewal, extensions of stay, travel and reentry, work permits, etc.); support for the International Club; course registration; cultural/ academic/personal adjustment; and community liaison.

## Student Abroad Opportunities

Study abroad is available to all Slippery Rock University students varying in length from one week to one year. These opportunities offer students the chance to explore different educational systems, cultures, and ways of life, as well as, to foster personal growth, cultural enrichment and enhanced employment opportunities.

For more information about study abroad at SRU, please visit https:// www.sru.edu/academics/study-abroad (https://www.sru.edu/academics/ study-abroad/)

## Courses

## ESL 001 - Start ESL Reading

This course is not for native speakers of English. This is a beginning ESL reading course in which students focus on understanding the meaning of written English by reading a variety of texts. students develop skills to read and understand English to make a transition from word-by-word translation to reading comprehension.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 002 - Basic ESL Reading

This course is not for native speakers of English. This is a basic ESL reading course in which students read various types of written texts in order to improve reading skills. Topics relate to academic and everyday life. Emphasis is placed on building vocabulary, developing reading strategies and critical thinking skills.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 003 - Intermediate ESL Reading

This course is not for native speakers of English. Students learn to read English as a second language fluently by reading interesting stories with a variety of topics, controlled for proficiency with appropriate difficulty. The course focuses on developing reading skills including pre-reading, skimming and scanning as well as building and developing a working English vocabulary. Students also write responses to the stories they read and share their reflections with their classmates.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 004 - High Intermediate ESL Reading

This course is not for native speakers of English. This course uses a variety of authentic, meaningful and stimulating ESL readings. The course focuses on developing critical reading strategies, skimming and scanning abilities, increadsing reading speed, building academic vocabulary power, drawing inferences, previewing, predicting and finding the main idea. Students will build successful reading strategies to comprehend language and concepts presented in college textbooks.

## Credits: 0

Term(s) Typically Offered: Offered as Needed

## ESL 005 - Advanced ESL Reading

This course is not for native speakers of English. In this course, students read a variety of authentic, meaningful and stimulating texts in order to help students develop ciritical reading strategies, increase reading speed and build academic vocabulary. The goal of this class is to prepare students with successful ESL reading strategies to compehend language and concepts that students will encounter in university level textbooks through a variety of disciplines as is required by a liberal studies curriculum.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 011 - Start ESL Listening

This course is not for native speakers of English. This course helps students with basic ESL listening needs in daily life situations. Students develop their listening and speaking skills in order to interact with others. Emphasis is also placed on recognizing different sounds in American English.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 012 - Basic ESL Listening

This course is not for native speakers of English. This course helps students with basic ESL listening needs in daily life and basic academic situations. Focus is on listening comprehension, with students developing their listening and speaking skills in order to interact with others.

Credits: 0
Term(s) Typically Offered: Offered as Needed
ESL 013 - Intermediate ESL Listening I
This course is not for native speakers of English. This course helps students with basic ESL listening needs in daily life and basic academic situations. Focus is on interpersonal communication skills in spoken American English. The course focuses on a variety of listening comprehension skills and strategies in order for students to become more effective listeners in a variety of settings.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 014 - High Intermediate ESL Listening

This course is not for native speakers of English. This course prepares students for the demands of college-level academic listening tasks. The course aims to enhance students' ESL listening skills and to provide strategies and practice for listening to instructors and classmates who use a variety of speech patterns and vocabulary in class lectures and discussion.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 015 - Advanced ESL Listening

This course is not for native speakers of English. This course prepares students for the demands of college-level academic listening tasks. The course aims to enhance students' ESL listening skills and to provide strategies and practice for listening to instructors and classmates who use a variety of speech patterns and vocabulary in class lectures and discussion. Students will practice listening to lectures from a variety of academic disciplines and will analyze the material that they hear. Students will also practice strategies for active participation in lectures and class discussion.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 021 - Start ESL Writing

This course is not for native speakers of English. This course provides basic ESL writing instruction for beginning level English language learners. Students will work on sentence and short-paragraphy length writing to express their ideas in English.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 022 - Basic ESL Writing

This course is not for native speakers of English. This course helps ESL students learn how to generate topics and write paragraph length discourse. There is also an emphasis on reading to understand writing styles and organization strategies. Students develop writing fluency by keeping a journal of American English essays throughout the semester.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 023 - Intermediate ESL Writing

This course is not for native speakers of English. This course helps students learn to generate topics and write paragraph length ESL discourse. Sentence structure and writing conventions of academic American English are also explored. Students will study application of vocabulary and grammar skills for writing and practice reading to understand writing better.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 024 - High Intermediate ESL Writing

This course is not for native speakers of English. This course prepares students to write academic papers by exploring elements of academic writing and its process. Students generate topics, write cohesive paragraphs, use organizational strategies and learn to consider audience. Students also explore self-expression and writing identity through ESL journal writing.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 025 - Advanced ESL Writing

This course is not for native speakers of English. In this course, students learn to write for a variety of purposes considering their audience. Lessons include developing appropriate writing styles and applying organizational strategies for different styles of texts. Students practice the writing process and practice prewriting, revision and editing. Students also learn about the U.S. academic expectations of writers, including appropriate citation practices and the importance of avoiding plagiarism. Students also learn strategies to improve their writing through self and peer review.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 031-Start ESL Speaking

This course is not for native speakers of English. This course emphasizes interpersonal ESL communication at a beginning level. Class meetings center around speaking activities that encourage fluency. Some attention will also be given to cultural considerations, pronunciation and conversation strategies.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 032 - Basic ESL Speaking

This course is not for native speakers of English. This course emphasizes interpersonal ESL communication with some focus on academic speech. Class meetings center around speaking activities that encourage fluency and comprehensibility. The class will help students set realistic goals for their pronunciation practices and learning strategies to improve their comprehensibility and confidence in speaking English.

## ESL 033 - Intermediate ESL Speaking

This course is not for native speakers of English. This course is designed to help students develop their own identity as an ESL speaker and user. In this course, students draw on their background knowledge of conversation skills from their primary language while they explore standard conventions in American English. The class will help students set realistic goals for their pronunciation studies and learn strategies to improve their comprehensibility and confidence in speaking English.

Credits: 0
Term(s) Typically Offered: Offered as Needed
ESL 034 - High Intermediate ESL Speaking
This course is not for native speakers of English. This course helps students explore the dynamic of ESL communication between different cultures. It provides students with strategies to communicate with people from different cultures and provides opportunities for students to interact with speakers from different cultural backgrounds. The emphasis of the class is oral communication, but students also learn about nonverbal communication and develop reading and writing skills.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 035 - Advanced ESL Speaking

This course is not for native speakers of English. This course is designed to enhance students' academic language skills to help them be successful in U.S. college courses. Students will learn to participate effectively in a variety of academic situations, such as discussions, lectures, study groups, team-projects and debates. The students will acquire a number of study skills including note-taking, brainstorming, problem-solving and pragmatic strategies for participating in class discussions.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 041 - Introduction to American English Grammar

This course is not for native speakers of English. This course presents the basics of American English grammar with an emphasis on conversational strategies.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 042 - Basic American Grammar

This course is not for native speakers of English. This course presents the basics of American English grammar with an emphasis on the sources from authentic written texts.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 043 - Intermediate American English Grammar

This course is not for native speakers of English. This course is designed to reinforce and refine knowledge of common grammatical structures. Students will increase their familiarity with and use of standard grammatical structures. Emphasis will be placed on grammatical structures common to academic speech and writing.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 044 - High Intermediate American English Grammar

This course is not for native speakers of English. This course is designed to reinforce and refine knowledge of common grammatical structures. Students will increase their familiarity with and use of standard grammatical structures. Emphasis will be placed on grammatical structures common to academic speech and writing.

Credits: 0
Term(s) Typically Offered: Offered as Needed
ESL 045 - Advanced American English Grammar
This course is not for native speakers of English. This course is designed to develop the abilities needed to use a variety of grammatical structures effectively and efficiently. The emphasis is on academic English in oral and written communication.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 051 - Introduction to American Culture

This course is not for native speakers of English. In this course, students learn about U.S. culture and explore resources available in the community of Slippery Rock, PA. students study pragmatic strategies to help them have successful interactions with others in the Slippery Rock community.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 052 - Exploring American Culture I

This course is not for native speakers of English. In this course, students learn about American life on campus and in the town and region.
Students will learn to use the resources available at SRU and in Slippery Rock and Pittsburgh area. The aim of the course is to help students adjust more quickly and completely to living and studying in America and at SRU.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 053 - Exploring American Culture II

This course is not for native speakers of English. In this course, students learn about American life on campus and in the town of Slippery Rock and the Pittsburgh region. Students will compare culutural perspectives from around the world. In addition, students will explore academic culture at SRU and learn to use the resources available at SRU.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 054 - Understanding American Culture

This course is not for native speakers of English. In this course, students learn about American life on campus and in the town and region. Students will compare cultural perspectives from around the world. In addition, students will explore academic culture at SRU and learn to use the resources available at SRU. By exploring culture through a variety of activities, both in and outside of the classroom, students develop a repertoire of listening, speaking, reading and writing strategies for effective interactions in the U.S.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 055 - Living in America

This course is not for native speakers of English. This course exposes students to a combination of American history and culture. Students will explore a variety of cultural topics and historical events. A multimedia approach will be used to develop cultural awareness. The class will encourage students to engage in open communication concerning their understandings and assumptions about life in the U.S. Students will participate in group projects in which they present cultural and historical backgrounds about important U.S. events or practices. Students will also explore the implication of U.S. history and culture for university life.

Credits: 0
Term(s) Typically Offered: Offered as Needed
ESL 061 - ESL Tutorial I
This course is not for native speakers of English. This course is a required tutorial. ESL tutoring provides inidividualized attention for students' language learning needs by pairing them with SRU students for small group instruction and interactions.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 062 - ESL Tutorial II

This course is not for native speakers of English. This course is a required tutorial. ESL tutoring provides individualized attention for students' language learning needs by pairing them with SRU students for small group instruction.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 063 - ESL Tutorial III

This course is not for native speakers of English. This course is a required tutorial. ESL tutoring provides individualized attention for students' language learning needs by pairing them with SRU students for small group instruction.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 064 - ESL Tutorial IV

This course is not for native speakers of English. This course is a required tutorial. ESL tutoring provides individualized attention for students' language learning needs by pairing them with SRU students for small group instruction.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## ESL 065 - Independent Seminar

This course is not for native speakers of English. This course is a selfdriven, student-oriented academic ESL practice session. In the beginning of a semester, each student meets with the director about their study plan in an American university and the director assigns a semester-long task. In the middle and at the end of a semester, the student must report the progress and the outcome of the study to the director.

Credits: 0
Term(s) Typically Offered: Offered as Needed

## Grants and Sponsored Research

Office: Old Main
Phone: 724-738-2045
Email: grantsoffice@sru.edu

## Interim Director

Casey Hyatt
Research and scholarship are central features of any academic environment. At Slippery Rock University, faculty and students are active in a wide range of internally and externally funded projects that support the research, teaching and public service missions of the university. The Office of Grants, Research and Sponsored Programs (GRASP) is responsible for assisting faculty in the acquisition of external funding for scholarship, research, and other projects; representing the university in pre-award and award transactions with funding sponsors; acting as a liaison between project directors, sponsors, administration, and external groups; and assisting with post-award administration of grants and contracts to assure compliance with federal, state, and university directives. The office also provides the administrative oversight to the Institutional Review Board (IRB) for ethical implementation of research projects involving human subjects and the Institutional Animal Care and Use Committee (IACUC) to ensure that the animal housing, care, and use in research labs meets federal standards and guidelines.

For more information: Grants and Sponsored Research (https:// www.sru.edu/offices/grants-research-and-sponsored-programs/)

## Honors College

Chair | Secretary |
| :--- | Location

Jason Hilton $\quad$| Repartment |
| :--- |
| Phone |

Department Web Site URL (https://www.sru.edu/academics/honors-
college/)
For information about the Honors College at SRU, please visit the Honors
College Website (https://www.sru.edu/academics/honors-college/).

## Courses

## HONR 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## HONR 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## HONR 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## HONR 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
HONR 295 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## HONR 298-Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## HONR 300 - Seminar in Global Learning

Honors Global Learning Seminar is an interdisciplinary course that explores some of the world's most pressing, interesting, and enduring global issues. This course makes use of experiential learning to allow for personal and professional development of skills and knowledge to become informed, self-aware, and responsible global citizens with increased attentiveness to diversity and the interdependence of the world's people and/or environmental systems.

## Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2 or Sophomore 2.
Enrollment limited to students with the HONORS PRGM - STUDENT attribute.

## HONR 385 - The Great Books

Seminars on selected topics from the classic works of human thought.

Credits: 3
Term(s) Typically Offered: Offered as Needed
HONR 386 - The Great Books
Seminars on selected topics from the classic works of human thought.
Credits: 3
Term(s) Typically Offered: Offered as Needed
HONR 387 - The Great Books
Seminars on selected topics from the classic works of human thought.
Credits: 3
Term(s) Typically Offered: Offered as Needed
HONR 388 - The Great Books
Seminars on selected topics from the classic works of human thought.

Credits: 3
Term(s) Typically Offered: Offered as Needed
HONR 390 - Experimental
A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## HONR 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## HONR 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## HONR 492 - Innovation for Positive Change

This course deals with the background knowledge, skills, and dispositions needed to innovate. This includes the ability to develop new ideas, recognize opportunities, analyze risks, create teams of motivated helpers, foster positive communication within the team, lead the team effectively to bring about change, assess progress from an idea to a change, and to pivot along the way. This course serves as the capstone course for the Innovation and Entrepreneurship Rock Studies Thread.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Innovation, Entrepreneurship, and Positive Change, Transfer Thread Completion Course
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

## HONR 495-Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

## HONR 498 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

## Housing and Residence Life

The philosophy of university residence halls at Slippery Rock University is educational and intended for student development that maintains that residence halls are not merely places to eat and sleep, but rather, communities in which students grow and develop. This development occurs in out-of-class learning experiences through participation in various activities assisting development at a personal, social and academic level. To achieve these objectives, the Residence Life staff offer opportunities to meet a wide variety of needs. Full-time professional staff members known as Assistant Directors/Associate Directors of Residence Life supervise the on-campus residence halls. These Assistant Directors/Associate Directors have a master's degree in college student personnel, counseling or related field. Additionally, each residence hall is staffed by a live-in Graduate Resident Director. These students, who are enrolled in graduate programs including Student Affairs in Higher Education, or other related program at SRU, reside in the residence hall and assist with the supervision of the Community Assistant staff. These Graduate Resident Directors are available to handle emergency situations because of their hall residency. Each residence hall floor
section has a Community Assistant available to provide educational and social programs to assist in the operation of the facility, offer support for the residents, and be available for emergency purposes. These staff members are full time students who have been selected for their skills and ability to be academic and personal role models.

There are eight university-managed residence halls and one apartment complex, housing approximately 2,800 students. Six of the eight residence halls offer suite style housing with a variety of room styles. Each of the residential suite units provide in room bathroom facilities for the residents of that unit. The remaining two halls are traditional style with double rooms and communal restroom facilities. All SRU residence hall and apartments are air-conditioned.

Residence hall rooms and apartments are furnished with beds, chairs, desks, and window covers (shades). The beds are supplied with a mattress only. Students furnish their own blankets, pillows, towels, bedspreads, dresser covers, pillowcases, and sheets. Students may bring their own drapes and other accessories to personalize their living environment. Self-service laundries are available in each apartment building and residence hall. Lounges and recreation areas are available in each hall. A refrigerator and microwave are provided in each of the residential suite style units (Building A-F; Rock Apartments). Common kitchens equipped with microwaves and oven is available in each of the residence halls for students to cook snacks.

Residence Life is responsible for housing students who select to live in a university-owned residence hall. All freshmen, except those who live with their parents or legal guardians within a reasonable commuting distance, are required to live on campus. While the University provides housing for non-traditional students, freshmen over the age of 21 may request permission to live off campus. All such requests must be sent in writing to the Office of Residence Life. During the month of January, current students submit housing agreements for the following year. These materials are provided to all residence hall students

Slippery Rock University has a diverse student population living in university residences. Therefore, in compliance with the Pennsylvania Fair Education Practice Act, all residence assignments are made without regard to race, color, sex, religion, ancestry, national origin, handicap or disability, record of a handicap or disability, or relationship or association with an individual with a handicap or disability, use of a guide or support animal, and/or handling or training of support or guide animals. Having accepted the Act, the university believes that a cross section of cultures provides a pluralistic community environment and exceptional opportunities for student development.

The Office of Residence Life provides six living learning communities for residence hall students. These communities offer an opportunity for students to apply to live with other students who share similar majors. Information regarding the living learning communities is provided along with housing agreement materials.

Students who reside in university-owned residence halls must contract to eat in the university dining facilities. No extensive cooking is permitted in the residence halls.

Campus residence halls will be closed to all students during university vacation periods and also between summer sessions and semesters. All students will be expected to leave the residence halls no later than 24 hours after their last examination. A designated residence hall will be open for summer sessions. Break housing is made available for an extra
per night fee for those who sign up during certain break periods (such as Thanksgiving and Spring Break).

The Housing and Residence Life staff is always pleased to offer help and assistance! Please visit our website (https://www.sru.edu/life-at-sru/housing/) for a variety of resources or find us on Facebook at SRUResidenceLife. Our central office staff is available Monday-Friday 8:00AM-4:30PM to receive your call at 724.738.2082.

## ID Office

For information about the ID Office at SRU, please visit the ID Office Website (https://www.sru.edu/offices/id-office/).

## ID Cards

The SRU Rock ID card is your official Slippery Rock University photo identification card and more! It offers you a convenient, easy, and safe way to make purchases and utilize campus services. The SRU One Card is your meal card; library card and activity card all rolled into one. For those students living in a residence hall, it provides access to your building. The ID card is also used as identification for cashing checks at the SGA Bookstore or in town and to withdraw materials from the library. The ID Card Office is located in the University Union along with the Parking Office.

## Inclusive Excellence

The Office for Inclusive Excellence (OIE) serves as an impetus for positive interactions with all cultures while also providing academic and social support through diverse learning opportunities.

OIE is established in an understanding of diversity that welcomes people of all abilities, ages, ethnicities, genders, nationalities, races, religions, spiritual traditions, socio-economic classes, and sexual orientations. OIE consists of the student transition programs (https://www.sru.edu/ life-at-sru/diversity/inclusive-excellence/jump-start/), campus-wide diversity programming (https://www.sru.edu/life-at-sru/diversity/ inclusive-excellence/programs-and-workshops/), Women's Center (https://www.sru.edu/life-at-sru/diversity/womens-center/), Pride Center (https://www.sru.edu/life-at-sru/diversity/lgbtq/) and the Veterans Center (https://www.sru.edu/veterans/).

Our goal is to practice inclusive excellence so that it is implemented and accomplished consistently throughout the institution.

## The Office for Inclusive Excellence:

- Provides mentoring and coaching designed to offer academic and social support, build individual capacity and self-efficacy, and connect students to the University community
- Creates opportunities for all students to explore and celebrate cultures and identities in a safe and supportive atmosphere
- Gives voice to the needs of students while teaching them to be positive advocates for change

The Office for Inclusive Excellence has four primary concentrations:

1. Student Transitions
2. Mentoring
3. Inclusion
4. Advocacy

For more information on any areas of the Office for Inclusive Excellence, please visit us on the web at Office for Inclusive Excellence (https:// www.sru.edu/life-at-sru/diversity/inclusive-excellence/).

## Leadership Development Program

Leadership Development Center
Office: 302 North Road, Slippery Rock, PA 16057
Phone: 724-738-4334

## Director

Erin Strain
SRU's Leadership Development Center (LDC) provides exceptional programs that engage students, faculty, staff, and community members through experiential learning opportunities. The staff at the LDC is comprised of both professional and student workers who bring a variety of expertise, knowledge, and diversity to our team. Programming at the LDC includes experience-based academic labs, student engagement, leadership \& professional development workshops, and staff retreats, just to name a few! Each of these experiences is unique and customized for the groups we serve.

Our programming is complemented by our facilities: a 2,200 sq. ft. training center and a military designed leadership reaction course. As a resource to the entire campus and the greater Slippery Rock community, the LDC is here for your group. Lodging is also available in the summer.

## Musical Organizations

For information about the ensembles at SRU, please visit https:// www.sru.edu/academics/colleges-and-departments/cla/departments/ music/music-ensembles (https://www.sru.edu/academics/colleges-and-departments/cla/departments/music/music-ensembles/).

## Off-Campus Housing

Off-campus housing is available in privately owned apartment complexes, rooming houses and homes. The University does not inspect or approve off-campus housing. Housing within the borough of Slippery Rock must comply with the housing code for property maintenance of the borough, which sets legal standards for safety (sanitation, freedom of hazards, etc.) and livability (water, ventilation, heat, etc.). Housing in the township does not fall under the jurisdiction of the Slippery Rock Borough zoning laws, but it must meet minimal health standards as determined by Butler County.

In addition to this housing, a number of rooms and apartments are available in the community. Off-campus housing lists are available via www.places4students.com (http://www.places4students.com). Students who live off campus may contract to eat in the university dining facilities.

## Parking Office

For information about the Parking Office at SRU, please visit the Parking Office Website (https://www.sru.edu/offices/parking/).

## Preschool Child Care Center

The SRU/SGA Preschool and Child Care Center is a state licensed, nationally accredited non-profit program managed by the Student

Government Association, Inc. of Slippery Rock University. Services are available for children age three to five of students, faculty, staff, and members of the Slippery Rock community. Children through age 12 are welcome for before and after-school care and for summer programs.

The Center is licensed by the Pennsylvania Department of Human Services and Department of Education and is accredited by the National Association for the Education of Young Children. It is a Keystone Stars STAR 4 rated site. The Center is the recipient of the PA Pre-K Counts and Federal CCAMPIS grants which provide free or reduced preschool to children based on financial need. The CCAMPIS grant is only available to the children of University enrolled students. In 2016, the Center was approved as a child care provider for both the Child Care Aware and GSA Subsidy military fee assistance programs. The Center employs one Master's level Director, three Master's level Head Teachers, three Graduate Assistants, and several undergraduate students majoring in education.

The Center is located at 007 McKay Education Building, and is open from 7:00 a.m. to 6:00 p.m., Monday through Friday. Service is provided year round. To contact, please call 724-738-2102.

## President's Commissions

Slippery Rock University has the following Presidential Commissions:

- Commission for Disability Issues
- Commission for Racial and Ethnic Diversity
- Commission on Women
- Commission for Gender Identity \& Expression and Sexual Orientation
- Commission on Wellness
- Commission on Sustainability
- Commission for Veterans and Military Affairs
- Commission for Mental Health

To view information about the President's Commissions at SRU, please visit the President's Commission website (https://www.sru.edu/about/ administration/office-of-the-president/presidents-commissions/).

## Pride Center

For information about the Pride Center at SRU, please visit the Pride Center Website (http://www.sru.edu/life-at-sru/diversity/lgbtq/).

## Publications

## SLAB

SLAB is an award winning, nationally recognized literary magazine published by students from the English Department. SLAB publishes fiction, poetry, creative nonfiction, and graphic novel excerpts from established and emerging writers including winners of NEA Fellowships, Pushcart Prizes, and Eisner Awards. Staff members gain valuable publications experience in manuscript selection, editing, creative writing, and layout. Founded in 2005, SLAB receives funding through the Student Government Association. To view SLAB, please visit slablitmag.org (http://www.slablitmag.org/)

## The Rocket

The Rocket is the independent, student-run newspaper serving Slippery Rock University. The staff publishes digital content daily on www.theonlinerocket.com (http://www.theonlinerocket.com/) and
print editions on a monthly basis. The Rocket produces award-winning news, sports, and feature content covering the campus community and beyond, and serves as an outlet for student opinion through the editorial and letter-to-the-editor features. The Rocket provides an excellent experience for students whose career goals are in the areas of print, broadcast or converged journalism, social media, advertising, layout and design, and general digital content or news management.

## Radio and Television

WSRU Radio
WSRU-FM 88.1 is a student owned and operated FCC regulated radio station and podcast studio on campus. It gives students hands-on experience in all aspects of radio and audio production including onair, sports play-by-play, promotions, and event planning all under the guidance of a faculty advisor. WSRU-FM operates out the University Union and is open to students from any major.

## WSRU-TV

The Maltby Converged Media Center is home to the student-run digital news team, WSRU-TV, and serves as an experiential learning environment for broadcast production courses offered from the Communication Department. The center features a multicamera studio space, control room, Mac-based editing bays, podcast stations and professionally maintained, state-of-the-art equipment that is updated regularly to meet industry standards. Students at the center gain hands-on experience in every phase of the production process and build their portfolios as they prepare for internships and careers in the media industry.

## Special Recognition of Academic Achievement

## Special Recognition of Academic Achievement

Slippery Rock University faculty and administration place a high value on the academic accomplishments of its students. SRU's academic reputation and its stature in the community of universities are tied inextricably to the scholastic achievements of its students. The university's rich and extensive resources provide a foundation of support for the realization of this goal. Scholarly and dedicated university faculty strive to challenge students' intellectual development and their achievement of excellence. The university community believes that student efforts in the attainment of high levels of scholarship deserve appropriate recognition and officially acknowledges student achievement throughout the academic year.

## Celebration of Achievement

In the spring, the university observes its Celebration of Achievement, a series of events, ceremonies and receptions to recognize our students' academic and leadership excellence. Among those honored are the twenty students in the sophomore, junior, and senior classes who attain the highest cumulative averages for coursework completed at Slippery Rock University. These individuals are presented with the Presidential Scholar Award. A separate event recognizes students on the Dean's list. The Celebration of Achievement also includes the Symposium for Student Research, Scholarship, and Creative Activity, a day-long event in which students present their research and scholarship, creative performances, and art works to the campus community. The Celebration
of Achievement honors our students' successes and serves to set the tone for an academic atmosphere where excellence in scholastic endeavors is given the highest priority.

## Student Center and Conference Services

The mission of the Slippery Rock University Student Center and Conference Services department is to provide assistance to anyone seeking to hold an event on campus. Through our efforts, we create a welcoming community that fosters student learning and provides a valuable, regional resource.

- The Robert M. Smith Student Center is a community gathering space where we create opportunities for learning and engagement through informal interaction and programmed events. In addition to various lounges and meeting spaces, the following offices and services are located in the Robert M. Smith Student Center. Student Center Operations, Dining Services, Conference Services, PNC Bank, Electronic Technology Center, Starbucks, SGA Bookstore, Rocky's Food Court, Quaker Steak \& Lube, and the Student Development Suite including Student Engagement \& Leadership, Inclusive Excellence, Women's Center, Student Success, Cooperative Activities, Student Government Association, University Program Board, Pride Center, Veteran's Lounge and other student organization offices.
- Students are our primary stakeholders, yet we also aim to serve the needs of the university and the community through support for events and programs.
- We train and empower our student employees to think critically, solve problems, and engage positively with diverse constituents.
- We create experiences for youth and adults to utilize our facilities and services through summer camps and conferences leading to positive benefits for the campus.
- We create learning environments that are inclusive, accessible, adaptable, and equipped with appropriate technology for a variety of events.

The variety of event spaces makes Slippery Rock University the venue of choice for student, staff, faculty, and community members to hold meetings, workshops, banquets, weddings, conferences, summer camps, and other special events. For additional information, stop by the Student Center Information Desk or call 724-738-4926.

## Student Conduct

Slippery Rock University is an academic community in which there is mutual respect and trust of the persons who learn, teach, and work within it. Students of Slippery Rock University are entitled to certain rights and privileges which must be protected through fair and orderly processes and which are best safeguarded when each student acts responsibly. All students of the university community are equally entitled to the protection of the code of conduct. Students are expected to be familiar with the provisions of the Student Code of Conduct which is available at www.sru.edu/studentconduct (http://www.sru.edu/studentconduct/).

## Student Counseling Center

Clinical Director<br>Dr. Ken Messina LPC

## Phone

724.738.2034

Email
scc@sru.edu
The Student Counseling Center (SCC) strives to facilitate the total development of students by reducing distress, enhancing mental health, well-being, quality of life, and supporting aspirations. Our primary focus is on providing brief, confidential counseling aimed at helping students to succeed academically and interpersonally. When students require mental health services that are beyond the role or scope of the SCC, we will make appropriate referrals to campus and community resources. See our website for services and contact information.
https://www.sru.edu/life-at-sru/health-and-wellness/counseling-center (https://www.sru.edu/life-at-sru/health-and-wellness/counseling-center/)

## Student Engagement and Leadership

The Office for Student Engagement and Leadership serves as the premier outlet for students to learn about and explore opportunities to connect with peers and engage in co-curricular and leadership experiences at SRU.

## Mission

The mission of the Office for Student Engagement \& Leadership is to empower students in pursuit of their own developmental growth and achievements, through purposefully cultivated co-curricular opportunities and leadership experiences.

The Office for Student Engagement and Leadership oversees the following involvement areas:

- Student Organizations (https://www.sru.edu/life-at-sru/student-activities/clubs-and-organizations/)
- Fraternity and Sorority Life (https://www.sru.edu/life-at-sru/student-activities/clubs-and-organizations/fraternity-and-sorority-life/)
- Leadership Programs (https://www.sru.edu/life-at-sru/student-activities/leadership-programs/)
- Emerging Leadership Experience (https://www.sru.edu/life-at-sru/student-activities/leadership-programs/emerging-leadershipexperience/)
- Student Government Association (https://www.srsga.org/)
- University Program Board (https://www.srupb.com/)
- Homecoming (https://sru.campuslabs.com/engage/organization/ homecoming/)


## CORE

CORE is the University's online student engagement platform, and the ultimate way to Connect, Organize, Reflect, and Engage in leadership and involvement opportunities at SRU. Students can explore hundreds of ways to get involved at SRU. Students can learn about student organizations, find volunteer experiences, and discover leadership opportunities. They can also stay up-to-date with the latest happenings on campus through the Events Calendar and personal news feed. CORE also provides features for students to organize and manage their own involvement through a co-curricular transcript.

To learn more about the various involvement areas and what's happening on campus, log into CORE at www.sru.edu/core (http://www.sru.edu/ core/), using your SRU username and password. For more information
regarding the Office for Student Engagement and Leadership contact 724-738-2092 or leadership@sru.edu.

## Student Health Services

For information about Student Health Services at SRU, please visit the Student Health Services Website (https://www.sru.edu/offices/student-health-services/).

## Student Support

For information about Student Support at SRU, please visit the Student Support Website (http://www.sru.edu/life-at-sru/health-and-wellness/ care-network/).

## Success Coaching

724-738-2011

## Success Coaches

Julie Ferringer

Emily McClaine

Bryan Murray

Aubrey Rader

Success Coaching empowers students in their college transitions, goal setting, time management, academic habits, effective learning strategies, academic motivation, exam preparation, campus connections, and academic progress. Coaches work with students in one-on-one sessions and group workshops. Each session is individualized based on the student's needs and goals. While some students meet with a coach once, or periodically, other students may choose to meet with a coach semi-regularly in order to develop the skills they need to reach their goals. Coaching helps students to cultivate deep learning practices and use resources that will help them thrive. All students at SRU are welcome to meet with a success coach, and can do so by emailing success.coach@sru.edu. The Success Coaching Program also oversees Peer Academic Coaching, which offers weekly one-on-one coaching on fundamental academic skills with an undergraduate Peer Academic Coach. The Success Coaching Website (https://www.sru.edu/academics/ academic-services/student-success-coaches/) provides more details about services and staff.

## Theatre Productions

The Department of Theatre sponsors an active co-curricular program, and encourages students from across the university community to participate in productions. Each year, it presents a season of facultydirected productions: a balance of Broadway hits, new plays, and classics of the world theatre. An additional lab theatre space allows students to direct and produce their own work as well.

Participation in the program is open to any interested student and is not confined to theatre majors. Auditions for productions are held throughout the academic year.

## University Advancement - Alumni Engagement

Office: Russell Wright Alumni House

Phone: 724-738-2018
Email: alumni@sru.edu

## Director

Kelly Bailey

## Secretary

Lisa Luntz

Slippery Rock University has more than 70,000 graduates living throughout the country. Alumni are encouraged to join the Slippery Rock University Alumni Association, a separately incorporated organization that is devoted to serving the university and its alumni.

The Slippery Rock University Alumni Association hosts several events in the region and across the country to engage alumni. A variety of benefits are associated with membership to the association, including discounts on insurance, partnerships with national travel partners and savings at campus entities including the SGA bookstore. Significantly, the Alumni Association manages and awards eighteen scholarships. Seventeen of the scholarships, the Alumni Association Scholarship, Past Presidents' Scholarship, the Madeline F. Stoops Scholarship, the the Nancy Angell/ Hallie Dugan Smith Scholarship, the Eisaman Alumni Scholarship for sophomore students, the Maree McKay/ Esther Smiley Scholarships, the Carl and Norma Laughner Scholarship, the Maggie Meise Fellowship, the Watson Family Scholarship, Jeanne Powell Furrie Scholarships, the Anna Brua Williams Scholarships for women elementary education majors, and the Addison Scholarships are for academic excellence. The N. Kerr Thompson Scholarship is for student athletes.

The Association also sponsors Homecoming and Alumni Weekend, as well as special events throughout the year. Additional information on the Alumni Association as well as upcoming events can be found on the alumni web site at www.rockalumni.com (http:// www.rockalumni.com/) or at www.sru.edu (http://www.sru.edu/) and then clicking on Alumni.

## University Police

For information about the University Police at SRU, please visit the University Police Website (https://www.sru.edu/life-at-sru/safety/ university-police/).

## Veteran's Services

For information about Veteran's Services at SRU, please visit the Veteran's Services Website (http://www.sru.edu/veterans/).

## Women's Center

For information about the Women's Center at SRU, please visit the Women's Center Website (http://www.sru.edu/life-at-sru/diversity/ womens-center/).

## Admission

Students are admitted to Slippery Rock University of Pennsylvania for the fall semester, spring semester, or a summer term. The university calendar should be consulted for specific starting dates. Applicants are considered for admission on a rolling basis. Criteria and deadlines used to determine admission to the university are defined by an applicant's admission category. Admission to the university may be subject to space
availability and criteria used for admission to the university are subject to change.

- First-year Applicants (p. 1394)
- Transfer Students (p. 1394)
- Post-Baccalaureate Students (p. 1395)
- Non-Degree Student Admission (p. 1395)
- Transient Students (p. 1395)
- Visiting Students (p. 1396)
- Faxed Transcripts/Documents (p. 1396)
- Student Right-to-Know and the Clery Act (p. 1396)
- International Students (p. 1396)


## First-Year Applicants First-Year Applicants

Any high school graduate (or anyone who will be a high school graduate prior to attendance) or anyone who has passed the General Educational Development test (GED) who has not yet enrolled at a college, university, or other post secondary educational institution and intends to enroll at Slippery Rock University to pursue a degree granting program shall apply for admission as a new first-year student. Students who enroll in dualenrollment college credit programs prior to high school graduation are still considered new first-year students.

## Admission Guidelines for New First-Year Students

New first-year students are admitted to Slippery Rock University on a rolling basis for all terms. Admission criteria used to evaluate an applicant usually include the student's previous academic record. Slippery Rock University adopted a test-optional admissions policy for new students entering Fall 2021 and beyond. Admission guidelines are based upon the academic profiles of previously successful students. First-time, full-time students (new first-year students) who succeed most often at Slippery Rock possess a cumulative grade point average of 3.0 on a 4.0 scale in high school at the time of admission. Other students who apply may be asked to supply additional information and may be considered for admission on an individual basis using a Waitlist process. Additional admission criteria for applicants on the Waitlist may include: high school course rigor, grade trends, grades in core college preparatory courses and class rank (if available). Waitlisted applicants are offered admission on a rolling, space available basis and applicants closest to the academic guidelines are offered admission most frequently.

Slippery Rock University recommends that entering first-year students complete a college preparatory curriculum in high school consisting of four years of English; three years of social studies (with a fourth year recommended); three years of science with two years laboratory science; three years of mathematics (with a fourth year recommended, including algebra one, algebra two and geometry). Two years of a foreign language in the same language is preferred but not required.

## How to Apply for Admission as a New First-Year Student

Applicants need to supply the following credentials to apply for admission:

- A completed Application for Admission (admission applications are
available through the Office of Undergraduate Admissions and via the
web at www.sru.edu (http://www.sru.edu))
- A \$ 30.00 application fee (non-refundable) or fee waiver documentation
- Official high school transcripts or GED, and senior year (12th Grade) class schedule if enrolled in high school

Official transcripts are those that either 1) are sent directly from the school to Slippery Rock University's Office of Undergraduate Admissions, or 2) are delivered to Slippery Rock University's Office of Undergraduate Admissions in a sealed envelope from the school. No other transcripts will be considered official. Transcripts should reflect all grades up through the end of the junior year (six completed semesters). Final official high school transcripts documenting graduation from high school will be required upon graduation prior to the start of the initial semester of enrollment. Failure to document high school graduation will result in the revocation of admission.

Slippery Rock University recommends that official transcripts include a student's complete curricular and grading history, semester and cumulative grade/quality point averages (both weighted and un-weighted if weighting is practiced), and class rank if calculated. If the high school uses a percentage grading scale, any conversion guide to a 4.0 scale is also recommended. Home schooled students should supply transcripts of home school curriculum as well as any previous high school transcripts if applicable.

If an applicant is submitting a GED rather than a high school diploma, the GED documentation must be a copy of the diploma and include the official test results.

Credentials should be directed to the Office of Undergraduate Admissions at Slippery Rock University. Once all credentials are received, Slippery Rock University admits new first-year students on a rolling basis for all terms. Applicants who are offered admission must reply to Slippery Rock University to accept their offers of admission, along with submitting a required enrollment deposit, before they are considered matriculated. Admission offers not acted upon by making an enrollment deposit, are subject to rescission after May 1 of the students senior year of high school. New first-year students seeking admission for the fall semester are encouraged to apply early in the preceding fall prior to enrollment.

First-year admission is valid for the term it is offered, or any subsequent term for not later than one academic year, as long as a student does not enroll in college courses at another college/university. Students who enroll in college courses elsewhere must reapply for admission as a transfer student for the semester they wish to enroll in. Students wishing to defer admission should contact the Office of Undergraduate Admissions.

## First-Year Residence Requirement

All new first-year students are required to live on campus. First-year students living with their parents or legal guardian within a reasonable commuting distance may request a release from this requirement in order to commute from home. The Residence Life Housing Appeals Board will review all written requests for this exception.

## Transfer Students

## Transfer Policies and Credit Evaluation

For information regarding Transfer Policies and Credit Evaluation, please visit the Transfer Admissions Website (https://www.sru.edu/admissions/ transfer-and-military-admissions/transfer-credit-evaluation/).

## Post-Baccalaureate Students

Students who have earned a baccalaureate or higher degree from an approved institution may qualify for admission to earn additional undergraduate credit beyond their degree (see same title in College of Education)

Students interested in post-baccalaureate study may take course work for self-enrichment, may earn a second degree, a letter of completion or an academic certificate. Students pursuing an additional degree must earn a minimum of 30 credits at SRU beyond their first baccalaureate degree and meet all department requirements for the degree.

Post-baccalaureate students may not enroll at SRU to add a second major, minor, or other academic credentials to their undergraduate degree without meeting all requirements for a second degree.

Post-baccalaureate students interested in learning more about curriculum and degree requirements should contact the related academic department at the university. Questions regarding the actual application process should be directed to the Office of Undergraduate Admissions.

## Admission Guidelines for PostBaccalaureate Students Seeking a Second Degree or Teacher Certification

A baccalaureate degree awarded from a regionally accredited institution of higher education is required. Certain programs, such as teacher certification and nursing programs, may require applicants to meet additional or more stringent admission criteria, including minimum Grade Point Average requirements. Interested applicants should contact those college or department offices for admission guideline information prior to applying for admission. Post-Baccalaureate students seeking to earn a second degree and/or teacher certification may be eligible for financial aid, and should contact the Financial Aid Office for further information.

## How to Apply for Admission as a Post Baccalaureate Student Seeking a Second Degree or Teacher Certification

The application process for the various categories of postbaccalaureate study varies. For additional information regarding the appropriate application process, refer to the Post-Baccalaureate Students link (http://www.sru.edu/admissions/other-admissions/post-baccalaureate-students/) on the admission page.

## Non-Degree Student Admission

A non-degree student is a student who does not possess a baccalaureate degree and wishes to enroll for undergraduate level credit coursework at Slippery Rock University for enrichment and does not intend to use the course work toward a degree program at an institution of higher education. Non-degree admission is valid for one semester at a time. Students who wish to enroll as non-degree students may reapply for admission for subsequent terms until a maximum of 30 semester hours have been completed, at which time further enrollment is precluded in the non-degree status. Non-degree students are not eligible for financial aid.

## Admission Guidelines for Non-Degree Student Admission

A non-degree student must be a high school graduate or have a GED to enroll. Non-degree student applicants sign a statement on the application for admission to that extent and have one semester of attendance to supply proof of high school graduation (generally either a high school transcript or GED). The Slippery Rock University Fast Track Program also offers admission as non-degree students to qualified high school students seeking to enroll at the University prior to high school graduation. Students interested in the Fast Track program should contact the Office of Undergraduate Admissions directly for more information, and to schedule a meeting to discuss the Fast Track application process.

## How to apply for Admission as a NonDegree Student

Applicants need to supply the following credentials to apply for admission:

- A completed Non-Degree Application for Admission
- Non-Degree student applicants do not pay an application fee
- Unofficial high school transcripts with a graduation date posted (or GED) are required during the term of enrollment. Other credentials may be appropriate for special Slippery Rock University programs. Other transcripts may be required to meet specific course prerequisites.

Non-degree students must enroll and make payment by registration and fee payment deadlines as published in the class schedule for the term in which they wish to enroll.

## Transient Students

Any current undergraduate student from another regionally accredited institution of higher education who wishes to enroll for one semester at Slippery Rock University for credit course work while pursuing a degree program at their home college or university may apply for admission as a transient student. Transient students enroll for one term at Slippery Rock with the intent of returning to their home institution to pursue their degree. Only credits, not grades, return to the home institution. If you are attending one of the PASSHE institutions, and wish to transfer grades and credits back to the home institution, you should apply as Visiting Student status.

## How to Apply for Admission as a Transient Student

To apply for Transient Student admission, complete the online application and submit a copy (unofficial or official) of the transcript from the most recently attended college or university to the Office of Undergraduate Admissions; no application fee required.

Transient students must enroll and make payment by registration and fee payment deadlines as published in the Class Schedule for the term in which they wish to enroll.

Transient students are admitted through the Office of Undergraduate Admissions for all enrollment terms.

## Visiting Students

Any current undergraduate student from one of the other 13 member universities of the Pennsylvania State System of Higher Education who wishes to enroll for one semester at Slippery Rock University for credit course work while pursuing a degree program at their home college or university may apply for admission as a visiting student rather than a transient student. Visiting students enroll for one semester at Slippery Rock University with the intent of returning to their home institution to pursue their degree. Eligible students should contact the registrar or academic records office at their home institution to review visiting student grading policies prior to enrolling as a visiting student at Slippery Rock.

## How to Apply for Admission as a Visiting Student

Applicants need to supply the following credentials to apply for admission:

- A completed Visiting Student Application (https://www.sru.edu/ Documents/academics/academic-services/academic-records/ Visiting\%20Student\%20Application.pdf?1481048695656) for Admission

Visiting students must enroll and make payment by registration and fee payment deadlines as published in the Class Schedule for the term in which they wish to enroll.

Visiting students are admitted and processed through the Office of Academic Records and Registration.

## Faxed Transcripts/Documents

Transcripts and documents faxed to Slippery Rock University on behalf of students may be used unofficially for the purpose of initial review or for use with non-degree seeking student applicants. No final decision will be made pertaining to acceptance to the university or acceptance of transfer credit until the university receives the official transcripts. Faxed copies of GED certificates and Green Cards are acceptable.

Note: All credentials submitted to Slippery Rock University become the property of Slippery Rock University and will not be returned to the student or forwarded to third parties.

## Student Right-To-Know and the Clery Act

Notification of Availability of Student Consumer Information including:

- Clery Act
- Annual Security Report
- Freshman and scholarship athlete graduation rates
- Students' Rights of Privacy (FERPA)
- Student Financial Assistance
- Costs of Attending SRU
- Facilities
- Health and Safety Information
- Other information of importance to students

Slippery Rock University's Annual Security Report includes statistics for the previous three years concerning reported crimes that occurred on campus, in certain off-campus buildings or property owned or controlled by Slippery Rock University; and on public property within, or immediately adjacent to and accessible from the campus. The report also includes institutional policies concerning campus security, such as policies concerning alcohol and drug use, crime prevention, the reporting of crimes, sexual assault, and other matters.

View the Annual Security Report (http://www.sru.edu/life-at-sru/safety/ university-police/annual-security-report/) or contact the Office of University Police at 724-738-3333.

View the Student Consumer Website (http://www.sru.edu/academics/ enrollment/Pages/StudentConsumerInfo.aspx) or contact the Office of Academic Records and Registration at 724-738-2010.

## International Students

Slippery Rock University actively recruits international students from all over the world. Whether you are a first-time student, transferring, seeking a second bachelor's degree, exchange, or non-degree visiting student, the information that you'll want to consider and the tools that you need for the admission process can be found on the International Admissions Website (https://www.sru.edu/admissions/international-admissions/).

The deadline for submission of all application and supporting credentials is May 1 for fall admission and October 1 for spring admission. All applicants are considered automatically for financial aid.

For further information, please contact international.admissions@sru.edu

## Departments

## College of Business

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## College of Education

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## College of Health, Engineering \& Sciences

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## Faculty

Slippery Rock University Faculty (p. 1397)
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## Slippery Rock University Faculty <br> A

Kristie Abbs
Instructor
Public Health \& Social Work
D.S.W., Capella University
M.Ed., Slippery Rock University
M.S.W., Ohio State University
B.S., Radford University

## Robertha Abney

Associate Professor
Sport Management
Ph.D., University of Iowa
M.Ed., University of Pittsburgh
B.S., South Carolina State College

## Michael Adamczyk

Assistant Professor
Safety Management
M.S., Eastern Kentucky University
B.S., Slippery Rock University

## Naresh Adhikari

Assistant Professor

Computer Science
Ph.D., Mississippi State University
M.S., Mississippi State University
B.E., Pokhara University

## Nikhil Ahuja

Assistant Professor
Public Health \& Social Work
M.D.S., Rajiv Gandhi University
B.D.S., Maharashtra University

## Monique Alexander

Associate Professor
Elementary Ed/Early Childhood
Ph.D., Pennsylvania State University
M.Ed., Teacher's College of Columbia University
B.A., Bucknell University

Frances Amatucci
Associate Professor
Management \& Marketing
Ph.D., University of Pittsburgh
M.B.A., University of Pittsburgh
B.S., University of Massachusetts

## Nora Ambrosio

Professor
Dance
M.F.A., Smith College
B.A., University of Maryland

## Michelle Amodei

Associate Professor
Elementary Ed/Early Childhood
Ed.D., Indiana University of Pennsylvania
M.S., Duquesne University
B.S., Indiana University of Pennsylvania

## Padma Anand

Professor
Secondary Ed/Foundations Ed
Ed.D., Memphis State University
M.A., Mysore University (India)
B.A., Bangalore University (India)

## Melanie Anderson

Professor
Accounting,Economics \& Finance
Ph.D., University of Nebraska-Lincoln
M.B.A., Pennsylvania State University
B.S., Clarion University

Whitney Angelini
Instructor
Parks,Conserv\&RecreationTherpy
D.P.T., Slippery Rock University
B.S., Slippery Rock University

Jonathan Anning
Associate Professor
Exercise \& Rehabilitative Sci
Ph.D., University of Toledo
M.A., Central Michigan University

## B.A., Central Michigan University

## James Anthony

Instructor
Mathematics \& Statistics
M.A., Penn State University
B.S., Lock Haven University

## Theresa Antonellis

Instructor
Art
M.F.A., University of Massachusetts Amherst
B.A., Mount Holyoke College

## Michael Ardoline

Instructor
Philosophy
Ph.D., University of Memphis
M.A., Kingston University/ Paris 8 Saint-Denis
M.A., West Chester University
B.S., Lebanon Valley College

## Stacy Arend

Assistant Professor
Athletics
M.P.H., Mercer University of Medicine
B.S., Western Michigan University

## Adaeze Aroh

Assistant Professor
Public Health \& Social Work

## Nicholas Artman

Assistant Professor
Strategic Comm and Media
Ph.D., Indiana University of PA
M.A., Indiana University of PA
B.S., Indiana University of PA

Jana Asher
Assistant Professor
Mathematics \& Statistics
Ph.D., Carnegie Mellon University
M.S., Carnegie Mellon University
B.A., Wellesley College

## Lua Augustin

Associate Professor
Accounting,Economics \& Finance
Ph.D., Texas Tech University
M.Ed., Lamar University
M.B.A., Midwestern State University
B.B.A., Midwestern State University

## B

Candice Bain
Instructor
Music
M.M.T., Slippery Rock University
B.M., Arizona State University

## Amy Baker

Instructor
Music
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M.Ed., Slippery Rock University
B.S., Slippery Rock University

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M.S., New Jersey Institute of Technology

## B.S., Universidad Del Zulia

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B.S., Juniata College

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M.A., West Chester University
B.A., East Stroudsburg University

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B.M., Cincinnati College

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M.S., Dakota State University
M.S., Yarmouk University
B.S., Yarmouk University

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B.A., University of Pittsburgh

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B.A., University of Pittsburgh

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B.A., Johnson Bible College

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B.S., Minnesota State University

Timothi Williams
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B.M., West Liberty University

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B.A., Spring Arbor University

Jeffrey Witman
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B.A., California State University

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## Matthew Zarit

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Nonprofit Mgt, Empower\&Div Stu
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M.S., Carnegie Mellon University
B.A., Syracuse University

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M.A., University of Tulsa
B.S., Northwest Missouri State University

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M.S., Nanchang University
B.S., Nanchang University

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B.S., Xi'an Jiaotong University (China)

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B.S., Kent State University

Assistant Professor
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B.A., Franklin and Marshall College

## Faculty/Administrative Emeriti

A
Richard Altenbaugh
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Henry Anna
Government \& Public Affairs
Patricia Archibald
Biology
Robert Arnhold
Physical and Health Education

## B

Deborah Baker
University Advancement
Eliott Baker
Acad. Records \& Registration
Stephen Banjak
Physical and Health Education
Nancy Barta-Smith
English

## Francis Bires

McKeever Center
Paul Black
Secondary Ed/Foundations Ed
William Boggs
English
Bruce Boliver
Hospitality \& Tourism Manage
Robert Bost
Special Education
Kathleen Boykin
Modern Languages \& Cultures
Roberta Braden
Physical and Health Education
Bernice Brown
Elementary Ed/Early Childhood
Beverly Buchert
Elementary Ed/Early Childhood
Edwin Buchert
Geography, Geology \& Environm
Robert Buck
Mathematics \& Statistics

## John Burtch

Elementary Ed/Early Childhood
Kent Bushnell
Geography, Geology \& Environm

## c

William Chapman
Geography, Geology \& Environm
Gerald Chesin
Curriculum \& Instruction
Jerry Chmielewski
Biology
Larry Cobb
Government \& Public Affairs
Louis Como
Library
Joan Condravy
English
Michael Conlon
Computer Science
Cornelius Cosgrove
English
Robert Crafton
English
John Craig
History
J Crayne
Art
David Culp
School of Business
D
Thomas Daddesio
Modern Languages \& Cultures
David Dailey
Computer Science
Maryann Dailey
Nursing
Michael Detlefsen
Mathematics \& Statistics
Cynthia Dillon
Academic Affairs
Diana Dreyer
English
Sherry Dupont
Elementary Ed/Early Childhood
Daniel Dziubek

## Parks and Recreation

## E

William Elliott
Administrative Affairs

## F

Hans Fellner
Physics

## Susan Ferrandiz

Library
Richard Findler
Philosophy
George Force
Government \& Public Affairs
Bernard Freydberg
Philosophy

## G

Thomas Gaither
Biology
Stephen Glinsky
Modern Languages \& Cultures
Anita Gorman
English
Gary Grabner
Mathematics \& Statistics
Anne Griffiths
College of Health \& Human Services

## H

Jean Hamilton
Physical and Health Education

## Susan Hannam

College of Health, Environment \& Science
Kenneth Harris
Theatre

## James Hathaway

Geography, Geology \& Environm

## Stephen Hawk

Music

## Francis Hensler

Information Technology

## Susan Herman

Exercise \& Rehabilitative Sci
William Herman
Physical and Health Education

College of Education

## John Hicks

Elementary Ed/Early Childhood
George Highland
Physics
Robert Hinds
Geography, Geology \& Environm
William Hotchkiss
Physical and Health Education
James Hughes
Geography, Geology \& Environm
Frank Hulick
Computer Science

## J

Patricia Johnson
Secondary Ed/Foundations Ed
Stanley Johnson
Parks and Recreation
Diana Jones
Nursing
Sharadchandra Joshi
Computer Science

## K

Thomas Kandl
Elementary Ed/Early Childhood
Brian Kearney
Physics

## Bradley Keith

Physical and Health Education
Donald Kelly
History
Stanley Kendziorski
Allied Health
Ahmad Khalili
Nonprofit Mgt, Empower\&Div Stu
Maribeth Knaub
Music
Theodore Kneupper
Philosophy
Akiko Kotani
Art
Parameswar Krishnakumar
Management \& Marketing

| $L$ | Secondary Ed/Foundations Ed |
| :---: | :---: |
| James Laux <br> Strategic Comm and Media | N |
|  |  |
|  | Ramona Nelson |
| Jeffrey Lehman | Nursing |
| Secondary Ed/Foundations Ed |  |
|  | John Nichols |
| Henry Lenz | History |
| Secondary Ed/Foundations Ed |  |
|  | Abbas Noorbakhsh |
| Ruth Leo | School of Business |
| Nursing |  |
|  | Joseph Normand |
| Ann Liedel-Rice | Strategic Comm and Media |
| Elementary Ed/Early Childhood |  |
|  | 0 |
| William Lindgren |  |
|  | Chester O'Bannon |
|  | Music |
| Paul Lueken |  |
| Athletics | William Oman |
|  | Philosophy |
| M | Monica Ondrusko |
| Francis Manfredi | Special Education |
| Special Education |  |
|  | Bruce Orvis |
| Srinivasa Mani | Management \& Marketing |
| Professional Study\&Inter Prgms |  |
|  | P |
| Joseph Marks |  |
| Developmental Programs | Nicholas Papanikolaou |
|  | Chemistry |
| Clair McClure |  |
| Mathematics \& Statistics | Leona Parascenzo |
|  | Nursing |
| Mary McKay |  |
| Elementary Ed/Early Childhood | Gary Pechar |
|  | Exercise \& Rehabilitative Sci |
| Joanne McKeag |  |
| Physical and Health Education | Rachela Permenter |
|  | English |
| Barbara McNeal |  |
| English | William Polk |
|  | Elementary Ed/Early Childhood |
| Donald Megnin |  |
| Political Science | Charles Porter |
|  | Counseling \& Educational Psychology |
| James Mennell |  |
| History | Fred Powell |
|  | Physical and Health Education |
| George Mihalik |  |
| Safety Management | Carolyn Prorok |
|  | Geography, Geology \& Environm |
| Carl Miller |  |
| Information Technology | R |
| Pamela Miller | Charles Rice |
| Elementary Ed/Early Childhood | Elementary Ed/Early Childhood |
| Catherine Morsink | Joseph Riggs |
| College of Education | Strategic Comm and Media |
| Richard Myers | Melinda Ristvey |
| Special Education | Modern Languages \& Cultures |
| Karin Myers-Tillotson | Paul Rizza |

Sociology, Anthropology \& Social Work

## Carolyn Rizza

Geography, Geology \& Environm

## Larry Rotge

History
Bruce Russell
College of Business

## S

Lucy Sack
Dance

## Robert Sattler

Special Education
W Sayre
Chemistry
Claire Schmieler
Health Services
Jane Scott Cleary
Library
Charles Shaw
History
Charles Shultz
Geography, Geology \& Environm
William Sigmund
Biology

## Esther Skirboll

Sociology, Anthropology and Social Work
Robert Smith
President
Nanette Solomon
Music
Donald Stauffer
Special Education
Stacey Steele
Music
Terry Steele
Music
Carolyn Steglich
Biology
Thomas Stewart
Strategic Comm and Media

## Michael Stowe

Sociology, Anthropology \& Social Work
K James Strickland
English
Kathleen Strickland

College of Education

## Constantine Stroumbakis

Secondary Ed/Foundations Ed

## Wendy Stuhldreher

Public Health \& Social Work
Valerie Swarts
Strategic Comm and Media

## T

Frederick Tannery
School of Business
David Taylor
Chemistry
Rhoda Taylor
Biology
William Taylor
Sociology, Anthropology \& Social Work
Charles Tichy
Modern Languages \& Cultures
Frank Treccase
Modern Languages \& Cultures
Eva Tsuquiashi-Daddesio
College of Liberal Arts
Genevieve Tvrdik
Biology

## V

David Valentine
School of Business
Mary Vetere
Elementary Ed/Early Childhood
Paulette Viola
Parks and Recreation
Hubert Voltz
Mathematics \& Statistics

## W

Raymond Wallace
Theatre
Frances Walsh
Elementary Ed/Early Childhood

## Amy Walters

Strategic Comm and Media
Robert Watson
Student Affairs

## Gene Wilhelm

Sociology, Anthropology \& Social Work

## A Williams

Elementary Ed/Early Childhood
William Williams
Academic Affairs

## Z

Patricia Zimmerman
Physical and Health Education

## Financial Aid and Scholarships

Office: 107 Maltby
Phone: 724-738-2044
Email: financial.aid@sru.edu
The Office of Financial Aid is responsible for the coordination of sources of financial assistance for undergraduate and graduate students at Slippery Rock University. The majority of financial aid offered through the Office of Financial Aid is based on the overall financial need of applicants. State, federal and institutional financial aid sources are coordinated through this office. The Office of Financial Aid also provides information about scholarship opportunities. A detailed listing of aid programs is available at The Office of Financial Aid (http://www.sru.edu/admissions/ financial-aid/).

## Tuition, Fees, \& Financial Policies

Note: The most current information on graduate tuition and fees may be found online at the Office of Student Accounts (https://www.sru.edu/ offices/accounting-services/student-accounts/).

By accepting admission to the Slippery Rock University, the student agrees to pay the fees and charges assessed by the university. Tuition, fees and other charges are subject to change at any time. Students cannot enroll in classes, receive transcripts of coursework taken while at the university, or graduate from the university unless all fees are paid. Past due account balances are submitted to the Attorney General's office for collection. If any account is submitted to a collection agency to assist in collecting the account, the student is responsible for any/all collection costs associated with this account. Payment of fees can be made in a variety of ways either in full or through installment payment plans (fee involved).

[^28]
## The University <br> The University

Slippery Rock University of Pennsylvania, one of 14 state-owned institutions that comprise Pennsylvania's State System of Higher Education, has a long tradition of providing quality education to students. Started in 1889 as a teacher education institution, the university developed into a multi-purpose institution with approximately 8,500 students and with approximately 135 programs in the College of Business, College of Education, College of Health, Engineering, and Science and College of Liberal Arts.

## Vision

Slippery Rock University will excel as a caring community of lifelong learners connecting with the world.

## Mission

The fundamental educational mission of Slippery Rock University (SRU) is to transform the intellectual, social, physical, and leadership capacities of students in order to prepare them for life and career success. Complementary missions are to engage in scholarly activity and professional service.

SRU is committed to serving a diverse student body and empowering anyone regionally, nationally, and internationally who can benefit from its programs and lifelong learning opportunities. Thereby SRU addresses the educationally-related economic, health, environmental, social, cultural, and recreational needs of the communities served by the university.

In pursuit of SRU's educational purpose, talented faculty and staff provide creative integrated curricula and experiences that are connected to the world in which graduates will work and live. Students are taught using powerful and engaging pedagogies in appropriate learning spaces employing state-of-the-art technology. They study in an open, caring, nurturing, and friendly environment, and live in a safe community with access to high-quality student services. SRU strives to be a best-value institution with an affordable cost and substantial student financial support.

## Core Values

## Student Success

We value students as the center of all that we do and support a climate that celebrates each person's success. We believe that, as a public regional university, our role is to transform our students to enable them to be economically and socially mobile.

## Excellence

We value excellence in teaching, research, scholarship, creative endeavors, student services and in all aspects of the University's operations to ensure institutional effectiveness and efficiency. We value excellent curricula and co-curricular experiences, together with high expectations of our students, in order to stimulate student success.

## Intellectual Freedom, Integrity and Free Expression

We value and uphold the right of all in our academic community to speak and write freely. We expect all who study, teach and work within the University to uphold the highest ideals of scholarly responsibility. We value honesty, integrity, fairness, and respect in creating, debating and disseminating intellectual and creative works. As such, we believe that all perspectives deserve fair scrutiny in the marketplace of ideas in a civil, fair and thoughtful manner.

## Innovation

We value the discovery and application of knowledge in teaching and learning and in developing innovative systems. We believe in offering educational programs that anticipate future needs, teach state-of-theart competencies and use modern evidence-based pedagogies. We strive to promote and adopt productive cutting-edge curriculum, technology, structures and processes throughout the enterprise.

## Diversity, Inclusion and Equity

We value a diverse campus community that enriches our students' intellectual and social growth. We strive to build and support a community that fully reflects the rich diversity of the commonwealth. We welcome all qualified individuals to SRU and will work to ensure that our enrollment, employment and advancement processes are open, unhindered and free of barriers. We seek an inclusive campus and equitable outcomes for students and employees alike.

## Openness, Shared Governance and Accountability (Combines Two Concepts)

We value shared decision making and promote a campus culture in which information is widely shared, broad participation is encouraged, decision making processes are clear and feedback is valued. We uphold our commitments to shared governance. We value transparency of information and process, collaboration in resolving significant issues of mutual interest and ethical decision-making. We will be publicly accountable for the quality of our work and will seek to steward University resources effectively.

## Social Responsibility

We value the importance of fostering citizenship to promote the public good, environmental sustainability, global understanding and informed civic engagement. We will leverage our intellectual and financial resources in order to educate our students and the public about sustainability, global awareness and civic responsibility and operate the University as sustainably as possible.

## Accreditation

Slippery Rock University is accredited by the following accrediting agencies:

## Institutional Accreditation

Accreditation Association for Ambulatory Health Care, Inc. International Association of Counseling Services

Middle States Commission on Higher Education
Professional Association of Therapeutic Horsemanship International

## College of Health, Engineering and Science

Accreditation Association for Ambulatory Health Care, Inc.
Accreditation Board for Engineering and Technology (ABET)
Accreditation Council for Occupational Therapy Education (ACOTE)
Accreditation Commission on Collegiate Nursing Education (CCNE)
Accreditation Review Commission on Education for the Physician Assistant, Inc. (ARC-PA)

Provisional Accreditation as of 03/2016

## American Chemical Society

American Physical Therapy Association (APTA)
Commission on Accreditation of Allied Health Education (CAAHEP)

Commission on Accreditation of Athletic Training Education (CAATE)

Council on Social Work Education
North American Association for Environmental Education (NAAEE)
College of Education
American Council on the Teaching of Foreign Languages
Council for the Accreditation of Educator Preparation (CAEP)
Pennsylvania Department of Education (PDE)

## College of Business

Accreditation Council for Business Schools and Programs (ACBSP)
Association to Advance Collegiate Schools of Business (AACSB)
Commission on Sport Management Accreditation (COSMA)

## College of Liberal Arts

National Association of Schools of Art and Design (NASAD)
National Association of Schools of Dance (NASD)
National Association of Schools of Music (NASM)
National Association of Schools of Theatre (NAST)

## Institutional Assessment

Assessment is the process through which effective learning is planned and measured by relating degree program goals to actual student performance. We do assessment to improve student learning. The Assessment Core Committee of Slippery Rock University has been working since 1998 to help the University community develop effective assessment processes. The web site reflects the collective efforts of both academic and student life programs to articulate student-learning outcomes and to devise appropriate and effective means of measuring student achievement.

For more information on assessment: Planning, Resource Management and Assessment (http://www.sru.edu/offices/planning-resource-management-and-assessment/)

## Location

Slippery Rock University's campus is located in Slippery Rock, a borough in northern Butler County, Pennsylvania, that is a safe and friendly community of approximately 3,500 residents. SRU is less than an hour's drive north of Pittsburgh, one hour south of Erie and 45 minutes east of Youngstown, Ohio. Two major interstate highways, I-79 and I-80, intersect seven miles from the University, making the campus easily accessible.

## Students

Three quarters of SRU's more than 8,800 students are from western Pennsylvania, including the largest number of students hailing from Pittsburgh and other cities in Allegheny County. Another 13\% of students come from central and eastern Pennsylvania. The remaining $11 \%$ are out-of-state students, as students from 43 states and 30 countries are represented among the student population.

## Faculty

The approximately 453 full- and part-time faculty members at SRU are teachers, scholars and contributors to the University and community. The typical faculty member teaches four undergraduate courses each semester, engages in scholarly research and creative endeavors and serves in a variety of decision-making roles. Of the current full-time tenured or tenure-track faculty, $48 \%$ are male and $52 \%$ are female and $18 \%$ are members of minority racial and ethnic groups. In addition, $91 \%$ of all full-time faculty are tenured or occupy tenure-track positions, and 94\% of full-time tenured or tenure-track faculty have earned a doctoral or other terminal degree.

## Campus

SRU's gorgeous 660-acre campus is located in the rolling countryside of western Pennsylvania. More than 30 major buildings and 64 total facilities, which blend traditional and modern architecture, contributes to an optimal living and learning environment.

Bailey Library supports the University's mission by developing collections and services that make the library integral to the learning process, both within and beyond the classroom. SRU has completed a multiphased renovation of the library to better serve the needs of the 21 st century student. Services and resources include, but are not limited to, personal librarians; holdings which include print and electronic books, government documents, print and electronic journals, newspapers, DVDs, audio books, archival records and special collections; group and individual learning spaces for scholarly work and recreational reading; interlibrary loan and document delivery services; the Technology Learning Center; the Instructional Materials Center; and University Archives and Special Collections Room.

Other facilities include Swope Music Hall, designed as both a performing and learning center; Vincent Science Center, with laboratories, classrooms and a greenhouse; and Morrow Field House, an instructional and recreational facility that houses a gymnasium, swimming pool, handball court, dance studio, tennis court and track. McKay Education, Spotts World Cultures and Eisenberg Classroom buildings are examples of standard educational facilities that have small and large classrooms, auditoria and other specialized classrooms.

Buildings erected since 2001 include the School of Physical Therapy Building and the Advanced Technology and Science Hall, which houses the Computer Science; Chemistry; and Geography, Geology and the Environment departments. Recent renovations include the Strain Safety Building, which underwent a \$6.5-million upgrade in 2018 and the Performing Arts Complex which underwent a \$29.2-million renovation and will reopen in 2021. The University opened the Harrisville Building in 2016 in nearby Harrisville, Pennsylvania, to house the physician assistant and occupational therapy programs.

Students reside in eight on-campus residence halls: six newer buildings housing students on the lower end of campus and two traditional halls located on the upper end of campus. Additionally, upperclass students can reside at the ROCK Apartments, an eight-building complex with 188 beds. Privately owned residence halls, apartments and other types of living accommodations are available off-campus.

There are two dining halls, Boozel and Weisenfluh, as well as dining options including Starbucks and Quaker Steak and Lube inside the 107,000-square-foot Smith Student Center. That building also houses a
ballroom, theater, book store, conference rooms, a bank branch and other offices and amenities.

## Campus Resources and Services

For information about resources and services at Slippery Rock University, please visit the Campus Resources and Services page (p. 1379).

# Archived Undergraduate Catalogs Archived Catalogs 

2004-2006 Undergraduate Catalog (https:// catalog.sru.edu/undergraduate/archived-undergraduatecatalogs/20042006UndergraduateCatalog.pdf)

2006-2008 Undergraduate Catalog (https:// catalog.sru.edu/undergraduate/archived-undergraduatecatalogs/20062008UndergraduateCatalog.pdf)

2008-2010 Undergraduate Catalog (https:// catalog.sru.edu/undergraduate/archived-undergraduatecatalogs/20082010UndergraduateCatalog.pdf)

2010-2012 Undergraduate Catalog (https:// catalog.sru.edu/undergraduate/archived-undergraduatecatalogs/20102012UndergraduateCatalog.pdf)

2012-2014 Undergraduate Catalog (https:// catalog.sru.edu/undergraduate/archived-undergraduatecatalogs/20122014UndergraduateCatalog.pdf)

2014-2016 Undergraduate Catalog (https:// catalog.sru.edu/undergraduate/archived-undergraduatecatalogs/20142016UndergraduateCatalog.pdf)

2016-2018 Undergraduate Catalog (https:// catalog.sru.edu/undergraduate/archived-undergraduatecatalogs/20162018UndergraduateCatalog.pdf)

2018-2020 Undergraduate Catalog (https:// catalog.sru.edu/undergraduate/archived-undergraduatecatalogs/20182020UndergraduateCatalog.pdf)

2020-2021 Undergraduate Catalog (https://catalog.sru.edu/ undergraduate/archived-undergraduate-catalogs/ Undergraduate_Catalog_2020-2021_8-20-21.pdf)
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[^0]:    Course counts for $50 \%$ of Major and not for Major GPA
    2 Course counts for $50 \%$ of Major and Major GPA

[^1]:    1 Course offered in multiple subjects; cannot take course in first major subject.
    2 Course may have a prerequisite

[^2]:    1 Select one course. See My Rock Audit for specific courses.

[^3]:    1 Course offered in multiple subjects; cannot take course in first major subject.

[^4]:    * All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

[^5]:    - Army ROTC (p. 135)

[^6]:    ** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing

[^7]:    1 Course offered in multiple subjects; cannot take course in first major subject.
    2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (https://forms.office.com/Pages/ ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9kIM7WtmwvVJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UIdNTi4u)to declare a thread.

    * Students are encouraged to take INDS 101 as a Free Elective.

[^8]:    Course counts for $50 \%$ of Major requirements but not for Major GPA
    2 SPED 315 \& SEFE 456 must be taken in the same semester.

[^9]:    1 Course offered in multiple subjects; cannot take course in first major subject.

[^10]:    1 Course offered in multiple subjects; cannot take course in first major subject.

[^11]:    Required In-Depth Chemistry Courses

[^12]:    1 Course offered in multiple subjects; cannot take course in first major subject.

[^13]:    Course counts toward Major GPA
    Course counts for $50 \%$ of Major requirements

[^14]:    1 Course counts toward Major GPA

[^15]:    * All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

[^16]:    - Degree Program Writing Competency: Upon completion of the degree program RT students will write professionally and effectively, according to expectations of the Recreational Therapy profession.

[^17]:    1 Course offered in multiple subjects; cannot take course in first major subject.
    2 From at least 3 Categories; no more than 6 credits from one department; 6 credits must be 300 -level or above.

[^18]:    1 Course counts for $50 \%$ of Major requirements and Major GPA

[^19]:    - Overall GPA: 3.25 or higher
    - Major GPA (only includes all major requirement courses): 3.00 or higher

[^20]:    1 Course offered in multiple subjects; cannot take course in first major subject.

[^21]:    1 Course offered in multiple subjects; cannot take course in first major subject.

[^22]:    COMM 200 Civil Discourse: Theory \& Practice

[^23]:    - Level IV in Modern Dance (required)
    - Level III in Ballet (recommended)
    - Level III in Jazz Dance (recommended)

[^24]:    COMM 200 Civil Discourse: Theory \& Practice

[^25]:    Experiential Learning Activities

[^26]:    - 21 major credits must be taken at SRU or PASSHE
    - 21 major credits must be taken at the 300 level or above

[^27]:    1 This thread requires GES 362 as a capstone. Students may only use 3 additional credits from EGEO/GES to satisfy thread requirements.

[^28]:    - Tuition Fees \& Financial Policies (http://www.sru.edu/admissions/ tuition-and-fees/)

