

Catalog Home

To Apply:

Contact the Office of Admissions
Toll free 1-800-929-4778
or visit our website at WWW.SRU.EDU
Slippery Rock, Pennsylvania 16057-1326
1-800-SRU-9111

Rock Solid Education

Produced under the supervision of Slippery Rock University's division of Academic Affairs.

This catalog contains requirements, regulations, and descriptions that are subject to change at any time. Slippery Rock University specifically reserves the right and authority to alter and amend any and all requirements contained herein. The educational policies and procedures are reviewed and changed continually in keeping with the educational mission of the university. Consequently, this document is intended to be used only as an informational guide. Students are responsible for keeping informed of official policies and regulations and for meeting all appropriate requirements.

Slippery Rock University of Pennsylvania is a member of the Pennsylvania State System of Higher Education

Respect for Individuals in the Community Statement

The statement states:

"Slippery Rock University provides an environment that respects, encourages, and promotes the talents and contributions of all. Slippery Rock University values a community with a shared sense of purpose, where people demonstrate mutual respect and appreciation. Slippery Rock University values diversity that honors and includes all persons regardless of age, creed, disability, ethnic heritage, gender, gender identity, race, religion, sexual orientation, or socioeconomic status in academic and extracurricular endeavor, in the working environment, and in the daily life of the university community."

Academic Life

A quality academic life for all students is the focus of Slippery Rock University. Students will find that their priority actively centers on the intellectual development necessary to successfully achieve their bachelor's degree.

Click on a link to be taken to the entry below.

- How Long Will It Take?
- What Degree Will I Receive?
- Academic Degrees and Programs
 - College of Business, Information, and Social Sciences
 - College of Education
- Liberal Studies
- Academic Major
- Academic Minor
- Internships
- Special Recognition of Academic Achievement

- College of Health, Environment and Science
- College of Humanities, Fine and Performing Arts
- Interdisciplinary Programs
- Choosing an Academic Program
 - Academic Honors Convocation
 - Academic Honors Month
 - Deans' List
 - Honors at Graduation
 - Honors Program

How Long Will It Take?

At SRU, the undergraduate program of study requires a minimum of 120 semester hours of course credit hours to receive a bachelor's degree. Some students will actually complete more than 120 credit hours. This occurs for one of three reasons:

- Some students will be required to take additional courses necessary to develop basic academic competencies. These courses are not counted as credit toward graduation. (See Liberal Studies basic requirement section for more detail.)
- Some students may choose to take more than 120 credit hours. For Example: when students choose to complete more than one major, or a minor/additonal specialization..
- Some majors require more than 120 credit hours for a bachelor's degree.
- Post-baccalaureate students must complete at least 30 credit hours at SRU to earn a baccalaureate degree.

What Degree Will I Receive?

The bachelor's degree awarded depends on a number of factors particularly the major selected. If a student completes more than one major, one or two degrees may be awarded depending upon the total number of credits earned and the degrees associated with each major. See the "Earning 2 Degrees or 2 Majors" section in the Academic Policies portion of this catalog. The undergraduate degrees and majors offered at SRU include:

Academic Degrees and Programs

College of Business, Information, and Social Sciences

School/Department	Program	Degr/Cert/Minor
School of Business	Accounting	BSBA, Minor, Certificate
	Business, Undeclared	Program
	Business Adm for non-business majors	Minor
	Economics	BSBA, Minor
	Finance	BSBA, Minor
	Management	BSBA, Minor
	Marketing	BSBA, Minor

Communication	Communication	BA, BS, Minor
	Public Relations	Track
	Journalism	Track
	Emerging Technologies & Multimedia	Track
	Communication/Graphic Design (Art majors only)	Minor
Computer Science	Computer Science	BS, Minor
	Information Systems	BS, Minor
	Information Technology	BS, Minor
Criminology & Criminal Justice	Criminology & Criminal Justice	BA, MA
	Criminology	Minor
	Community Corrections	Specialization
Military Science	Leadership	Minor
Professional Studies	Health Services Administration	BS
	Professional Studies	BS
	Anthropology	Minor
	Sociology	Minor
	Non-Profit Leadership	Minor
Safety Management	Safety Management	BS
	3+3 Physical Therapy	Program
	Gerontology	Minor, Certificate

TOP

College of Education

School/ Department	Program	Degr/Cert/Minor
Counseling & Development	Community Counseling	MA, Endorsement
	Addiction Counseling	Track
	Child & Adolescent Counseling	Track
	Adult Counseling	Track
	Student Affairs in Higher Education	MA, Endorsement
	School Counseling	MEd, Endorsement
Elementary Ed/ Early Child	Elementary Education (K-6)	BSEd, Tch Cert
	Elem Ed - Early Development & Learning	BSEd, Certification
	Early Childhood Education (K-4)	BSEd, Tch Cert
	Early Child/ Special Education (PK-4, K-8)	BSEd, Tch Cert
	Elementary Education	MEd
	Reading	Tch Cert, Track
	Math/Science	MEd
Physical Education	Health & Physical Education	BSEd, Tch Cert
	Adapted Physical Activity	MS, Minor
	Aquatics	Minor
	Coaching	Minor
Secondary Ed/ Foundations of Ed	Secondary Education	BSEd, MEd
	English	Track
	French	Track (Undergrad)
	Social Studies-History	Track
	Spanish	Track (Undergrad)
	Math/Science	Track (Graduate)
	Educational Leadership	MEd
	Middle Level Language Arts (4-8)	BSEd

	Middle Level Mathematics (4-8)	BSEd
	Middle Level Science (4-8)	BSEd
	Middle Level Social Studies (4-8)	BSEd
Special Education	Community Programs for Amer w/Disabilities	BS
	Adapted Physical Activity	Track
	Non-Profit Management	Track
	Special Education	BSEd, MEd
	Master Teacher	Track (Graduate)
	Mentally & Physically Handicapped	Certification
	Supervision	Track (Graduate), Cert
Sport Management	Sport Management	BS, Minor

TOP

College of Health, Environment and Science

School/Department	Program	Degr/Cert/Minor
Biology	Biology	BA, BS, Minor
	Cytotechnology	Track
	Biology-Professional	Track

	Medical Technology	Track
	Pre-Masters of Education	Track
	3+4 LECOM Pre-Osteopath	Track
	3+3 Logan Pre-Chiropractic	Track
	3+3 Pre-Physical Therapy	Track
	2+3 LECOM Pre- Pharmacy	Track
	Marine Science	Minor
Chemistry	Chemistry	BA, BS, Minor
	Biochemistry	Track
	3+3 LECOM Pre-Pharmacy	Track
	Environmental	Track
	Forensic	Track
	Pre-Masters of Education	Track
Exercise & Rehabilitative Sciences	Exercise Science	BS
	3+3 Pre-Physical Therapy	Track
	Athletic Training	BS
Geography, Geology, & the Environment	Geography	BS, Minor
	Applied Geographic Technology	Track
	Geographic Information Technology	Minor
	Environmental Studies	Track
	Environmental Geosciences	BA, BS
	Pre-Masters of Education	Track
	Environmental Science	Track, Minor
	Geology	Track, Minor
	Meteorology	Minor
	Sustainable Systems	MS

Mathematics	Mathematics	BA, BS, Minor
	Pre-Masters of Education	Track
	Math-Chemistry	Track
	Math-Computer Science	Track
	Math-Economics	Track
	Math-Environmental Geosciences	Track
	Math-Philosophy	Track
	Math-Physics	Track
	Math-Psychology	Track
	Math-Statistics	Track
	Math-Public Health	Track
	Math-Finance	Track
	Math-Pre MBA	Track
	Math-Actuarial Science	Track
	Math-Biology	Track
	Math-Pre Graduate	Track
	Statistics	Minor
	Elementary School Math	Minor, PBAC Cert
Actuarial Studies	Minor	
Middle School Math	Minor	
Statistical Applications	Certificate	
Nursing	Nursing	BSN
	School Nurse	PBAC Cert
Parks & Recreation Environmental Education	Environmental Education	MEd
	Park & Resource Management	BS, MS
	Environmental Education/Interpretation	Track

	Outdoor Leadership	Track
	Resort & Recreation Mgmt/Tourism	BS
	Therapeutic Recreation	BS, Minor
	3+3 Pre-Physical Therapy	Track
Physics	Physics	BA, BS, Minor
	Computational	Track
	Pre-Masters of Education	Track
	Nanofabrication Technology	Certificate
Physical Therapy	Physical Therapy	DPT
Psychology	Psychology	BA, BS, Minor
Public Health & Social Work	Public Health	BS, Minor
	3+3 Pre-Physical Therapy	Track
	Social Work	BS

TOP

College of Humanities, Fine and Performing Arts

School / Department	Program	Degr/Cert/Minor
Art	Art	BA, BFA
	Art, General	Minor
	Art, w/teacher certification with Carlow University	BFA
	Art History	Minor
	Art-Graphic Design (Communication majors)	Minor
	Art-Elementary Education majors	Minor

Dance	Dance	BA, Minor
English	English Literature	BA, Minor
	English Writing	MA, BS, Minor
	Professional Writing	Track
	Creative Writing	Track
	Film & Media Studies	Minor
History	History	MA, BA, Minor
	American History	Minor
	European History	Minor
	Military History	Minor
	Non-Western History	Minor
Modern Languages & Cultures	Asian Studies	Minor
	French	BA, Minor
	French-Business Administration	BA
	German	Minor
	Russian	Minor
	Spanish	BA, Minor
	Spanish-Business Administration	BA
	Spanish for Elementary Education	Minor
	Latin American Studies	Certificate
Music	Music-Piano/Voice/Saxophone/Instrumental	BA
	Music Education-Piano/Voice/Saxophone/Instrumental	BM
	Music Performance-Piano/Voice/Saxophone/Instrumental	BM
	Music Therapy-Piano/Voice/Saxophone/Instrumental	BM
	Music	Minor

Philosophy	Philosophy	BA, Minor
	Career Related	Track
	Liberal Arts	Track
	Professional	Track
	Ethics	Minor
Political Science	Political Science	BA, Minor
	American Politics	Minor
	Comparative Politics & International Relations	Minor
	International Affairs	Minor
Theatre	Theatre	BA, Minor
	Acting	Track
	Design/Technology	Track
	Playwriting	Track
	Arts Administration	Track

TOP

Interdisciplinary Programs

Dean, College of Humanities, Fine & Performing Arts	Women's Studies	Minor
Academic Services	Exploratory (Undeclared)	Program

Choosing an Academic Program

What Makes Up an Academic Program?

Courses a student takes during their SRU experience can be broadly divided into three types: Liberal Studies, Major and Electives. Beyond this, individual students may also take courses in a minor field or for a certificate.

Liberal Studies

In Fall 2005, a new liberal studies program took affect for all students. This new Liberal Studies Program benefits Slippery Rock University continuing students as well as new incoming students.

The program contains six critical goals or areas of study. For each area, students select one or two classes from a selection of "goal courses." In addition, in some areas of study, students select a course from a wide class selection identified as "enrichment courses." These courses provide the opportunity to broaden and deepen knowledge in the goal area. Lastly, co-curricular "Supporting Experiences," are identified. These activities and programs available to all students and encompass working on student publications, belonging to honorary societies or working with various on-campus special interest groups. These activities show that the university experience is not and ought not be contained wholly in the classroom.

Goal I: Basic Requirements

The educated person must be able to communicate effectively in oral and written modes using varied media and information sources. A university education should give attention to encouraging intellectual levels that will equip the individual for an energetic and productive life.

Goal Courses (12 credits)

Some students may be exempted from one or more of the required courses based on entrance examination and/or pertinent experience. If students are exempted from a required goal course, no credit will be awarded, and the student will still be required to complete at least 48 credits of liberal studies coursework.. Some students may be required to take additional courses to develop basic academic requirements in reading and study skills and mathematics. However, credits earned in those courses are not applicable toward the credits required for a baccalaureate degree.

Goal courses in this category, with the exception of Interpreting Literature, will be graded as A, B, C, or NC (no credit). When goal courses are repeated, they will be graded A, B, C, or F.

The basic requirement courses, with the exception of Interpreting Literature, are subject to continuous registration. Students during the first semester of enrollment will be placed into the appropriate basic requirement course(s). Students who receive an "NC" or "F" in these courses must repeat the course(s) the following semester. Once classes begin, students are not permitted to drop or withdraw from a basic requirement course.

Goal II: The Arts

Through the creative process, writers and artists express, challenge, and extend societal values. To understand our own and other cultures, one must come to terms with artistic efforts. Ideally, such understanding will lead to experiences in which the individual seeks to be a participant in the arts, finding creative ways to express feelings and insights.

Goal Courses (3 credits)

It is strongly recommended that all students enrolled in arts goal courses attend a minimum of two arts events.

Goal III: Global Community

The educated person who is aware of other people, places and values exhibits an enlightened perspective and appreciates cultural diversity. The university must assist in developing insights and skills, which will enable every student to value humanity's worth, dignity and contributions.

Goal Courses (9 credits)

Three credits of US courses and six credits of non-US courses taken will meet the requirement. The modern language courses used to satisfy the BA requirement may not be used in the portion of this global community perspective block.

Goal IV: Human Institutions and Interpersonal Relationships

Our society depends heavily upon groups, organizations and institutions to function. The student will demonstrate an understanding of individual and group behavior by developing cooperative work strategies, examining individual and societal values, and exploring social issues.

Goal Courses (3 credits)

Goal V: Science, Technology and Mathematics

The educated person studies science, technology and mathematics not only to master specific disciplinary content, but also to understand the modes of thought and methods of inquiry of the scientist.

Rigorous, disciplined inquiry enables us to access information and process that enhance physical well being and our natural resource use.

Goal Courses (9-10 credits)

Students are required to have one laboratory experience in either the goal or enrichment areas in the Biology, Chemistry, Physics, or Geography, Geology or the Environment departments.

Goal VII: Challenges of the Modern Age

The essential characteristic of the educated person is the ability to weigh alternatives and make thoughtful choices. The rapidly changing world in which we live demands that we all make enormously difficult decisions, choosing wisely and responsibly in an area of competing persuasions. Courses in Goal VII will have a minimum prerequisite of "Advanced Standing."

Goal Courses (3 Credits)

Enrichment Courses (9 credits)

Students must choose one course from each of three of the following four areas:

1. The Arts (Select one-three credit course or three different one-credit courses)
2. Global Community
3. Human Institutions and Interpersonal Relationships
4. Science, Technology and Mathematics

For assistance with the liberal studies requirements, please contact Academic Advisement at 724-738-2009, Academic Services at 724-738-2012, Academic Records and Summer School at 724-738-2010, or Retention Services at 724-738-2011.

Academic Major

In addition to the liberal studies requirements, the university requires students to select a major or a curricular area of concentration. Students are typically responsible for meeting the major requirements in effect at the time they enter the university or change majors. When the students leave the university and are later readmitted, they become responsible for meeting the major requirements in effect at the time they are readmitted.

If students would benefit from meeting a set of major requirements other than those in effect at the time they declared their major or were admitted/readmitted to the university, their advisor may request of the students' academic dean that a different set of major requirements be met.

At the time of enrollment or by the end of the sophomore year, students must select a major. The university encourages students to select during their early semesters the exploratory (undeclared) student status if they have uncertainty or apprehension about the choice of a major. If students desire to change their major, they must complete, with departmental chairperson's signature, the change of major form in the Office of Academic Records and Summer School.

Using their criteria, departments determine the admission or rejection of students into their departments to pursue their major. Students may obtain these criteria from the departmental advisor or chairperson. Course requirements for a major may not be taken using a Pass/No Credit grade option. Courses taken within a student's first major department may not be used to meet any Liberal Studies program requirements.

Students may declare a second major by completing a declaration of second major form. The requirements for all majors must be completed prior to the awarding of the student's first baccalaureate degree. Once graduated, students may not return and add additional majors to their undergraduate record. Undergraduate courses taken after graduating will be recorded as post baccalaureate courses on the transcript.

Students may earn two majors or two degrees simultaneously. Also, the university's modern language requirement is a bachelor of arts degree requirement and not a requirement of a major. Therefore, a student earning a second major would not be required to complete the modern language requirement for the second major. If the student's initial degree required the modern language requirement, the student would be expected to meet the requirement.

All academic majors must consist of at least 30 credits; at least 50% of which must be completed at SRU and 50% of which must be at the upper division (numbered 300 or above).

Academic Minor

A minor is a set of courses that meet specified guidelines and is designed to allow a sub-major concentration in an academic discipline or in a specific area within a discipline. Unlike a specialization or a concentration, the minor is recorded on the students' transcripts, providing the students have maintained a 2.000 minimum quality point average for all coursework required for the minor. Courses used to meet the academic requirements of a minor may not be taken on a Pass/No Credit basis.

The minimum hours for a minor shall be no fewer than 18 credit hours, excluding courses required for professional certification.

A minimum of 9 credit hours of the minor must be upper division (courses numbered 300 and above or courses requiring a 3 credit pre-requisite). For each student at least 4 credits in the selected minor area must be outside his/her major area requirements or electives counted toward his/her major, and at least 6 credits must be completed at Slippery Rock University.

Ordinarily, a minor is a subset of some major. But, 1) a minor may concentrate on an area which involves two or more academic disciplines, each of which is related to the minor, (For example, no major exists in journalism, but the departments of English and communication jointly offer a minor in journalism, which includes courses from each of the disciplines) or 2) a minor may be offered in a discipline where no major is given. (For example, East Asian Studies.)

Students cannot major and minor in the same discipline/academic area. For example, they cannot major and minor in mathematics, but they can major in mathematics and minor in statistics.

Students may declare minors at any time by completing a declaration of minor form available in the Office of Academic Records and Summer School.

The requirements for all minors must be completed prior to the awarding of the first baccalaureate degree. Once graduated, students may not return and add additional minors to their undergraduate record. Additional coursework taken after graduating will be recorded on the transcript as post baccalaureate credit. If students, however, are pursuing a second baccalaureate degree, the majors and minors completed will be added to the transcript under the second degree.

Students are typically responsible for meeting the minor requirements in effect at the time they enter the university or change minors. When students leave the university and are later readmitted, they become responsible for meeting the minor requirements in effect at the time they are readmitted.

If students would benefit from meeting a set of minor requirements other than those in effect at the time they declared their minor or were admitted/readmitted to the university, their advisor may request of the student's academic dean that a different set of minor requirements be met.

Internships

Slippery Rock University offers a diverse program of internships through which students may earn from 1 to 12 credits. A minimum of 40 hours of work is required for each credit earned. In some cases an internship or other field experience is required for a major. Internships provide students with an opportunity to apply their academic preparation in a variety of professional or occupational settings. Through an internship, students have the opportunity to expand their knowledge and to enhance their learning of the theories of academic disciplines and programs of study through appropriate career-related experiences and to provide them with the knowledge and experience necessary for obtaining certification or licensing. Students may enroll in semester, academic year, or summer internships with governmental agencies, private firms, or non-profit organizations both in the United States and abroad.

Students must have a minimum quality point average of 2.000 in their major (or program where applicable), and at least a 2.000 for all coursework, including the semester previous to placement. The agency, academic department or program may specify higher standards and/or other academic requirements. Acceptance into the internship program must occur prior to registration for the course. Registration in the course, however, does not guarantee placement in the field. Agency supervisors' evaluations are a requirement for completion of the internship and may be a factor in determining the final grade. Students must be at least a junior in good standing at the time they begin the internship.

Interested students should check with their major department for internship information in their fields. Students are permitted to earn no more than 12 credits in any one internship and a total of 15 credits for all internships taken.

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.

Academic Honors Convocation

In the Spring, the university observes its Academic Honors Convocation, a formal ceremony with regalia and academic procession. The convocation provides for the recognition of Deans' List students and 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 President's Award of Achievement. The convocation also recognizes, scholar athletes, service scholars, academic scholarship recipients, students on the Dean's List and top ranking graduate students and serves to set the tone for an academic atmosphere where excellence in scholastic endeavors is given the highest priority.

Academic Honors Month

During the month of April many of the university colleges and departments honor their students who have excelled academically. The events take various forms, including banquets that are held on and/or off campus where recognition awards are presented. In addition, the director of the Honors Program coordinates a month-long program of lectures, seminars and presentation of papers by Slippery Rock University students and faculty and by special guests.

Deans' List

Undergraduate students who earn an adjusted semester quality point average of 3.500 or higher on a schedule of at least 12 new attempted and earned credits will achieve the Deans' List as long as their cumulative QPA is at least 2.000. Student teachers may achieve Dean's List status if they have earned 90 or more credits and have a cumulative QPA of 3.50 or higher at the end of the semester in which they student taught. Repeated courses and P/NC courses will not be computed into the 12 credit-hour minimum. The Office of University Public Relations will submit names of these students to their hometown newspapers for publication. During the Academic Honors Convocation, these students will be formally presented to the university community. There is no Deans' List during the summer term. Post-baccalaureate and graduate students are not eligible for the Dean's List.

Honors at Graduation

The policies for awarding latin honors are currently under review. If changes should occur they will be noted in this catalog and announced to the university community.

At both the December and May commencement ceremonies, the university recognizes students who have met the academic criteria for Latin honors.

- Undergraduates working on their first baccalaureate degree may qualify for honors at graduation. Post-baccalaureate and graduate students are not eligible for these honors.
- A minimum of 60 credits must be earned at Slippery Rock University. These credits may include: all credit course work; all credits earned through SRU's credit by exam program, including the NLN Mobility Profile II, administered by the Department of Nursing; SRU credit earned with a "P" grade; and credits earned as a visiting student at another SSHE institution.
- Credits earned by any other form of credit by exam (AP, CLEP, PEP, DSST and NLN (other than the Mobility Profile II), credits earned at other universities (transfer & transient) and non-SRU course work taken abroad will not count toward the 60 credit minimum.
- The following cumulative QPA's must be earned to qualify for honors at graduation.

Summa Cum Laude (With the Highest Honor) 3.800 - 4.000

Magna Cum Laude (With High Honor) 3.600 - 3.799

Cum Laude (With Honor) 3.500 - 3.599

No restrictions will apply to students who repeat grades of D or F and who still meet the criteria for honors at graduation.

At commencement the names of these honor students are specially designated in the commencement program. In addition, the Summa Cum Laude graduates wear medallions around their necks, which are gifts of the Slippery Rock University Alumni Association; Magna Cum Laude graduates wear white honor cords; and Cum Laude graduates wear green honor cords.

Students identified by the director of the University Honors Program as having completed the requirements of the Honors Program will also wear special honor cords at graduation.

Recognition of honors at graduation will be based upon students' cumulative QPA at the end of the semester preceding graduation. Designation of honors on the university transcript will not be determined until the students' final semester grades are submitted and an official, final cumulative QPA is calculated.

Honors Program

Slippery Rock University's Honors Program is designed to enrich the university experience by fostering a student-centered learning environment and by helping each student develop his or her individual potential as a life-long learner. Designed to encourage critical thinking and communication skills, honors courses emphasize reading, writing and research and encourage students to assume responsibility for their learning experiences, both on and off campus, through discussion-based classes and by participating in service-learning opportunities. Students in the program are fine scholars, but they are also committed to taking full advantage of their years spent at Slippery Rock University by participating in the extra-curricular and travel opportunities which the program offers.

All honors courses fulfill liberal studies requirements, which means that participation in the program will not extend a student's stay at Slippery Rock University. To graduate with an honors designation, students must complete a minimum of seven honors courses (21 credits) while maintaining an overall QPA of 3.25 or higher or 3.4 or higher if the student has an Honors scholarship. Students may select from a variety of specially-designed courses in the following departments: communication, English, political science, history, mathematics, philosophy, geography, geology, environmental science, physics and professional studies.

Students also have the opportunity to take Great Books courses, which are geared toward extensive reading in a specialized area. Content in these seminars varies from semester to semester and have included, Ancient Greek Culture (Greece), War and Peace (Russia), The Holocaust (Germany), Latin American History (Panama), Galileo (Florence), and Irish Playwrights (Ireland). Because a research project is a component of this course, the Great Books course is especially valuable for students contemplating graduate education.

Honors students enjoy a number of benefits, both in and out of the classroom, including seminar-style classrooms where enrollment is typically capped at 25 students per class; early registration privileges, and learning experiences through national and international travel opportunities. Every fall, Honors Program students present their research papers and projects at the National Collegiate Honors Council (NCHC) conference in cities like Kansas City, Washington D.C., Denver, San Antonio, Chicago, and Los Angeles. In addition, courses are offered every spring and summer, which include opportunities for travel abroad. In the past, students have traveled to Greece, London, Germany, Turkey, South Africa, Mexico and Ecuador.

The Honors Program is open to all qualified students, regardless of their major field of interest. Interested students must enroll formally by completing an application and submitting a two-page, typed essay in which they discuss what they hope to gain from their university experience and a resume that includes their leadership, service and extra-curricular involvement. If you are interested in participating, please call 724-738-4003, e-mail honorsprogram@sru.edu, or visit the Honors Program Web Site

Academic Programs

Slippery Rock University

Slippery Rock University

College of Business, Information, and Social Sciences

105 Eisenberg Building
724-738-2008

Interim Dean

David Valentine

Assistant to the Dean

Larry McCarthy

Administrative Assistant

Leigh McGuirk

Secretary

Deborah White

Departments

Communication

Computer Science

Criminology and Criminal Justice

Minor and Certificate in Gerontology

Military Science

Professional

Professional Studies

Safety Management

School of Business

Slippery Rock University's College of Business, Information, and Social Sciences is comprised of seven academic departments: communication, computer science, military science, professional studies, criminology and criminal justice, safety management, and the School of Business which includes the programs of accounting, economics, finance, management, and marketing.

Information and information processing are becoming more accessible and more important in daily life. Businesses rely on information and on individuals who can effectively process and analyze information. The university enhances opportunities for students to keep pace with a continually changing society. The information, social science, and business administration programs are thus united as one college to provide focus and unity for students.

Students majoring in the College of Business, Information, and Social Sciences must satisfy the university's liberal studies program requirements in addition to meeting specific major degree requirements. Study in the liberal arts, which contributes to life-long happiness and productivity, assists in developing skills in such areas as oral and written communication, problem-solving, critical thinking and mathematics. With specific departmental degree requirements, students who major in the College of Business, Information, and Social Sciences are assured of both breadth and depth of knowledge. The social sciences provide students with a disciplined approach to both the theories and methodologies that will assist them in understanding society and culture. The curriculum is committed to creating a learning environment of self-awareness and a sense of perpetual growth and development. Disciplines include: political science, military science, criminology, criminal justice, social work, and professional studies with minors in anthropology and sociology.

The College of Business, Information, and Social Sciences also combines popular and rapidly changing fields of study, supported with current technology and facilities for such areas as computer science, information systems, information technology, multimedia technology, journalism, public relations and broadcasting, safety management and the School of Business.

Students who have inquiries regarding programs in the College of Business, Information, and Social Sciences should contact specific departmental chairpersons or the office of the dean of the college.

Other Programs

- The Center for Government Contracting Assistance

The Center for Government Contracting Assistance

006 Eisenberg
724-738-2346

Contracting Specialist Renee Decker

The Government Contracting Assistance Center (GCAC), a unique segment of the College of Business, Information, and Social Sciences, was established for the purpose of aiding local businesses and industries to compete successfully for federal, state and local government contracts and subcontracts.

The GCAC is a full service procurement technical assistance center. It's primary function is to enhance economic revitalization by bringing federal, state and local contract dollars into the area. The GCAC identifies procurement opportunities for businesses and helps them to submit complete and competitive bids. It also provides education and training on government contracting policies and procedures through regularly scheduled seminars and through individual counseling sessions with companies.

Communication

222 Eisenberg Building
724-738-2032

Communication Department

The central mission of the Department of Communication at Slippery Rock university of Pennsylvania is to foster our students' abilities to be socially competent citizens and to find meaningful employment through high-quality educational experiences.

Because communication underlies all human pursuits, we seek to prepare students with the ethical standards necessary to preserve the ideals of democratic free expression. We also seek to develop their abilities to produce, distribute, analyze and critically consume communication. In keeping with this mission, we will continue to offer courses that serve the needs and goals of all students from across the university.

Maintaining the tradition of study of communication as a liberal art, and recognizing the often-blurred boundaries among communication specialties, we continue to offer an integrated Bachelor of Arts degree. In addition, we now offer a Bachelor of Science degree designed to provide the greatest focused preparation for students.

Our Key areas in the Bachelor of Science for the development of professional expertise include: Public Relations, Journalism and Emerging Technology & Multimedia.

Chair
Thomas Flynn

Assistant Chair

Mark Banks

Secretary

Marilyn Garczynski

Faculty

Mark Banks, Brett Barnett, Trudy Bayer, Mark Chase, Thomas Flynn, Jennifer Foster, Joseph Harry, James Laux, Ray Pastore, Christine Pease-Hernandez, Li Pu, Katrina Quinn, Thomas Stewart, Valerie Swarts, Amy Walters, Mark Zeltner

Communication is the means whereby relationships are created and sustained. Studying communication offers students the opportunity to learn about communication as well as to prepare for careers as widely diverse as broadcasting, audio and video production, web site and electronic graphics design, interactive multimedia production, journalism, public relations, speech and public address, and other related professions.

The Department of Communication offers both the Bachelor of Arts (BA) and the Bachelor of Science (BS) degrees. The BA emphasizes a broad liberal arts approach to communication, with five emphasis areas that include broadcasting/media production, public relations and corporate communication, print and broadcast journalism, emerging technologies and multimedia, and speech communication.

The BS degree emphasizes a more concentrated, skill-based approach in one of three tracks: public relations, journalism, and emerging technologies and multimedia.

Students in either degree program will have courses available in several areas. In broadcasting and emerging technologies, courses cover not only the traditional audio and video media, but also multimedia, web design, streaming media, and digital recording and editing in a multimedia laboratory. The explosion of technology and e-commerce has created a huge demand for individuals who can design, produce, and evaluate multimedia programs.

Courses in public and corporate communication cover such areas as public relations writing and campaign design, traditional and new media communication formats, Internet and intranet-based resources, and the latest desktop publishing, graphics, and corporate media capabilities.

Students emphasizing journalism study both the basics of print and broadcast journalism, plus advanced courses in journalism applications, including opportunities for involvement with the campus newspaper, radio, television, and Internet streaming and publishing. The department's active internship program affords qualified students in all areas the opportunity to test and develop their knowledge and skills.

Throughout the communication program at Slippery Rock, there is an emphasis on the integration of all communication forms and media. By completing a core of courses distributed among all the areas of communication, students are prepared in an all-encompassing array of concepts and skill development in this fast-changing discipline.

The all digital Television Studio, a three-camera color facility, located at 101 Vincent Science Hall, is a newly remodeled facility with a control room, offices, and the studio. The television news: studio production, television news: field production, and the broadcast announcing classes use the facility as a component of the broadcast journalism curriculum. The offices of the student production organization, WSRU-TV, are also located at the facility. This student organization produces variety and interview programs for distribution on the campus cable network.

Majors

- Communication (BA)
- Communication (BS) - Emerging Technology and Multimedia
- Communication (BS) - Journalism
- Communication (BS) - Public Relations

Minor for Non-Majors

- Minor in Communication - Graphic Design Track for Art Majors

Minors

- Minor in Communication

Communication (BA)

Communication Department

Requirements for the Major - Credits:40

Students are required to complete a program of 40 credit hours, including COMM 110, COMM 310 and COMM 410. The balance of the program is defined for each student by selecting courses from several levels in consultation with the advisor. All students in the Communication major must maintain an overall QPA of 2.5 to enroll in COMM 310 and COMM 410 or to graduate with a Communication degree.

The Bachelor of Arts degree requires proficiency at the 103 level of a modern language or the equivalent.

Students may transfer credits from other institutions toward the major but must earn at least 15 credits in communication from Slippery Rock University. At least 9 of these credits must be from courses numbered 300 or above, including at least 3 credits from courses numbered 400 or above.

- COMM 110 - Communication Concepts Credits: 3
- COMM 310 - Communication Research Methods Credits: 3
- COMM 410 - Communication Law Credits: 3

A Minimum of a 2.0 is Required in Each of the Following Courses:

- COMM 110 - Communication Concepts Credits: 3
- COMM 310 - Communication Research Methods Credits: 3
- COMM 410 - Communication Law Credits: 3

Communication (BS) - Emerging Technology and Multimedia - 59 credits

Communication Department

Students must earn a QPA of 2.5 in the major and a minimum grade of "C" in COMM110, 310, and 410. At least 40% (48 credits) of the entire degree and 50% (28 credits) of courses in the major must consist of upper level coursework.

Core Requirements - Credits: 17

- COMM 110 - Communication Concepts Credits: 3
- COMM 115 - Visual Literacy Credits: 3
- COMM 310 - Communication Research Methods Credits: 3
- COMM 362 - Mass Media and Society Credits: 3
- COMM 393 - Junior Seminar Credits: 1
- COMM 410 - Communication Law Credits: 3
- COMM 493 - Senior Seminar Credits: 1

Level 1 Technology & Design Skills/Theory - Choose 15 credits

- COMM 201 - Digital Imaging Credits: 3
- COMM 254 - Video Production Credits: 3
- COMM 232 - Publication Production Credits: 3
- COMM 242 - News Writing Credits: 3
- COMM 247 - Photojournalism Credits: 3
- COMM 258 - Interactive Multimedia I Credits: 3
- COMM 262 - Broadcast Announcing Credits: 3

Level 2 Technology & Design Skills/Theory - Choose 15 credits

- COMM 335 - 2-D Animation Credits: 3
- COMM 318 - Professional Presentation Credits: 3
- COMM 334 - Publication Production II Credits: 3
- COMM 350 - Editing for Video Credits: 3
- COMM 354 - TV Studio Production Credits: 3
- COMM 355 - TV Field Production Credits: 3
- COMM 359 - Interactive Multimedia II Credits: 3
- COMM 360 - Corporate Media Credits: 3
- COMM 363 - Audio Production Credits: 3

Level 3 Management/Interpersonal Communication Skills - Choose 9 credits

- COMM 453 - Media Project Management Credits: 3
- COMM 449 - Communication Projects Credits: 3
- COMM 458 - Media Criticism Credits: 3
- COMM 459 - Issues in Communication Technologies Credits: 3

Applied Communication - Credits: 3

- COMM 450 - Internship Credits: Up to 12

Communication (BS) - Journalism

Communication Department

Requirements for the Major - Credits: 59

Students must earn a QPA of 2.5 in the major and a minimum grad of "C" in COMM 110, COMM 310, and COMM 410.

At least 48 hours of the entire degree and 30 hours of courses in the major must consist of upper level coursework.

Core Requirements - Credits: 17

- COMM 110 - Communication Concepts Credits: 3
- COMM 115 - Visual Literacy Credits: 3
- COMM 310 - Communication Research Methods Credits: 3
- COMM 362 - Mass Media and Society Credits: 3
- COMM 393 - Junior Seminar Credits: 1
- COMM 410 - Communication Law Credits: 3
- COMM 493 - Senior Seminar Credits: 1

Journalism Requirements - Credits: 18

- COMM 242 - News Writing Credits: 3
- COMM 305 - Broadcast Journalism Credits: 3
- COMM 343 - Feature Journalism Credits: 3
- COMM 347 - New-Media Journalism Credits: 3
- COMM 348 - Advanced Reporting Credits: 3
- COMM 450 - Internship Credits: Up to 12

Communication Electives - Credits: 18

At least one each from Print and Broadcast and at least two from Media Concepts.

Print Journalism Emphasis

- COMM 201 - Digital Imaging Credits: 3
- COMM 232 - Publication Production Credits: 3
- COMM 247 - Photojournalism Credits: 3
- COMM 258 - Interactive Multimedia I Credits: 3
- COMM 334 - Publication Production II Credits: 3
- COMM 342 - Sports Journalism Credits: 3

Broadcast Journalism Emphasis

- COMM 254 - Video Production Credits: 3
- COMM 262 - Broadcast Announcing Credits: 3
- COMM 350 - Editing for Video Credits: 3
- COMM 354 - TV Studio Production Credits: 3
- COMM 355 - TV Field Production Credits: 3
- COMM 449 - Communication Projects Credits: 3

Media Concepts

- COMM 405 - International Journalism Credits: 3
- COMM 413 - Communication Theory Credits: 3
- COMM 422 - History of Journalism Credits: 3
- COMM 441 - Issues in Journalism Credits: 3
- COMM 458 - Media Criticism Credits: 3
- COMM 480 - The Communication Age Credits: 3

Choose one Political Science Course:

- POLS 101 - American National Government Credits: 3
- POLS 200 - State and Local Government Credits: 3

Choose one Economics Course:

- ECON 201 - Principles of Macroeconomics Credits: 3
- ECON 202 - Principles of Microeconomics Credits: 3

Communication (BS) - Public Relations

Communication Department

Requirements for the Major - Credits: 56

All students in the Communication major must maintain an overall QPA of 2.5 to enroll in COMM 310 and COMM 410 and to graduate with a Communication degree.

A minimum of a 2.0 is required in each of the following courses: COMM 110, 310, and 410.

Core Requirements - Credits: 17

- COMM 110 - Communication Concepts Credits: 3

- COMM 115 - Visual Literacy Credits: 3
- COMM 310 - Communication Research Methods Credits: 3
- COMM 362 - Mass Media and Society Credits: 3
- COMM 393 - Junior Seminar Credits: 1
- COMM 410 - Communication Law Credits: 3
- COMM 493 - Senior Seminar Credits: 1

Public Relations Emphasis - Credits: 27

- COMM 201 - Digital Imaging Credits: 3
- COMM 231 - Introduction to Public Relations Credits: 3
- COMM 232 - Publication Production Credits: 3
OR COMM 258 - Interactive Multimedia I
- COMM 242 - News Writing Credits: 3
- COMM 315 - Organizational Communication Credits: 3
- COMM 332 - Case Studies in Public Relations and Integrated Communications Credits: 3
- COMM 333 - Public Relations Writing Credits: 3
- COMM 415 - Persuasion Credits: 3
OR COMM 312 - Argumentation
- COMM 431 - Public Relations and Integrated Communications Campaigns Credits: 3

Message Production and Preparation - Credits: 6

Take one lower level and one upper level course.

- COMM 232 - Publication Production Credits: 3
OR COMM 258 - Interactive Multimedia I
- COMM 247 - Photojournalism Credits: 3
- COMM 254 - Video Production Credits: 3
- COMM 318 - Professional Presentation Credits: 3
- COMM 334 - Publication Production II Credits: 3
- COMM 360 - Corporate Media Credits: 3
- PROF 205 - Accounting for Decision Makers Credits: 3

Applied Communication - Credits: 3

- COMM 449 - Communication Projects Credits: 3
OR
- COMM 450 - Internship Credits: Up to 12

Required Business Course - Credits: 3

- MGMT 351 - Organizational Behavior Credits: 3
OR
- MRKT 330 - Principles of Marketing Credits: 3

Minor in Communication

Communication Department

Internship: only 3 credits may be counted toward the minor.

Students interested in a communication minor will have an advisor from their major department, but they are encouraged to seek assistance in choosing the appropriate communication courses from a faculty member in the Department of Communication.

Students must have a minimum 2.5 QPA overall.

Students may transfer up to 9 communication credits from other institutions. Transfer students must earn at least 3 credits at the 300 level and 3 credits at the 400 level at Slippery Rock University.

Requirements for a Minor in Communication - Credits: 21

Students planning to minor in communication are required to take 21 credits of communication coursework, excluding COMM 200.

Required Core

- COMM 110 - Communication Concepts Credits: 3
- COMM 310 - Communication Research Methods Credits: 3
- COMM 410 - Communication Law Credits: 3

Electives - Credits: 12

Three must be at the 300/400 level, and three must be at the 400 level.

Footnote

* In place of COMM 310, students may substitute one of the following courses:

- HIST 205 - Historians Craft Credits: 3
- HLTH 406 - Program Planning and Evaluation Credits: 3
- MRKT 430 - Marketing Research Credits: 3
- POLS 310 - Research Methods Credits: 3
- PSYC 221 - Introduction to Behavioral Statistics Credits: 3
- SEFE 270 - Educational Measurements, Assessment and Evaluation Credits: 3
- SOWK 318 - Research Methods Credits: 3
- SPMT 499 - Sport Management Research Methods Credits: 3

Internship:

Only 3 credits may be counted toward the minor.

Minor in Communication - Graphic Design Track for Art Majors

Communication Department

21 Credits

Required Communication Courses - 21 Hours

- COMM 110 - Communication Concepts Credits: 3
- COMM 232 - Publication Production Credits: 3
- COMM 258 - Interactive Multimedia I Credits: 3
- COMM 334 - Publication Production II Credits: 3
- COMM 453 - Media Project Management Credits: 3
- COMM 359 - Interactive Multimedia II Credits: 3
- COMM 410 - Communication Law Credits: 3

Computer Science

275 Advanced Technology and Science Hall
724-738-2040

Computer Science Department

Chair

Deborah Whitfield

Assistant Chairperson

Secretary

Faculty

Michael Conlon, David Dailey, Adel Fergany, Beverly Gocal, Frank Hulick, Patricia Joseph, Sharadchandra Joshi, Paul Mullins, Sam Thangiah, David Valentine, Hongbo Zhou

The mission of the Department of Computer Science is to provide a broad-based coverage of the Computer Science curriculum to prepare its majors for careers in a technical setting, to provide thorough instruction of the Information Systems curriculum while students specialize in fields of their choosing, and to provide intensive instruction for students aiming to pursue graduate studies in either Computer Science or Information Sciences.

The Department will actively support the University and the College's efforts to achieve the institution's various goals of providing broad education, fulfilling its commitments to the community it serves, engaging in multidimensional evaluations and assessments, and ensuring the institution's continued vitality.

The Department will accomplish its mission in an environment that will promote close and lasting relationships among students and faculty.

The Department of Computer Science offers majors and minors in three programs. Each major prepares the student for challenging careers in computing. Moreover, each major is flexible enough to allow a wide selection of other courses from the Department of Computer Science or other departments within the University. With proper planning and selection of appropriate minor or individual courses the student majoring in any one of the three programs will be able to meet his/her academic goal in four years.

Majors

- Computer Science (BS)
- Information Systems (BS)
- Information Technology (BS)

Minors

- Minor in Computer Science
- Minor in Information Systems
- Minor in Information Technology
- Healthcare Informatics

Computer Science (BS)

Computer Science Department

The major in computer science emphasizes modern approaches to software and hardware development and requires mastery of abstract concepts. Theoretical subjects are included for essential conceptual foundations along with practical applications of theory. Computer science majors are offered an entrance to all facets of the dynamic computer field. This degree offers solid preparation for graduate study in computer science or applied areas involving computing.

SRU Computer Science is accredited by the Computing Accreditation Commission of ABET, 111 Market Place Suite 1050, Baltimore, MD 21202, (410) 347-7700.

Graduation requirements for all students pursuing the bachelor of science degree with the major of computer science include a minimum 2.000 quality point average in courses taken at Slippery Rock University that will fulfill the major requirements stated below under Required Courses and Required Electives, and a minimum 2.000 quality point average in all course-work completed at Slippery Rock University.

For transfer students to earn the bachelor of science degree with a major in computer science, the required course work for the major must include a minimum of six computer science courses (18 credits) at the 200 level or above, at least two of which must be at the 400 level, and completed at Slippery Rock University.

Requirements for the Major

Required Computer Science Courses - Credits: 31

- CPSC 140 - Introduction to Programming Principles Credits: 3
- CPSC 150 - Advanced Programming Principles Credits: 4
- CPSC 370 - Computer Organization Credits: 3
- CPSC 374 - Algorithms and Data Structures Credits: 3
- CPSC 376 - Programming Languages Credits: 3
- CPSC 378 - Theory of Computation Credits: 3

- CPSC 423 - Computer Networks Credits: 3
- CPSC 464 - Principles of Concurrent Programming and Operating Systems Credits: 3
- CPSC 474 - Computer Architecture Credits: 3
- CPSC 488 - Software Engineering Credits: 3

Required Electives - Credits: 9

(Maximum of 3 credits from CPSC 236 and CPSC 217)

Two of:

- CPSC 217 - Structured and Dynamic Web Programming Credits: 3
OR CPSC 236 - Selected Computer Languages
- CPSC 317 - Scripting Languages Credits: 3
- CPSC 323 - Data Base Systems Credits: 3
- CPSC 327 - Administration and Security Credits: 3
- CPSC 450 - Internship Credits: Up to 12

One of:

- CPSC 358 - Simulation Credits: 3
- CPSC 456 - Introduction to Computer Graphics Credits: 3
- CPSC 466 - Compiler Design and Implementation Credits: 3
- CPSC 476 - Artificial Intelligence Credits: 3
- CPSC 478 - Analysis of Algorithms Credits: 3
- CPSC 498 - Selected Topics Credits: 1 to 3

Required Mathematics Courses - Credits: 15

Taking MATH131 will require an additional math course to bring this block up to 15 credits. Recommended courses are MATH231, 235, or 240.

- MATH 152 - Elementary Statistics I Credits: 3
or MGMT/ECON219 Business Statistics
- MATH 225 - Calculus I Credits: 4
- MATH 230 - Calculus II Credits: 4
- MATH 131 - Discrete Mathematics Credits: 3
or CPSC311 Discrete Structures

Required Science Courses - Credits: 7-8

Choose a two course sequence in Chemistry, Biology, Physics or Environmental Geoscience. See Major Curriculum Guide for course selections.

Additional Mathematics or Science Courses

Select additional Mathematics or Science courses to total 30 credits of combined Math/Science courses. See Major Curriculum Guide for course selections.

Information Systems (BS)

Computer Science Department

The major in information systems emphasizes applying computer technology to one of a choice of business fields. Courses cover fundamentals of information technology and programming skills to provide a foundation of essential conceptual knowledge and practical experience. The information systems major consists of a cluster of computer science courses, a cluster of mathematics courses, and a choice of one of the allied areas of specialization.

SRU Information Systems is accredited by the Computing Accreditation Commission of ABET, 111 Market Place Suite 1050, Baltimore, MD 21202, (410) 347-7700.

To graduate with the bachelor of science degree in information systems, the student must earn at least a 2.000 quality point average in courses in the major, and at least a 2.000 quality point average over all courses. The courses listed below as Other Required Courses are not included in the major quality point average. Courses taken elsewhere than Slippery Rock University are not counted in either quality point average.

Note: For transfer students to earn the bachelor of science degree with a major in information systems, the required course work for the major must include a minimum of three computer science courses (9 credits) at the 200-level or above, at least two of which must be at the 300 level or above, and completed at Slippery Rock University.

Requirements for the Major

Required Computer Science Courses - Credits: 31

- CPSC 130 - Introduction to Programming and Information Systems Credits: 3
- CPSC 140 - Introduction to Programming Principles Credits: 3
- CPSC 150 - Advanced Programming Principles Credits: 4
- CPSC 210 - Productivity Software Credits: 3
- CPSC 300 - Challenges of Computer Technology Credits: 3
- CPSC 323 - Data Base Systems Credits: 3
- CPSC 343 - File Processing Credits: 3
- CPSC 413 - Systems Analysis Credits: 3
- CPSC 423 - Computer Networks Credits: 3
- CPSC 443 - Software Project Management Credits: 3

Choose one course from the following for 3 credits

- CPSC 236 - Selected Computer Languages Credits: 3
- CPSC 305 - Introduction to Expert Systems Credits: 3
- CPSC 370 - Computer Organization Credits: 3
- CPSC 450 - Internship Credits: Up to 12

Required Mathematics - Credits: 7

- ECON 219 - Business Statistics Credits: 3
or MGMT 219 - Business Statistics
- CPSC 311 - Discrete Computational Structures Credits: 4
or MATH 225 - Calculus I

Required Business Environment Courses - 12 credits

- ACCT 209 - Financial Accounting Credits: 3
- ECON 201 - Principles of Macroeconomics Credits: 3
or ECON 202 - Principles of Microeconomics
- CPSC 365 - Management Information Systems Credits: 3
- MGMT 351 - Organizational Behavior Credits: 3

Required Electives: 6 credits

Choose any 2 upper division courses from a single area in the School of Business. See Major Curriculum Guide for course selections.

Information Technology (BS)

Computer Science Department

The Information Technology (IT) program provides students with an opportunity to examine information gathering, retrieval, management, and storage capabilities with respect to information technology. The program also provides students with tools and techniques needed for creating and maintaining highly interactive computer systems while strengthening the student's problem solving and critical thinking abilities. The scope of the program includes decision making, social and ethical professionalism, information management, incorporation of audio and video into software applications, computer networking, and system administration. Graduates of this program will possess technical abilities to maintain computing systems that are used not only by programmers and database managers, but also remotely by employees and often customers.

Graduation requirements for all students pursuing the bachelor of science degree with the major of information technology include a minimum of 2.000 quality point average in courses taken at Slippery Rock University that will fulfill the major requirements stated below under Required Courses and Required Electives, and a minimum 2.000 quality point average in all coursework completed at the university.

For transfer students to earn the bachelor of science degree with a major in information technology, the required coursework must include a minimum of four computer science courses (12 credits), at least two of which must be numbered 400 or above, completed at Slippery Rock University.

Requirements for the Major - Credits: 58

Required Courses - Credits: 46

- ART 114 - Basic Studio Digital Media Credits: 3
- COMM 258 - Interactive Multimedia I Credits: 3
- CPSC 130 - Introduction to Programming and Information Systems Credits: 3
- CPSC 140 - Introduction to Programming Principles Credits: 3
- CPSC 207 - System Software and Architecture for End Users Credits: 3
- CPSC 217 - Structured and Dynamic Web Programming Credits: 3
- CPSC 300 - Challenges of Computer Technology Credits: 3
- CPSC 311 - Discrete Computational Structures Credits: 4
- CPSC 317 - Scripting Languages Credits: 3
- CPSC 323 - Data Base Systems Credits: 3
- CPSC 327 - Administration and Security Credits: 3
- CPSC 413 - Systems Analysis Credits: 3
- CPSC 423 - Computer Networks Credits: 3
- CPSC 427 - Interface Design Credits: 3
- MATH 152 - Elementary Statistics I Credits: 3
or ECON/MGMT 219 Business Statistics

Electives - Credits: 6

Select 2 courses from one of the following areas:

Art:

- ART 214 - Art Synthesis Digital Media Credits: 3
- ART 314 - Advanced Studio Digital Media Credits: 3

Management:

- MGMT 351 - Organizational Behavior Credits: 3
Any MGMT course numbered 300 or above

Marketing:

- MRKT 330 - Principles of Marketing Credits: 3
Any MKTG course numbered 300 or above and

Select 2 Courses

1 must be numbered 300 or above:

- ART 214 - Art Synthesis Digital Media Credits: 3
- COMM 201 - Digital Imaging Credits: 3

- COMM 254 - Video Production Credits: 3
- COMM 359 - Interactive Multimedia II Credits: 3
- COMM 453 - Media Project Management Credits: 3
- CPSC 150 - Advanced Programming Principles Credits: 4
- CPSC 210 - Productivity Software Credits: 3
- CPSC 236 - Selected Computer Languages Credits: 3
- CPSC 301 - Practical Computer Security Credits: 3
- CPSC 343 - File Processing Credits: 3
- CPSC 443 - Software Project Management Credits: 3
- CPSC 450 - Internship Credits: Up to 12
- MGMT 365 - Management Information Systems Credits: 3
or CPSC 365
- PROF 205 - Accounting for Decision Makers Credits: 3

Minor in Computer Science

Computer Science Department

For transfer students to earn a minor in computer science, the required course work for the minor must include a minimum of four computer science courses (12 credits) at the 200 level or above, at least two of which must be at the 400 level and completed at Slippery Rock University.

Requirements for the Minor in Computer Science - Credits: 19

Minor in computer science requires a minimum 2.000 quality point average in computer science courses completed at Slippery Rock University to fulfill course requirements of the minor.

Required Courses

- CPSC 140 - Introduction to Programming Principles Credits: 3
- CPSC 150 - Advanced Programming Principles Credits: 4
- CPSC 374 - Algorithms and Data Structures Credits: 3
- CPSC 376 - Programming Languages Credits: 3

Two Courses (6 Credits) from the Following:

At least one of the courses taken must be a 300 or 400 level.

- CPSC 217 - Structured and Dynamic Web Programming Credits: 3
- CPSC 236 - Selected Computer Languages Credits: 3
- CPSC 317 - Scripting Languages Credits: 3
- CPSC 323 - Data Base Systems Credits: 3
- CPSC 358 - Simulation Credits: 3
- CPSC 370 - Computer Organization Credits: 3
- CPSC 378 - Theory of Computation Credits: 3
- CPSC 423 - Computer Networks Credits: 3

- CPSC 450 - Internship Credits: Up to 12
Maximum of three credits in CPSC 450 permitted.
- CPSC 456 - Introduction to Computer Graphics Credits: 3
- CPSC 464 - Principles of Concurrent Programming and Operating Systems Credits: 3
- CPSC 466 - Compiler Design and Implementation Credits: 3
- CPSC 474 - Computer Architecture Credits: 3
- CPSC 476 - Artificial Intelligence Credits: 3
- CPSC 478 - Analysis of Algorithms Credits: 3
- CPSC 488 - Software Engineering Credits: 3
- CPSC 498 - Selected Topics Credits: 1 to 3

Minor in Information Systems

Computer Science Department

Requirements for the Minor in Information Systems - Credits: 24

Minor in information systems requires a minimum 2.000 quality point average in the courses completed at Slippery Rock University to fulfill course requirements of the minor

A minimum of nine credits must be upper division (numbered 300 or above). Four credits must be outside the student's major requirements and electives.

For transfer students to earn a minor in information systems, the required course work for the minor must include a minimum of four courses (12 credits) completed at Slippery Rock University. Of these four courses at least two must be in computer science one of which must be from CPSC 305, CPSC 343, or CPSC 413.

Required Courses

- ACCT 209 - Financial Accounting Credits: 3
- ACCT 330 - Accounting Information Systems Credits: 3
or MGMT/CPSC 365 - Management Information Systems
- COMM 215 - Small Group Communication Credits: 3
or COMM 318 - Professional Presentation
- CPSC 130 - Introduction to Programming and Information Systems Credits: 3
or CPSC 140 - Introduction to Programming Principles
- CPSC 210 - Productivity Software Credits: 3
- CPSC 300 - Challenges of Computer Technology Credits: 3
or CPSC 305 - Introduction to Expert Systems or COMM 480 - The Communication Age
- CPSC 323 - Data Base Systems Credits: 3
- ECON 201 - Principles of Macroeconomics Credits: 3

Minor in Information Technology

Computer Science Department

Minor in information technology requires a minimum 2.000 quality point average in the courses completed at Slippery Rock University to fulfill course requirements of the minor.

A minimum of nine credits must be upper division (numbered 300 or above). At least 4 credits must be outside the student's major area requirements or electives counted toward the student's major.

For transfer students to earn a minor in information technology, the required course work for the minor must include a minimum of four courses (12 credits) completed at Slippery Rock University. Of these four courses at least two must be in computer science one of which must be at 300-level or higher.

Requirements for the Minor in Information Technology - Credits: 24

Minor in information technology requires a minimum 2.000 quality point average in the courses completed at Slippery Rock University to fulfill course requirements of the minor.

Required Courses:

- CPSC 130 - Introduction to Programming and Information Systems Credits: 3
- CPSC 140 - Introduction to Programming Principles Credits: 3
- CPSC 207 - System Software and Architecture for End Users Credits: 3
- CPSC 217 - Structured and Dynamic Web Programming Credits: 3
- CPSC 317 - Scripting Languages Credits: 3

Two Courses - Credits: 6

- CPSC 300 - Challenges of Computer Technology Credits: 3
- CPSC 327 - Administration and Security Credits: 3
- CPSC 413 - Systems Analysis Credits: 3
- CPSC 423 - Computer Networks Credits: 3
- CPSC 427 - Interface Design Credits: 3
- CPSC 443 - Software Project Management Credits: 3
- CPSC 450 - Internship Credits: Up to 12
- MGMT 365 - Management Information Systems Credits: 3
or CPSC 365

One Additional Course

3 Credits from:

- ART 114 - Basic Studio Digital Media Credits: 3
- ART 214 - Art Synthesis Digital Media Credits: 3
- COMM 201 - Digital Imaging Credits: 3
- COMM 254 - Video Production Credits: 3
- COMM 258 - Interactive Multimedia I Credits: 3
- COMM 350 - Editing for Video Credits: 3
- COMM 359 - Interactive Multimedia II Credits: 3
- CPSC 150 - Advanced Programming Principles Credits: 4
- CPSC 210 - Productivity Software Credits: 3
- CPSC 300 - Challenges of Computer Technology Credits: 3

- CPSC 323 - Data Base Systems Credits: 3
- CPSC 327 - Administration and Security Credits: 3
- CPSC 343 - File Processing Credits: 3
- CPSC 413 - Systems Analysis Credits: 3
- CPSC 423 - Computer Networks Credits: 3
- CPSC 427 - Interface Design Credits: 3
- CPSC 450 - Internship Credits: Up to 12
- ECON 219 - Business Statistics Credits: 3
or MGMT 219 - Business Statistics
- MATH 152 - Elementary Statistics I Credits: 3
- MGMT 351 - Organizational Behavior Credits: 3
- MGMT 365 - Management Information Systems Credits: 3
or CPSC 365 - Management Information Systems
- MGMT 465 - Management of Information Technology Credits: 3
- MRKT 330 - Principles of Marketing Credits: 3
- PROF 205 - Accounting for Decision Makers Credits: 3

Criminology and Criminal Justice

Criminology and Criminal Justice

004 Spotts World Culture Building
724-738-2084

Chair

Katherine Hardesty

Secretary

Kathleen Dombeck

Faculty

David Champion, Richard Gigliotti, Katherine Hardesty, Patrick Harvey, D. Neil McEwen, Jon McLister, Youngyol Yim Schanz, Rebecca Schnupp

The Department of Criminology and Criminal Justice is dedicated to the education of its students through development of critical thinking skills, deeper understanding of the diversity of society, and the advancement of ethical thought and practices in the pursuit of criminal and social justice.

The BA in Criminology and Criminal Justice provides a foundation of knowledge for students interested in a variety of careers both in and out of the formal justice system. This degree program covers criminological theory, policing, courts and adjudication, corrections, research methodology, justice administration and special topics of criminal justice. The BA in Criminology and Criminal Justice prepares students for careers in law enforcement, corrections, juvenile casework, probation, parole, and other careers in the criminal justice system. It also provides a foundation for students who wish to pursue advanced degrees in the study of criminology and justice studies.

Majors

- Criminology and Criminal Justice (BA)

Minors

- Minor in Criminology

Specialization

- Community Corrections

Community Corrections (Optional Specialization for Criminology and Criminal Justice majors)

Criminology and Criminal Justice Department

Optional Specialization: This specialization is not part of the above major core/cognates. This specialization can be taken as part of the free electives component for interested Criminology majors.

Required Courses - 15 credits

- CRIM 321 - Criminal Justice interventions 1 Credits: 3
- CRIM 322 - Criminal Justice Interventions 2 Credits: 3
- CRIM 416 - Community Corrections Credits: 3
- PSYC 276 - Introduction to Abnormal Psychology Credits: 3
Or SOWK334, Theoretical Perspectives on Mental Dysfunction
- PSYC 321 - Drugs and Behavior Credits: 3

Criminology and Criminal Justice (BA)

Criminology and Criminal Justice Department

The BA in Criminology and Criminal Justice provides a foundation of knowledge for students interested in a variety of careers both in and out of the formal justice system. This degree program covers criminological theory, policing, courts and adjudication, corrections, research methodology, justice administration and special topics of criminal justice. The BA in Criminology and Criminal Justice prepares students for careers in law enforcement, corrections, juvenile casework, probation, parole, and other careers in the criminal justice system. It also provides a foundation for students who wish to pursue advanced degrees in the study of criminology and justice studies.

Requirements for the Major

Core Courses - Credits: 21

- CRIM 205 - Introduction to Criminology and Criminal Justice Systems Credits: 3
- CRIM 273 - American Corrections Credits: 3
- CRIM 301 - Theoretical Criminology Credits: 3
- CRIM 317 - Statistical Methods Credits: 3
or SASW317
or PROF317
- CRIM 318 - Research Methods Credits: 3

or SOWK318

- CRIM 360 - Police and Society Credits: 3
- CRIM 404 - Adjudication in Crime and Justice Credits: 3

Cognates - Credits: 9

- CRIM 105 - Human Diversity Credits: 3
or SOWK105
- CRIM 345 - Juvenile Delinquency Credits: 3
- CRIM 408 - Capstone: Ethics and Criminal Justice Credits: 3

Major Electives - Credits: 9

Choose 9 credits from the following courses. Students may take either CRIM321 or SOWK355; CRIM322 or SOWK356 as part of the 9 credits required.

- CRIM 321 - Criminal Justice interventions 1 Credits: 3
- CRIM 322 - Criminal Justice Interventions 2 Credits: 3
- CRIM 333 - Crime, Justice and Society Credits: 3
- CRIM 343 - Criminal Investigations Credits: 3
- CRIM 380 - Women & the Criminal Justice System Credits: 3
- CRIM 414 - Criminal Justice Policy Credits: 3
- CRIM 416 - Community Corrections Credits: 3
- CRIM 450 - Internship Credits: Up to 12
- CRIM 498 - Selected Topics Credits: 1 to 3
- PSYC 302 - Psychology of Criminal Behavior Credits: 3
- SOWK 200 - Introduction to Child Welfare Credits: 3
- SOWK 355 - Social Work Methods I Credits: 3
- SOWK 356 - Social Work Methods II Credits: 3

Community Corrections Specialization - 15 credits

Optional Specialization: This specialization is not part of the above major core/cognates. This specialization can be taken as part of the free electives component for Criminology majors.

- CRIM 321 - Criminal Justice interventions 1 Credits: 3
- CRIM 322 - Criminal Justice Interventions 2 Credits: 3
- CRIM 416 - Community Corrections Credits: 3
- PSYC 276 - Introduction to Abnormal Psychology Credits: 3
Or SOWK334, Theoretical Perspectives on Mental Dysfunction
- PSYC 321 - Drugs and Behavior Credits: 3

Minor in Criminology

Criminology and Criminal Justice Department

Requirements for the Minor - Credits: 18

Required Courses - Credits: 15

- CRIM 205 - Introduction to Criminology and Criminal Justice Systems Credits: 3
- CRIM 273 - American Corrections Credits: 3
- CRIM 333 - Crime, Justice and Society Credits: 3
- CRIM 360 - Police and Society Credits: 3
- CRIM 404 - Adjudication in Crime and Justice Credits: 3

Electives - Credits: 3

(3 credits from the following courses):

- CRIM 343 - Criminal Investigations Credits: 3
- CRIM 345 - Juvenile Delinquency Credits: 3
- CRIM 390 - Experimental Credits: 3
- CRIM 414 - Criminal Justice Policy Credits: 3
- CRIM 498 - Selected Topics Credits: 1 to 3
- NURS 451 - Internship in Correctional Nursing Credits: 6
- PSYC 302 - Psychology of Criminal Behavior Credits: 3
- SOWK 200 - Introduction to Child Welfare Credits: 3

Military Science (Army ROTC)

101 Strain Behavioral Science Building
724-738-2019

Military Science Department

Chair

LTC Patrick A. Callahan

Secretary

Deborah Kosciuszko

Faculty

CPT Richard G. Coleman, Jr.

MSG Christopher D. Wolf

SFC Ricardo R. Saspe

SFC Eddy L. Simpson

In 1981, Slippery Rock University was authorized as a Senior Reserve Officer's Training Corps (ROTC) unit. The Army ROTC program offers to both men and women the opportunity to learn and practice leadership and managerial techniques; to obtain credits, which count toward graduation; and to earn a commission as a Second Lieutenant in the U.S. Army upon completion of the program.

What is Army ROTC? It is a program that offers students the opportunity to graduate as officers and serve in the U.S. Army, the Army National Guard, or the U.S. Army Reserve.

Other Programs

- Army ROTC

Minors

- Minor in Leadership

Army ROTC

Army ROTC

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

Freshman Year - Total Hours: 6

- MS 100 - The American Military Experience Credits: 3
- MS 102 - Principles of Leadership Credits: 3

Sophomore Year - Total Hours: 6

- MS 201 - Basic Military Skills Credits: 3
- MS 202 - Intermediate Military Skills Credits: 3

Junior Year - Total Hours: 8

- MS 301 - Fundamentals of Tactical Operations Credits: 4
- MS 302 - Advanced Military Skills Credits: 4

Senior Year - Total Hours: 8

- MS 401 - Leadership Dimensions and Concepts Credits: 4
- MS 402 - Officership and the Profession of Arms Credits: 4

Required Course (Any Year)

- HIST 304 - American Military History Credits: 3

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 five-week 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 two-year program.

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.

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.

Minor in Leadership

Military Science Department

Students participating in the leadership minor curriculum are instilled with multiple leadership traits and abilities that are universally applicable. Students earning the Leadership Minor learn about organizational vision, purpose, direction, motivation, delegation, teambuilding, time management, decision making, and problem solving.

A student who completes the Advanced ROTC program can achieve three significant accomplishments during their collegiate career:

- A Bachelors of Science or Arts in the student's chosen major
- A Minor in Leadership
- A commission as a Second Lieutenant in the U.S. Army

The Leadership Minor requires completion of 25 credit hours, six of which are electives from among the departments of History, Management, Political Science, and Psychology. The heart of the Leadership Minor curriculum is the nationally accredited U.S. Army Officers curriculum.

Requirements for the Minor

Cadets can earn a Minor in Leadership by completing all of the Military Science courses, the Leadership Development and Assessment Course the summer prior to graduation, and two additional elective courses. Students interested in this program should contact the Department of Military Science for more information.

Core Courses - Credits: 19

- MS 102 - Principles of Leadership Credits: 3
- MS 301 - Fundamentals of Tactical Operations Credits: 4
- MS 302 - Advanced Military Skills Credits: 4
- MS 350 - ROTC Advanced Leadership Practicum Credits: 3
- MS 401 - Leadership Dimensions and Concepts Credits: 4
- MS 402 - Officership and the Profession of Arms Credits: 4

Elective Courses

Choose two from among the following:

- GES 105 - World Regional Geography Credits: 3
- HIST 151 - Ancient and Medieval World Credits: 3
- HIST 153 - Twentieth Century World Credits: 3
- HIST 203 - U.S. History Since 1900 Credits: 3
- HIST 304 - American Military History Credits: 3
- HIST 330 - Warfare in the Twentieth Century Credits: 3
- HIST 335 - Outstanding Americans Credits: 3
- MGMT 320 - Operations Management I Credits: 3
- MGMT 352 - Operations Management II Credits: 3
- MGMT 354 - Human Resources Management Credits: 3
- MGMT 457 - International Management Credits: 3
- POLS 220 - Foreign Policy Credits: 3
- POLS 321 - The Presidency Credits: 3

Professional Studies

Professional Studies

Empowering Futures

107 Spotts World Culture
724-738-4192

Chair

Joseph Lisciandro

Secretary

Pam Evans

Faculty

Kundan Bhatia, John Bavaro, Ahmad Khalili, Alice Kaiser-Drobney, Susan Lubinski, Srinivasa Mani, Larry McCarthy, Armand Policicchio, Lori Zulauf

The Department of Professional Studies offers majors in: Health Services Administration and Professional Studies and minors: Anthropology and Sociology.

Mission: Professional Studies provides individualized programs through unique and innovative educational, experiential, and civic opportunities.

Vision: Our vision is to be a compelling educational choice to empower an individual's future.

Majors

- Health Services Administration (BS)
- Professional Studies (BS)

Minors

- Minor in Anthropology
- Minor in Sociology
- Minor in Non-profit Leadership

Health Services Administration (BS)

Department of Professional Studies

A student pursuing a bachelor of science degree can choose to major in Health Services Administration. The Health Services Administration program prepares students to assume entry-level positions within a dynamic healthcare environment. It accomplishes this by providing an excellent foundation of relative coursework, structured extracurricular learning experiences, and a supervised internship.

Our students and graduates are prepared to assume a variety of employment opportunities within the healthcare field. Some examples of these opportunities include areas such as: hospitals, nursing homes, managed care companies, group practices, government agencies, health insurance companies, pharmaceutical companies, primary care centers, healthcare technology companies, retirement villages, medical supply companies, adult day care centers, senior centers, rehabilitation and specialty hospitals, and more. They are also prepared to enter highly selective and professional graduate studies.

The Future Healthcare Leaders of SRU is the student organization for Health Services Administration majors. It is affiliated with the national association known as the American College of Healthcare Executives. Students are encouraged to become active members of this association to help them advance their personal and academic goals. The organization is involved in providing many interesting local, regional, and national activities and events, such as field trips, an annual national conference held in Chicago, as well as other opportunities for networking and service-related activities. You can visit their web site at: <http://sru.collegiatelink.net>. (You may need to type "Future Healthcare Leaders" in the search engine to access the full link.)

Health Services Administration students who maintain a 2.5 QPA overall and in the major participate in a 12-week full-time administrative internship during the summer of their senior year. The internship is the capstone course that provides a linkage between the knowledge and theory obtained throughout the curriculum and the actual work environment. SRU students have been given excellent recommendations for graduate programs and employment following internships. In addition, many students have been offered employment as a result of their excellent performance during the internship.

Required Courses - Credits: 60

Health Services Administration Core - Credits: 30

- HSA 231 - The US Healthcare System Credits: 3
- HSA 332 - Health Services Planning and Evaluation Credits: 3
- HSA 335 - Current Topics in Health Care Credits: 3
- HSA 436 - Technology in Health Care Credits: 3
- HSA 437 - Financial Management of Healthcare Organizations Credits: 3
- HSA 439 - The Accreditation and Survey Process Credits: 3
- HSA 450 - Internship in Health Services Administration Credits: 12

Other Required Courses - Credits: 30

- ACCT 340 - Legal Environment or Business I Credits: 3
- COMM 231 - Introduction to Public Relations Credits: 3
- CPSC 210 - Productivity Software Credits: 3
- CPSC 323 - Data Base Systems Credits: 3
- ECON 219 - Business Statistics Credits: 3

- MGMT 351 - Organizational Behavior Credits: 3
- MGMT 354 - Human Resources Management Credits: 3
OR MGMT 451 - Employment Law
- MGMT 451 - Employment Law Credits: 3
- MRKT 330 - Principles of Marketing Credits: 3
- MATH 113 - Mathematics as a Liberal Art Credits: 3
or any higher level math course
- PROF 205 - Accounting for Decision Makers Credits: 3

Internship Required

A 12-week internship is required as a capstone experience prior to graduation. The internship provides opportunities to obtain practical experience, to network, and to identify potential employment opportunities.

Students are encouraged to maintain active membership in the SRU student chapter and the national chapter of the American College of Healthcare Executives and other professional associations based upon special interests. Invaluable opportunities exist within the organizations and they assist with socializing students into the profession and serve as an excellent opportunity to network with administrators in the field.

Minor in Anthropology

Department of Professional Studies

Requirements for the Minor in Anthropology - Credits: 18

- PROF 202 - Introduction to Anthropology Credits: 3
- PROF 211 - Physical Anthropology Credits: 3
- PROF 212 - Archaeology/World Prehistory Credits: 3
- PROF 319 - Anthropology Methods Credits: 3
- PROF 401 - Applied Anthropology Credits: 3

And One of the Following:

- GES 303 - Asia Credits: 3
- GES 308 - Europe Credits: 3
- GES 309 - Africa Credits: 3
- PROF 310 - Cultural Area Studies Credits: 3

Minor in General Sociology - Credits: 18

Department of Professional Studies

Requirements for the Minor - Credits: 18

Core Courses - Credits: 12

- PROF 201 - Principles of Sociology Credits: 3
- PROF 106 - Race and Ethnic Diversity in the USA Credits: 3
- PROF 304 - Urban Sociology Credits: 3
- PROF 317 - Statistics for the Social Sciences Credits: 3

Electives - Credits: 6

Select any two courses from the list below:

- PROF 226 - Population and Society Credits: 3
- PROF 309 - Health and Society Credits: 3
- PROF 321 - Minority Groups Credits: 3
- PROF 324 - The Family Credits: 3
- PROF 327 - Religion and Society Credits: 3
- PROF 339 - Gender Roles and Society Credits: 3

Minor in Nonprofit Leadership

Department of Professional Studies

The minor in nonprofit leadership 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.

Program Requirements

- PROF 205 - Accounting for Decision Makers Credits: 3
- PROF 220 - Introduction to Nonprofit Leadership Credits: 3
- PROF 320 - Community Change and Development Credits: 3
- PROF 325 - Social and Ethical Issues in Philanthropy and Fundraising Credits: 3
- PROF 450 - Internship Credits: Up to 12

And one of the following

- CDEV 248 - Human Development and Education Credits: 3
- PROF 106 - Race and Ethnic Diversity in the USA Credits: 3
- PROF 120 - Civic Engagement and Community Decision-Making Credits: 3

Professional Studies (BS)

Department of Professional Studies

The major in Professional Studies is an outcome based, degree completion program. This means there are no prescribed courses. Rather, in consultation with an advisor, professional studies majors select courses that demonstrate

competency in the following four areas: Oral and Written Communications, Interpersonal Skills and Civic Responsibility, Professional Skills/Personal Development, and Quantitative, Analytical, and Critical Thinking Skills.

The flexibility of the major affords students the opportunity to gain a quality education with the ability to focus on skills they will need in their chosen profession. As such, the professional studies major has wide appeal to a variety of careers. It is most applicable to those currently employed and desiring to further their career, technical school graduates, international students seeking to complete an American baccalaureate degree, and those wishing to enter Officer Candidate School. It is not intended for the traditional undergraduate student where a specialized degree is more appropriate, but many students may find it valuable as a second major.

(120 Credits)

Program Requirements – Credits: 120 (including transfer credits)

Core Courses - Credits: 15

At least 3 credits in each of the following areas:

Oral and Written Communication

Interpersonal Skills and Civic Responsibility

Analytical, Quantitative, and Critical Thinking Skills

Emphasis Area - Credits: 15

Safety Management

208 Strain Behavioral Science Building
724-738-2017

Safety Management

The mission of the Safety Management Major at Slippery Rock University is to provide a quality education in the managerial and technical aspects in the field of professional safety practice. Safety Management involves protecting and preserving people, property, and the environment.

Chair

Joseph Cali

Secretary

Patti Pink

Faculty

Angela Bernardo, Joseph Cali, Wilma Cavill, Terrence Lonchena, George Mihalik, Daniel Sherwin, Adelle M. Williams

The Department of Safety Management offers a bachelor of science with a major in Safety Management, and a certificate or minor in gerontology.

Major

- Safety Management (BS)

Minor

- Minor in Gerontology

Certificate Program

- Certificate in Gerontology

Certificate in Gerontology

Gerontology Program

Coordinator

Adelle Williams

“My experience with the SRU gerontology program fostered my interest in aging. The education was the key that unlocked the door to my career in gerontology.”

Michelle Zanicky Jamieson
December, 1992

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. Job opportunities for students who have academic preparation in gerontology are available in community agencies servicing the older adult, long term care facilities and hospitals, senior citizen living facilities, and community recreation and senior centers. The program is open to students in any major. Students may decide to complete the requirements for a certificate in gerontology or a gerontology minor.

The Student Gerontological Society provides students with opportunities to participate in the annual campus-wide Health Fest in October, community outreach activities, and program marketing as well as attend national and regional conferences. Sigma Phi Omega, the national honorary society in gerontology, recognizes students' exemplary scholastic accomplishments in the field of aging. Undergraduate students with a QPA of 3.300 or above (on a 4.000 scale) are eligible to apply.

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 to fulfill the certificate in gerontology. Students must assume responsibility for fulfilling all requirements for graduation.

Requirements for the Certificate

With the assistance of an advisor from the Gerontology Program, students will select four 3-credit courses approved from the gerontology specialization and will culminate their studies with a 3-credit internship related to their area of interest.

Minor in Gerontology

Gerontology Program

Coordinator

Adelle Williams

“My experience with the SRU gerontology program fostered my interest in aging. The education was the key that unlocked the door to my career in gerontology.”

Michelle Zanicky Jamieson
December, 1992

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. Job opportunities for students who have academic preparation in gerontology are available in community agencies servicing the older adult, long term care facilities and hospitals, senior citizen living facilities, and community recreation and senior centers. The program is open to students in any major. Students may decide to complete the requirements for a certificate in gerontology or a gerontology minor.

The Student Gerontological Society provides students with opportunities to participate in the annual campus-wide Health Fest in October, community outreach activities, and program marketing as well as attend national and regional conferences. Sigma Phi Omega, the national honorary society in gerontology, recognizes students' exemplary scholastic accomplishments in the field of aging. Undergraduate students with a QPA of 3.300 or above (on a 4.000 scale) are eligible to apply.

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 to fulfill the minor in gerontology. Students must assume responsibility for fulfilling all requirements for graduation.

Requirements for the Minor

Students must take a total of five 3-credit courses as well as a 3-credit internship related to major area of interest and involving the elderly unless they have taken such an internship in their major. Of the five required courses, one must be Aging and the Older Person (GERO 265), at least one course from the list of approved gerontology courses in the health science area, and one course from the psychological/sociological area.

To enter the gerontology program, students must submit an application form requiring the advisor's signature. A quality point average of 2.500 is required at the end of the semester prior to internship. Students are to notify the gerontology office when they have completed all of the requirements.

Safety Management (BS)

Safety Management Department

Chairperson

Joseph Cali

“Attending Slippery Rock University as a student-athlete shaped my future for success. The Safety and Environmental Management curriculum is recognized in interviews and is well-respected throughout the industry. The support provided during my stay at 'The Rock' has not ended with my diploma. Regardless of geographic region, Slippery Rock staff and alumni are willing to assist in any way. This is what sets 'The Rock' above any other university.”

Michael Welhorsky, '99

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 major is based on Safety Management concepts with technical elements incorporated throughout the curriculum. The Safety Management major at Slippery Rock University is an Institute for Safety and Health Management (ISHM) Board approved degree program.

Post Grad Certification

The B.S. in Safety Management degree is approved by the Institute for Safety and Health Management. Such recognition permits Slippery Rock University's Safety Management graduates to apply for the Associate Safety and Health Manager's (ASHM) designation. With two additional years of work experience, the graduate can seek the Certified Safety and Health Manager's (CSHM) designation. Individuals graduating from non-recognized programs must work five years before applying for certification. The Certified Safety and Health Manager (CSHM) is accredited by the Council on Engineering and Scientific Specialty Boards (CESB).

Career Opportunities

Upon completion of the degree, students are prepared for entry-to-mid-level administrative, managerial, and supervisory positions in the field of safety. Other options include: health care, insurance, manufacturing, chemical, consulting, higher education and government agencies. Additional options and positions include: risk control manager, safety consultant, safety coordinator, safety account manager, assistant safety representative, loss control representative, health and safety scientist, safety and environmental manager, safety engineer, regional safety coordinator, senior environmental engineer, corporate health and safety officer, regulatory compliance coordinator, and safety and health compliance officer.

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 12-week, 12-credit internship is offered only during the summer term, with the majority of interns receiving compensation.

Student Organizations

All students accepted into the safety management major are encouraged to be student members of both the American Society of Safety Engineers and the student section of ASSE at Slippery Rock University. Students are also encouraged to attend meetings, conferences, seminars, and workshops as part of their professional educational growth.

Center for Safety Management

Students enrolled in the safety major are provided a unique opportunity to access Slippery Rock University's Center for Safety and Environmental Management. Students are able to take advantage of the available certification course offerings and programs, such as Hazardous Waste Operations and Emergency Response, Permit Required Confined Space, Hazard Communication, Respiratory Protection, Blood-borne Pathogens, Asbestos, etc. There is no fee for students who enroll in these programs as long as they are in the undergraduate Safety Management degree program.

Contact the Department of Safety Management for the most current requirements.

Requirements for the Major - Credits: 63

Required Professional Courses:

- CHEM 104 - Introduction Chemistry I Credits: 3
or
- CHEM 107 - General Chemistry I Credits: 3
- MGMT 351 - Organizational Behavior Credits: 3
- MGMT 354 - Human Resources Management Credits: 3
- SAFE 118 - Introduction to Safety Credits: 3
- SAFE 218 - Hazard Analysis and Legislative Compliance Credits: 3
- SAFE 318 - Principles of Industrial Hygiene Credits: 3
- SAFE 319 - Principles of Industrial Hygiene II Credits: 3
- SAFE 328 - Comprehensive Emergency Management and Fire Services Credits: 3
- SAFE 338 - Ergonomics and Human Factors Credits: 3
- SAFE 348 - Hazardous Materials and Waste Management Credits: 3
- SAFE 358 - Construction Safety Credits: 3
- SAFE 368 - Injury and Damage Incidents Evaluation Credits: 3
- SAFE 408 - Contemporary Safety Topics and Issues Credits: 3
- SAFE 418 - Security in the Workplace Credits: 3
- SAFE 428 - Motor Transportation Fleet Safety Credits: 3
- SAFE 448 - Management and Integration of Safety Credits: 3
- SAFE 488 - Safety Training and Development Credits: 3
- SAFE 450 - Internship Credits: Up to 12

Internship Requirement

Each student is required to successfully complete a 12 credit (SAFE450), 480 hour internship in order to graduate with either a BS in Safety Management or a BS in Safety and Environmental Management. It is the student's responsibility to secure an internship site. Internship requirements are available from the Department of Safety Management. The internship will only be waived if a student prior to entering the Safety Major at Slippery Rock University has held a professional full-time position in the field of Safety (documentation required) or has a military commitment (documentation required). An Internship Resource Manual is available listing sites where students have completed Safety Internships in the past. Potential Internship employers also conduct interviews on campus. If a student fails to secure and complete an internship, they must change their major. The major that will assist the student who does not complete an internship in graduating is a BS Professional Studies.

School of Business

School of Business

110 Eisenberg Building
724-738-4865

Chair

David Culp

Assistant Chair

Anna Lusher

Secretaries

Danielle Bailey, Cathy Howryla

Faculty

Frances Amatucci, Michael Amspaugh, John Buttermore, Anindya Chatterjee, David Culp, Diane Galbraith, John Golden, Fusun Gonul, Richard Grimm, Alben Iossifova, Benjama Jirasakuldech, Ahmad Khalili, Anna Lusher, Donald Mong, Abbas Noorbakhsh, David Nugent, Bruce Orvis, Roger Solano, Pavani Tallapally, Frederick Tannery, Jesus Valencia, Theresa Wajda, Fred Webb, Jerome Zetts

Vision

Success starts here.

Mission

Helping students build strong foundations for successful careers:

- Written communication skills
- Oral communication skills
- Critical thinking and problem solving
- Teamwork
- Professional proficiency

The School of Business supports this mission through a focus on:

- Globalism
- Technology
- Interpersonal skills
- Ethical decision making
- Student engagement
- Experiential learning
- Sustainability
- Entrepreneurship
- Leadership

Slippery Rock University's School of Business, as part of the College of Business, Information, and Social Sciences, exists to serve students interested in business careers and to equip them with the necessary knowledge and skills to become the business leaders of tomorrow. The School of Business offers the Bachelor of Science in Business Administration (BSBA) degree in five majors: accounting, economics, finance, management, and marketing. Students in all five majors complete a core of business courses designed to provide them with a solid foundation in the main functional areas of business.

Graduation requirements for all students pursuing the BSBA degree include a minimum 2.000 quality point average in courses designated as the BSBA core, a minimum 2.500 quality point average in courses constituting the major field of

study (accounting, economics, finance, management, and marketing), and a minimum 2.000 quality point average in all coursework taken at Slippery Rock University. Transfer students must earn at least 30 credits in business courses at Slippery Rock University in order to be eligible for the degree. (Twelve of these credits must apply to the students' major in the degree.)

All students must complete at least 48 hours of upper division courses for graduation.

BSBA Core Course Requirements (45 credits)

Note: For detailed course information see the Course Descriptions section of this catalog or the program of interest.

Required BSBA Core Courses (39 credits): ACCT 209, ACCT 210, ACCT 340, ECON 201, ECON 202, ECON or MGMT 219, FIN303, FIN 320, MGMT 351, MRKT 330, MGMT 320, MGMT 365 or CPSC 365, MGMT 458.

Required Non-Business Courses (6 credits): CPSC 210, MATH 123 or MATH 225.

In addition to the business core, students are required to complete courses in their chosen major (accounting: 24 credits; economics: 18 credits; finance: 18 credits; management: 21 credits, and marketing: 18 credits.)

Requirements for Minor in Business Administration (for students who are not pursuing a BSBA degree)

Required Courses (24 credits): ACCT 209, ECON 201 or ECON 202, MGMT 351, MRKT 330, and twelve additional credits selected from the 200-, 300-, or 400-level courses in any business discipline. At least six credits must be courses at the 300 or 400 level. At least 4 credits must be taken that do not count in the students' major.

Students pursuing a minor in business administration must maintain a minimum QPA of 2.000 in all business courses taken at Slippery Rock University.

Certificate Programs

- Certificate in Accounting

Majors

- Accounting (BSBA)
- Economics (BSBA)
- Finance (BSBA)
- Management (BSBA)
- Marketing (BSBA)

Minor for Non-Majors

Minor in Business Administration (non-BSBA)

Minors for BSBA Majors

- Minor in Accounting (BSBA)
- Minor in Economics (BSBA)
- Minor in Finance (BSBA)
- Minor in Management (BSBA)
- Minor in Marketing (BSBA)

Accounting (BSBA)

School of Business

A student pursuing a bachelor of science in business administration degree can choose to major in accounting. The program in accounting at Slippery Rock University serves to develop its majors into professional accountants who can function effectively in public accounting, government, and industry. The curriculum focuses on the development of the student's business and accounting knowledge as well as key communication and computing skills. Emphasis is placed on passing the professional certification examinations (CPA, CMA, CFM, and CIA). Student professional growth is encouraged and enhanced through participation in the student chapter of the Institute of Management Accountants and through participation in the internship program in the School of Business.

A certificate in accounting program provides the opportunity for individuals with or without a baccalaureate degree to advance their employment potential by developing expertise and technical skills in the challenging and rewarding field of accounting.

Requirements for the Major

Required BSBA Core Courses - Credits: 39

- ACCT 209 - Financial Accounting Credits: 3
- ACCT 210 - Managerial Accounting Credits: 3
- ACCT 340 - Legal Environment or Business I Credits: 3
- ECON 201 - Principles of Macroeconomics Credits: 3
- ECON 202 - Principles of Microeconomics Credits: 3
- FIN 303 - Issues in Global Business Credits: 3
- FIN 320 - Managerial Finance Credits: 3
- MGMT 219 - Business Statistics Credits: 3
or ECON 219
- MGMT 320 - Operations Management I Credits: 3
- MGMT 351 - Organizational Behavior Credits: 3
- MGMT 365 - Management Information Systems Credits: 3
OR CPSC 365 - Management Information Systems
- MGMT 458 - Integrated Business Policy Credits: 3
- MRKT 330 - Principles of Marketing Credits: 3

Accounting Major - Credits: 24

- ACCT 308 - Federal Individual Income Tax Credits: 3
- ACCT 310 - Cost Accounting Credits: 3
- ACCT 313 - Intermediate Accounting I Credits: 3
- ACCT 314 - Intermediate Accounting II Credits: 3
- ACCT 330 - Accounting Information Systems Credits: 3
- ACCT 411 - Auditing Theory and Practice Credits: 3
- ACCT 413 - Advanced Accounting Credits: 3

Choose one Accounting Elective from the list below:

- ACCT 311 - Federal Corporate and Transfer Taxes Credits: 3
- ACCT 341 - Legal Environment of Business II Credits: 3
- ACCT 412 - Accounting Seminar Credits: 3
- ACCT 450 - Internship Credits: Up to 12
- FIN 321 - Investments Credits: 3
- FIN 323 - Financial Markets and Institutions Credits: 3
- FIN 409 - Retirement and Estate Planning Credits: 3

Other Required Courses - Credits: 6

- CPSC 210 - Productivity Software Credits: 3
- MATH 123 - Introduction to Applied Calculus Credits: 3
or MATH225 Calculus I

Certificate in Accounting

School of Business

This certificate permits students interested in a career as a Certified Public Accountant who have a non-accounting bachelors' 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 CPA exam.

Program Prerequisite or Co-requisite: Bachelor's Degree

Program Requirement: The Certificate in Accounting will be awarded upon successful completion of approved coursework with a 2.5 QPA for all courses taken at SRU. Students must complete a minimum of 12 hours of coursework at SRU.

Program of study will include 30 hours selected from the following courses:

Related Business Courses:

- CPSC 210 - Productivity Software Credits: 3
- ECON 219 - Business Statistics Credits: 3
- ECON 202 - Principles of Microeconomics Credits: 3
- FIN 320 - Managerial Finance Credits: 3
- MGMT 351 - Organizational Behavior Credits: 3

Accounting Courses

- ACCT 209 - Financial Accounting Credits: 3
- ACCT 210 - Managerial Accounting Credits: 3
- ACCT 308 - Federal Individual Income Tax Credits: 3
- ACCT 310 - Cost Accounting Credits: 3
- ACCT 313 - Intermediate Accounting I Credits: 3
- ACCT 314 - Intermediate Accounting II Credits: 3

- ACCT 330 - Accounting Information Systems Credits: 3
- ACCT 340 - Legal Environment or Business I Credits: 3
 - Approved 300/400 Accounting or Finance course
- ACCT 411 - Auditing Theory and Practice Credits: 3
- ACCT 413 - Advanced Accounting Credits: 3

Economics (BSBA)

School of Business

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 well-being. 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-of-classroom experience, develop a sense of professional common bond and group support among themselves and create a network with off-campus 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.

Requirements for the Major

Required BSBA Core Courses - Credits: 39

- ACCT 209 - Financial Accounting Credits: 3
- ACCT 210 - Managerial Accounting Credits: 3
- ACCT 340 - Legal Environment or Business I Credits: 3
- ECON 201 - Principles of Macroeconomics Credits: 3
- ECON 202 - Principles of Microeconomics Credits: 3
- ECON 219 - Business Statistics Credits: 3
or MGMT 219
- FIN 303 - Issues in Global Business Credits: 3
- FIN 320 - Managerial Finance Credits: 3
- MGMT 219 - Business Statistics Credits: 3
or ECON 219
- MGMT 320 - Operations Management I Credits: 3
- MGMT 351 - Organizational Behavior Credits: 3

- MGMT 365 - Management Information Systems Credits: 3
OR CPSC 365 - Management Information Systems
- MGMT 458 - Integrated Business Policy Credits: 3
- MRKT 330 - Principles of Marketing Credits: 3

Required Major Courses - Credits: 18

- ECON 301 - Macroeconomic Analysis Credits: 3
- ECON 302 - Microeconomic Analysis Credits: 3
- ECON 304 - Money and Banking Credits: 3
or FIN 323 - Financial Markets and Institutions
- ECON 326 - International Economics Credits: 3

And 2 Elective Courses

Elective courses are selected from any 300-400 level economic courses excluding internship.

Other Required Courses - Credits: 6

- CPSC 210 - Productivity Software Credits: 3
- MATH 123 - Introduction to Applied Calculus Credits: 3
or MATH225 Calculus I

Finance (BSBA)

School of Business

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.

Requirements for the Major

Required BSBA Core Courses - Credits: 39

- ACCT 209 - Financial Accounting Credits: 3
- ACCT 210 - Managerial Accounting Credits: 3
- ACCT 340 - Legal Environment or Business I Credits: 3
- ECON 201 - Principles of Macroeconomics Credits: 3
- ECON 202 - Principles of Microeconomics Credits: 3
- ECON 219 - Business Statistics Credits: 3
or MGMT 219
- FIN 303 - Issues in Global Business Credits: 3
- FIN 320 - Managerial Finance Credits: 3
- MGMT 320 - Operations Management I Credits: 3
- MGMT 351 - Organizational Behavior Credits: 3
- MGMT 365 - Management Information Systems Credits: 3
OR CPSC 365 - Management Information Systems
- MGMT 458 - Integrated Business Policy Credits: 3
- MRKT 330 - Principles of Marketing Credits: 3

Required Major Courses

- FIN 321 - Investments Credits: 3
- FIN 323 - Financial Markets and Institutions Credits: 3
- FIN 326 - Intermediate Corporate Finance Credits: 3
- FIN 427 - International Financial Management Credits: 3

Two Elective Courses - Credits: 6

Elective courses are selected from other 300- and 400-level Finance courses, and/or including the following:

- ECON 301 - Macroeconomic Analysis Credits: 3
- ECON 302 - Microeconomic Analysis Credits: 3
- FIN 341 - Entrepreneurial Finance Credits: 3
- FIN 450 - Internship Credits: Up to 12

Other Required Courses - Credits: 6

- CPSC 210 - Productivity Software Credits: 3
- MATH 123 - Introduction to Applied Calculus Credits: 3
or MATH225 Calculus I

Management (BSBA)

A student pursuing a bachelor of science in business administration degree can choose to major in management. This program focuses on the process of working with and through others to achieve organizational objectives. Today's manager must effectively plan, organize, lead and make decisions in an increasingly complex, changing environment.

The management students learn to make decisions regarding production, personnel, and overall strategy within the organization, considering the need to be responsive to growing societal demands, international competition and the multicultural nature of today's work force. The program is relevant to students who plan to own, manage, or consult for any organization, large or small, public or private, profit or nonprofit.

Requirements for the Major

Required BSBA Core Courses - Credits: 39

- ACCT 209 - Financial Accounting Credits: 3
- ACCT 210 - Managerial Accounting Credits: 3
- ACCT 340 - Legal Environment or Business I Credits: 3
- ECON 201 - Principles of Macroeconomics Credits: 3
- ECON 202 - Principles of Microeconomics Credits: 3
- ECON 219 - Business Statistics Credits: 3
or MGMT 219 - Business Statistics
- FIN 303 - Issues in Global Business Credits: 3
- FIN 320 - Managerial Finance Credits: 3
- MGMT 320 - Operations Management I Credits: 3
- MGMT 351 - Organizational Behavior Credits: 3
- MGMT 365 - Management Information Systems Credits: 3
OR CPSC 365 - Management Information Systems
- MGMT 458 - Integrated Business Policy Credits: 3
- MRKT 330 - Principles of Marketing Credits: 3

Required Major Courses - Credits: 12

- MGMT 354 - Human Resources Management Credits: 3
- MGMT 454 - Management Seminar Credits: 3
- MGMT 457 - International Management Credits: 3
- MGMT 456 - Management and Society Credits: 3

Management Electives - Credits: 9

Choose 3 courses from below

- MGMT 341 - Organizational Leadership Credits: 3
- MGMT 352 - Operations Management II Credits: 3
- MGMT 357 - International Operations Management Credits: 3
- MGMT 360 - Total Quality Management Credits: 3
- MGMT 364 - Recruitment and Selection Credits: 3
- MGMT 370 - Entrepreneurship and Innovation Credits: 3
- MGMT 450 - Internship Credits: Up to 12

- MGMT 451 - Employment Law Credits: 3
- MGMT 452 - Management-Labor Relations Credits: 3
- MGMT 455 - Compensation Management Credits: 3
- MGMT 456 - Management and Society Credits: 3
- MGMT 460 - Training and Development Credits: 3
- MGMT 459 - Small Business Institute Credits: 3

Other Required Courses - Credits: 6

- CPSC 210 - Productivity Software Credits: 3
- MATH 123 - Introduction to Applied Calculus Credits: 3
or MATH225 Calculus I

Marketing (BSBA)

School of Business

A student pursuing a bachelor of science in business administration degree can choose to major in marketing. The study of marketing involves the dynamic process by which persons and organizations strive to anticipate and satisfy consumers' needs and wants. In a free enterprise system, this is accomplished through marketing research, product planning, pricing, promotion, and distribution.

The marketing student develops an understanding of the concepts, functions and institutions of marketing, an appreciation of the consumer orientation, the skills to analyze and the ability to formulate marketing policies. The marketing major is particularly relevant to the student planning a career in sales, advertising, consumer relations, merchandising, brand management, marketing management, marketing research, retailing services, purchasing, business logistics, small business operations, executive management, consulting, business education, or employment in certain government agencies as well as many non-profit organizations.

Requirements for the Major

Required BSBA Core Courses - Credits: 39

- ACCT 209 - Financial Accounting Credits: 3
- ACCT 210 - Managerial Accounting Credits: 3
- ACCT 340 - Legal Environment or Business I Credits: 3
- ECON 201 - Principles of Macroeconomics Credits: 3
- ECON 202 - Principles of Microeconomics Credits: 3
- ECON 219 - Business Statistics Credits: 3
or MGMT 219 - Business Statistics
- FIN 303 - Issues in Global Business Credits: 3
- FIN 320 - Managerial Finance Credits: 3
- MGMT 320 - Operations Management I Credits: 3
- MGMT 351 - Organizational Behavior Credits: 3
- MGMT 365 - Management Information Systems Credits: 3
OR CPSC - Management Information Systems

- MGMT 458 - Integrated Business Policy Credits: 3
- MRKT 330 - Principles of Marketing Credits: 3

Other Required Courses - Credits: 6

- CPSC 210 - Productivity Software Credits: 3
- MATH 123 - Introduction to Applied Calculus Credits: 3
or higher Math

Required Marketing Major Courses - Credits: 18

- MRKT 332 - Business Marketing Credits: 3
- MRKT 333 - Consumer Behavior Credits: 3
- MRKT 430 - Marketing Research Credits: 3
- MRKT 431 - Marketing Seminar Credits: 3
- MRKT 437 - International Marketing Credits: 3

Choose one of the following:

- MGMT 370 - Entrepreneurship and Innovation Credits: 3
- MRKT 331 - Distribution Management Credits: 3
- MRKT 334 - Advertising Management Credits: 3
- MRKT 335 - Retail Management Credits: 3
- MRKT 336 - Sales Management Credits: 3
- MRKT 338 - E-Commerce Credits: 3
- MRKT 450 - Internship Credits: Up to 12

Minor in Accounting (BSBA)

School of Business

Required BSBA Core Courses - Credits: 21

- ACCT 310 - Cost Accounting Credits: 3
- ACCT 313 - Intermediate Accounting I Credits: 3
- ACCT 314 - Intermediate Accounting II Credits: 3
- FIN 320 - Managerial Finance Credits: 3
- MGMT 320 - Operations Management I Credits: 3
- MGMT 351 - Organizational Behavior Credits: 3
- MRKT 330 - Principles of Marketing Credits: 3

And One of the Following Courses:

- ACCT 308 - Federal Individual Income Tax Credits: 3
- ACCT 330 - Accounting Information Systems Credits: 3

- ACCT 411 - Auditing Theory and Practice Credits: 3

Minor in Business Administration (non-BSBA)

School of Business

Requirements for the Minor - Credits: 24

- ACCT 209 - Financial Accounting Credits: 3
- ECON 201 - Principles of Macroeconomics Credits: 3
OR ECON 202 - Principles of Microeconomics
- MGMT 351 - Organizational Behavior Credits: 3
- MRKT 330 - Principles of Marketing Credits: 3

Electives - Credits: 12

Select twelve additional credits from the 200-, 300-, or 400-level courses in any business discipline. At least six credits must be at the 300 or 400 level. Four credits in minor must be outside major.

Minor in Economics

School of Business

Students pursuing a minor in economics must maintain a minimum QPA of 2.000 in all business courses taken at Slippery Rock University.

Required BSBA Core Courses - Credits: 24

- ECON 301 - Macroeconomic Analysis Credits: 3
- ECON 302 - Microeconomic Analysis Credits: 3
- FIN 320 - Managerial Finance Credits: 3
- MGMT 320 - Operations Management I Credits: 3
- MGMT 351 - Organizational Behavior Credits: 3
- MRKT 330 - Principles of Marketing Credits: 3

And Two 300 or 400 Level Economics Courses

Minor in Finance

School of Business

Students pursuing a minor in finance must maintain a minimum QPA of 2.000 in all business courses taken at Slippery Rock University.

Required BSBA Core Courses - Credits: 24

- FIN 320 - Managerial Finance Credits: 3
- FIN 321 - Investments Credits: 3
- FIN 323 - Financial Markets and Institutions Credits: 3
- FIN 327 - Management of Working Capital Credits: 3
- FIN 328 - Long Term Financial Management Credits: 3
- MGMT 320 - Operations Management I Credits: 3
- MGMT 351 - Organizational Behavior Credits: 3
- MRKT 330 - Principles of Marketing Credits: 3

Minor in Management (BSBA) - Credits: 24

School of Business

Required BSBA Core Courses - Credits: 21

- FIN 320 - Managerial Finance Credits: 3
- MGMT 320 - Operations Management I Credits: 3
- MGMT 351 - Organizational Behavior Credits: 3
- MGMT 352 - Operations Management II Credits: 3
- MGMT 354 - Human Resources Management Credits: 3
- MGMT 457 - International Management Credits: 3
- MRKT 330 - Principles of Marketing Credits: 3

One of any 300- or 400-Level Management Courses - Credits: 3

Minor in Marketing (BSBA) - Credits: 24

School of Business

Students pursuing a minor in marketing must maintain a minimum QPA of 2.000 in all business courses taken at Slippery Rock University.

Required BSBA Core Courses - Credits: 21

- FIN 320 - Managerial Finance Credits: 3
- MGMT 320 - Operations Management I Credits: 3
- MGMT 351 - Organizational Behavior Credits: 3
- MRKT 330 - Principles of Marketing Credits: 3
- MRKT 332 - Business Marketing Credits: 3
- MRKT 333 - Consumer Behavior Credits: 3
- MRKT 437 - International Marketing Credits: 3

And One of Any 300- or 400-Level Marketing Courses - Credits: 3

College of Education

105 McKay Education Building
724-738-2007

The mission of the Slippery Rock University College of Education is to prepare educators and related professionals for service in a diverse global community. Within this context, teaching, scholarship and service are viewed as a triad, in which teaching is enlightened by scholarship and applied through service.

Interim Dean

Kathleen Strickland

Assistant to the Dean

Herbert Hunt

Administrative Assistant

Michelle Houston

Management Technician

Charlene Winslow

Departments

Counseling and Development
Elementary Education/Early Childhood Education
Physical Education
Secondary Education/Foundations of Education
Special Education
Sport Management

Slippery Rock University of Pennsylvania has been preparing teachers since 1889, when it began as a state normal school and developed through the years as a state teachers college and state college. Now, as a unit within a multi-purpose university, the College of Education programs are the largest segment of the student population. The near ideal enrollment of the college, the student/professor ratio, and dedication of the faculty enable us to continually prepare teachers for Pennsylvania, the nation, and the international community. The College consists of the departments of Counseling and Development, Elementary and Early Childhood Education, Physical Education, Secondary Education and Foundations of Education, Special Education, and Sport Management. In addition, School Nurse and Music Education are majors that lead to teacher certification, but are offered through other colleges within the university. These major fields of study are described as programs according to each administering department. The guidelines included below apply to all department programs; additional, more specific guidelines are provided for each individual program.

Teacher Education

The College of Education provides programs for the preparation of teachers for elementary and secondary schools. These programs are accredited by the National Council for the Accreditation of Teacher Education (NCATE), the respective learned societies (specialty program areas) for each program, the Middle States Association, and the Pennsylvania Department of Education. Additional certification programs (music education and school nurse) are offered in cooperation with the College of Humanities, Fine and Performing Arts and the College of Health, Environment and Science. However, within the College of Education is the certification officer for the University whose responsibility it is to review an individual's progress and recommend deserving candidates for teacher certification in Pennsylvania.

Admission to Teacher Education

Although freshmen and transfer students may declare a major in education, students are not considered education majors until they have been admitted to the teacher education program. The following are the requirements for admission to the teacher education program: completion of 48 semester hours of credit including six credits of college level mathematics and six credits of English composition/literature; successful completion of the Praxis I examination (PPST) (These criteria are established through the Pennsylvania Department of Education's Chapter 354). In addition, perspective students must have evidence of 20 contact hours with children in a school with at least 15% diversity (see advisor for clarification), and a 2.8 QPA. For additional requirements related to the admission to teacher education programs, students should consult the "Application for Admission to Teacher Education" form available in their major department office. In addition, students must present evidence of a clear (**no record**) Act 34 (criminal record), Act 151 (child abuse), and FBI clearance (Act 114). Out-of-state students are also subject to background checks. These record checks are good for one year only. Detailed requirements and policies are described in the Teacher Education Policy Manual which is available in the Dean's office or on the College of Education homepage.

Request for Accommodations: Student Teaching with Disabilities

The university follows guidelines, including the Americans with Disabilities Act, in accommodating students with disabilities. Inquiries related to special needs must be made early in the program to the Office of Social Equity, especially for those who may apply for student teaching. To be recommended for certification, a candidate must demonstrate the ability to perform essential functions required of all beginning teachers.

Student Teaching

A teacher candidate, having met or exceeded personal and program requirements at prescribed levels of competence, has earned the right to participate in student teaching. While student teaching, the teacher candidate experiences the comprehensive assessment of performance mandated in an approved certification program. The practical application of instruction and learning can be simulated in university classrooms, but not duplicated. A true test of relating theory into practice awaits each teacher candidate, assisted by a cooperating teacher and a university supervisor.

Pre-registration for this capstone experience, one year in advance, reserves the right of assignment for the qualified candidate. Completed cards, signed by the candidate's advisor, are filed in McKay Education Building (MEB), room 105. Qualified applicants anticipate successful completion of all program courses with a grade of "C" or higher for certification prior to student teaching. Also, a tuberculin test, 30 days prior to contact with school students, is required. In addition, students must present current evidence of a clear (**no record**) Act 34 (criminal record), Act 151 (child abuse), and Act 114 (FBI clearance). Out-of-state students are also subject to background checks.

Actual registration for student teaching takes place early in the semester preceding the experience. Beginning with mandatory attendance at the student teaching orientation meeting, students are acquainted with policies and procedures including automated registration.

The university student teaching supervisors service a large geographical area. However, the area serviced in any particular semester varies according to candidate placements and supervisor availability. In the student teaching semester, candidates are responsible for their own housing and transportation to assignments in school districts and should realize that this will be an added expense to the cost of a university education. A student teaching handbook is provided at the beginning of the student teaching semester in the opening seminar. Additional policies and procedures are described in the Teacher Education Policy Manual.

<http://www.sru.edu/Academics/Education/COE/Tchr%20Candidates/TchrCandidate.htm>

Placement of Student Teachers

Students are permitted to make several suggestions for districts, in close proximity to permanent or temporary residences, in which they may be assigned to student teach. These suggestions are non-binding to the university, but helpful as one variable in the assignment of student teaching sites. Transportation to the student teaching site is an individual's responsibility.

Certification

A baccalaureate degree is a requirement for Pennsylvania certification and requires successful completion of a minimum of 120 credits, including the liberal studies requirements. However, in some instances, a degree may be awarded without recommendation for certification. A recommendation for the Instructional I (Provisional) certificate requires satisfactory completion of an approved program which includes a 16 week student teaching experience, while satisfying general graduation requirements, the required 3.0 QPA for certification and a passing score on the PRAXIS II examination(s) in the candidate's content area. Seniors meeting all requirements will be provided with graduation application materials at the beginning of the semester in which they should graduate. Applications are received by the Office of Dean of Education during the first three weeks of the semester. Students failing to complete program requirements must reapply.

Interstate Reciprocity

Although some states have not formally agreed to reciprocity, the Pennsylvania certificate has been honored by most states.

Praxis Test Results

The following information is presented in accordance with the Title II Higher Education Act of 1998 and is a result of the most recent Praxis results (2008/2009). While the state of Pennsylvania mandates that candidates who are recommended for certification must have passing scores on the Praxis series; SRU, unlike some other teacher preparation institutions, does not withhold candidate graduation until Praxis tests are passed. However, all candidates must present evidence of having taken the Praxis II test for the area in which they will student teach. Those who do not pass the Praxis II prior to student teaching must show evidence that they are enrolled in a Praxis remediation program prior to the start of student teaching.

Area: Pass Rate
State

SRU

Rate	Pass Rate	Pass
------	-----------	------

Basic Skills

PPST Reading	100%	100%
Computerized PPST Reading	100%	
100%		

PPST Writing	100%	99%
Computerized PPST Writing	100%	
99%		

PPST Mathematics	100%	99%
Computerized PPST Mathematics	100%	
99%		

Academic Content Areas

Elem Ed Curr. Instruc. Assessment.	95%
96%	

Early Childhood Educ.	100%
100%	

English Lang. Lit. Comp. Cont Knowledge	100%
99%	

Social Studies Content Knowledge	91%
96%	

Music Content Knowledge	93%
97%	

Fundamental Subjects 99%
99%

Education of Exceptional Students 100%
100%

Other Content Areas

Health and Physical Education 100%
100%

French Content Knowledge *
97%

Spanish Content Knowledge *
89%

Biology Content Knowledge *
100%

Chemistry Content Knowledge *
100%

Physics Content Knowledge *
100%

General Science Content Knowledge *
98%

Earth Science Content Knowledge *
100%

* Fewer than 10 students took this test during the academic year, therefore, there is no report of their pass rate.

Post-baccalaureate Studies

Individuals who have earned a baccalaureate degree from an accredited institution may qualify for initial certification or an endorsement to an existing teaching certificate by completing prescribed requirements in one or more of the approved undergraduate programs.

An application for a post-baccalaureate (post-bac) program must be submitted to the university's Undergraduate Admissions Office where the candidates' previous work is reviewed. Following this review, the candidate will be notified of his/her admission status. Work that is dated, especially in pedagogy, may not be accepted and the candidate may be required to retake such courses. Candidates accepted for admission as post-bac students will be informed of program requirements to be completed to obtain certification in the desired area. Admission to post-bac study requires a minimum undergraduate QPA (Quality Point Average) for admission. Those who do not have the minimum QPA may apply for "conditional" admission provided they meet the requirement as set forth in the Teacher Education Policy Manual: <http://www.sru.edu/academics/colleges/education/Pages/FormsandDocuments.aspx>. In addition to the QPA requirement, post-baccalaureate students must submit proof of clear (**no record**) Acts 34 (criminal record), 151 (child

abuse), and Act 114 (FBI clearance). for admission and maintain clear records throughout the program. Out-of-state students are also subject to background checks. These record checks are good for one year only. A field experience is required so the candidate's teaching ability may be observed and evaluated in the area for which initial certification or added endorsement is sought. In addition, post-baccalaureate students must post passing scores on the Praxis I exam during their first twelve credits of study and take the Praxis II prior to student teaching (if required). Those who do not pass the Praxis II in their content area must show evidence that they are enrolled in a Praxis remediation program prior to student teaching.

Benefits of post-baccalaureate work include: earning an initial or additional certification, obtaining an additional degree, making a certificate permanent, or personal enrichment. At the start of the post-baccalaureate education, candidates must state their intention for their program. Those candidates pursuing an additional degree must earn a minimum of 30 credits beyond their initial baccalaureate degree. To add an additional major or minor to an existing baccalaureate degree requires earning an additional degree.

Admission to all programs is determined on a space available basis and some programs may not be open to admission. Candidates are encouraged to speak to the chair of the department in which the certificate they intend to pursue is housed to ascertain departmental admissions procedures.

PA State Board of Education

The State Board of Education adopted changes that affect all of PA's teacher certification programs by adding nine (9) credits or 270 hours or equivalent combination for adaptations and accommodations for diverse students in an inclusive setting and three (3) credits or ninety (90) hours or equivalent combination to meet the instructional needs of English Language Learners. Although these regulatory changes became effective on September 22, 2007, the PA Department of Education has not yet developed **final** requirements for colleges/universities to follow. Therefore additional program requirements will be developed and incorporated into your certification program to comply with new regulations for certifying teachers that become effective on January 1, 2013.

The State Board of Education also adopted changes specific to early childhood, elementary (K-6) and special education. New certification guidelines will apply January 1, 2013 regardless of a candidate's enrollment date. Candidates seeking current certifications must complete their program by December 31, 2012.

Counseling & Development

006 McKay Education Building
724-738-2035

Counseling & Development

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 community and school counseling and student affairs in higher education. We offer exemplary programs to a diverse group of students as well as in-service and continuing education to post-Master's students. Our students are prepared according to professionally accepted standards and, where appropriate, for licensure/ certification in their field of study

Chair

Donald Strano

Secretary

Lorraine Vinski

Faculty

Debra Hyatt-Burkhart, Michael Ignelzi, Jered Kolbert, Gerard Love, Michelle McClelland, Molly Mistretta, Amy Peters, Mary Frances Russo, Donald Strano

Certification programs are available only at the graduate level and include a Master of Education program in school counseling.

In addition, at the graduate level the department offers Master of Arts programs in Community Counseling, with specialization in addiction, child and adolescent, and adult counseling, and also offers a Master of Arts in Student Affairs in Higher Education. (For description of graduate programs see the Graduate Catalog.)

Elementary Education/Early Childhood

104 McKay Education Building
724-738-2042

Elementary Education/Early Childhood

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 21st century.

Chair

Lee Williams

Assistant Chair

Marilyn Yensick

Secretaries

Dixie Hogue, Brenda Fedokovitz

Faculty

Susan Argyle, Bernice Brown, Sean Colbert-Lewis, Kim Creasy, Carmine DeCarlo, Sherry DuPont, Cinda Findlan, Thomas Gordon, Rose Heilman-Houser, Herbert Hunt, Geraldine Jenny, Nikki Merchant, James Preston, Suzanne Rose, Anne Slanina, Robert Snyder, Pamela Soeder, Mary Vetere, Christine Walsh, Deborah Wells, Judy Werner, Lee Williams, Marilyn Yensick

The Department of Elementary Education/Early Childhood offers an undergraduate certification program in elementary education with the opportunity to add on certification in Early Childhood Education. Prospective elementary teachers take balanced course work that provides a broad educational experience. Included are liberal studies courses as well as both professional and elementary education courses. Students (in this certification area) are required to complete 20 contact hours with elementary children during the freshman and sophomore years. This early experience is followed by numerous field experiences in elementary classrooms 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 education program is to develop competent, caring and effective state-of-the-art teachers.

Complementary Competencies

In addition to the required courses for teacher preparation, students must demonstrate competencies in complementary areas. Students may complete these requirements by taking courses, through workshops or life experiences. Generally, competency areas are determined by accrediting agencies and state certification requirements. The goal of the complementary competencies is to provide knowledge and experiences, which contribute to the development of well-rounded classroom teachers. Details with regard to meeting these competencies are outlined on the guide sheet for elementary education majors.

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. Specific requirements for additional certification, minors, and areas of concentration are available from advisors and the Department of Elementary Education/Early Childhood office, room 104 McKay Education Building. Students are encouraged to work closely with their academic advisor 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 elementary 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 and a required practicum. The practicum must be completed in an elementary classroom under the supervision of a university faculty member, even if the student is certified in another area.

Certification Programs

- Elementary Education (BSEd)

Majors

- Elementary Education - Early Learning and Development (BSEd)

Elementary Education (BSEd)

Elementary Education / Early Childhood Education

The specific course of study and the requirements leading to teacher certification administered by the Department of Elementary Education/Early Childhood Education are available in the departmental office, from the student's advisor, and from the Teacher Education Policy Manual, available in 105 McKay Education Building and on the College of Education homepage.

The guidelines on admission, professional conduct, and student teaching for this department are subject to change. Current requirements for the College of Education as a whole may be found in the Teacher Education Policy Manual.

Track: Elementary School Teaching

Elementary Education Core Courses - Credits: 12 or 13

- ELEC 285 - Integrating Creative Expression through the Arts Credits: 3
- PE 243 - Movement Education Credits: 2
or DANCE 223 - Introduction to Creative Dance
- SAFE 205 - First Aid and Safety Credits: 3
- SEFE 342 - Educational Psychology Credits: 3
- SPED 100 - Overview of Special Education Credits: 3

Block One - Credits: 6

ELEC 281/288 must be taken in a block. Sophomore standing required for registration.

- ELEC 281 - Family and Community Diversity and Partnerships Credits: 3
- ELEC 288 - Children's Literature Credits: 3

Elementary Education Classroom Teaching Track Courses - Credits: 46

- MATH 210 - Elementary Mathematics I Credits: 3
- MATH 310 - Elementary Mathematics II Credits: 3
- SEFE 230 - Production and Utilization of Instructional Technology Credits: 3
- SEFE 270 - Educational Measurements, Assessment and Evaluation Credits: 3

Block Two - Credits: 7

Successful completion of Block 1 and of Math 210 and 310 as well as admission to teacher certification programs required for registration. ELEC 342, 362, 301.

- ELEC 301 - Math/Science Teaching Lab Credits: 1
- ELEC 342 - The Teaching of Elementary Mathematics Credits: 3
- ELEC 362 - The Teaching of Elementary Science Credits: 3

Block Three - Credits: 6

Successful completion of Block 2 required. Block 3 requires that the last 15 days of the semester and certain Wednesdays be available for fieldwork. Therefore, only 12-week or night classes can be taken concurrently with Block 3.

- ELEC 320 - Elementary Field Experience Credits: 3
- ELEC 332 - The Teaching of Elementary Reading Credits: 3

Other Required Courses - Credits: 21

- ELEC 352 - The Teaching of Language Arts Credits: 3
- ELEC 372 - The Teaching of Elementary Social Studies Credits: 3

- ELEC 455 - Student Teaching: Early Childhood Credits: 12, 6, 3
- SEFE 380 - History and Philosophy of Education Credits: 3

Other Program Requirements

Act 34 and 151, and FBI fingerprinting clearances must be current for admission to the Teacher Certification Program, as well as for any course with a field component.

2.8 QPA is required for admission to Teacher Certification. 3.0 QPA is required for certification.

A TB test, 20 hours of early field experience, and PPST 1 are required for admission to the Teacher Certification Program.

Praxis 2: ELED Fund. Subj. 30511 and specialty tests are required for student teaching.

Elementary Education - Early Learning and Development (BSEd)

Elementary Education / Early Childhood Education

The specific course of study and the requirements leading to teacher certification administered by the Department of Elementary Education/Early Childhood Education are available in the departmental office, from the student's advisor, and from the Teacher Education Policy Manual, available in 105 McKay Education Building and on the College of Education homepage.

The guidelines on admission, professional conduct, and student teaching for this department are subject to change. Current requirements for the College of Education as a whole may be found in the Teacher Education Policy Manual.

Elementary Education Core Courses - Credits: 22 or 23

- CDEV 248 - Human Development and Education Credits: 3
- ELEC 285 - Integrating Creative Expression through the Arts Credits: 3
- MATH 210 - Elementary Mathematics I Credits: 3
- PE 243 - Movement Education Credits: 2
or DANC 223 - Introduction to Creative Dance
- SAFE 205 - First Aid and Safety Credits: 3
- SEFE 200 - Introduction to Education Credits: 3
- SEFE 342 - Educational Psychology Credits: 3
- SPED 100 - Overview of Special Education Credits: 3

Block 1 - Credits: 6

ELEC 281 and 288 must be taken together. Sophomore standing is required for registration.

- ELEC 281 - Family and Community Diversity and Partnerships Credits: 3
- ELEC 288 - Children's Literature Credits: 3

Elementary Education Early Learning Track Courses - Credits: 42

- ELEC 306 - Early Childhood Education I Credits: 3
- ELEC 317 - Child and Family Development in Early Childhood Credits: 3
- ELEC 327 - Social/Cultural Studies in Early Childhood Education Credits: 3
- ELEC 337 - Literacy Practices for the Emergent Learner(PreK-grade 1) Credits: 3
- ELEC 347 - Modern Primary Programs Credits: 3
- ELEC 407 - Math and Science in Early Childhood Learning Credits: 3
- ELEC 427 - Early Intervention Credits: 3
- ELEC 437 - Assessment in Early Childhood Credits: 3
- ELEC 445 - Administration of Child Care Programs Credits: 3
- ELEC 420 - Early Childhood Field Experience Credits: 3
- ELEC 450 - Internship: Early Childhood Credits: 12

Other Program Requirements

Act 34 and 151 and FBI fingerprinting clearances must be current and can not expire during a field experience. A TB test is also required for any course with a field component.

A Service Learning component is required prior to graduation. Projects are available through Community Institute and some classes. Check with your advisor.

PK-4 Early Childhood Education (Beginning Fall 2010)

Elementary Education/Early Childhood

Courses Required Outside Major

These courses will also fulfill some Liberal Studies Requirements

- ENGL 101 - College Writing I Credits: 3
- ENGL 103 - College Writing II Credits: 3
- ENGL 210 - Interpreting Literature Credits: 3
- COMM 200 - Public Speaking Credits: 3
- MATH 210 - Elementary Mathematics I Credits: 3
- MATH 310 - Elementary Mathematics II Credits: 3
- PHYS 101 - Concepts of Science I/ Lab Credits: 3

Early Childhood Education Courses

Courses may be taken prior to admittance to College of Education

- ELEC 100 - Early Childhood Education Theory & Practice Credits: 3
- ELEC 200 - Child Development Typical Credits: 3

- ELEC 285 - Integrating Creative Expression through the Arts Credits: 3
- PE 243 - Movement Education Credits: 2
or DANC223, Creative Dance for Children
- SPED 121 - High Incidence Disabilities Credits: 3

Diversity Block

- ELEC 230 - Field-Based Child Development Typical Credits: 3
- ELEC 237 - ELL Strategies and Practice for Early Childhood Education Credits: 3
- ELEC 281 - Family and Community Diversity and Partnerships Credits: 3

Early Literacy Block

- ELEC 314 - Developmental Formal & Informal Assessment Credits: 3
- ELEC 337 - Literacy Practices for the Emergent Learner(PreK-grade 1) Credits: 3

Early Childhood Major Courses - Block 1

Must be admitted to College of Education and have completed both Diversity and Early Literacy blocks

- ELEC 311 - Mathematics & Literacy Teaching Lab Pre K - 4 Credits: 1
- ELEC 330 - Literacy Practices for the Developing Learner, Grades 2 - 4 Credits: 3
- ELEC 340 - Mathematics Methods and Strategies for PRE K - 4 Teachers Credits: 3

Block 2

Must have completed Block 1

- ELEC 460 - Instructional Strategies for Science and Technology Credits: 3
- ELEC 470 - Social Studies & Citizenship Credits: 3
- ELEC 420 - Early Childhood Field Experience Credits: 3
- ELEC 440 - ECE Curriculum Integration: Theory into Practice Credits: 3

Other Required Coursework for Graduation

Other requirements for certification and graduation are available in the College of Education

- SPED 325 - Interventions in the Inclusive Classroom Credits: 3
- SPED 430 - Positive Behavior Strategies Credits: 3
- ELEC 480 - Assessment and Differentiating Literacy Credits: 3
- ELEC 348 - Leadership, Advocacy & Program Development Credits: 3
- ELEC 455 - Student Teaching: Early Childhood Credits: 12, 6, 3

Physical Education

109 Morrow Field House
724-738-2072

Physical Education

The Slippery Rock University Physical Education Program will graduate dynamic, problem-solving professionals competent in the art and the science of the design, delivery and assessment of teaching health and physical education (grades K-12). These candidates will possess a global perspective, exhibit social responsibility, and display a personal commitment to a healthful, active lifestyle, promoting the same in their students.

Chair

Betsy McKinley

Secretary

Sis Warcup

Faculty

Wei Bian, Istvan Kovacs, Joanne Leight, Wenhao Liu, Betsy McKinley, Jeff Messer, Marybeth Miller, Randall Nichols, Robert Ogoreuc, Lou Slautterback, Lynn Spadine-Taylor, Jay Vasil, Traci Zillifro

The Department of Physical Education offers a major degree program in physical education. The traditional focus within the department is the teacher certification program that prepares students to teach both health and physical education in grades K-12.

Students are also encouraged to include an additional minor in one of the following: aquatics or coaching. The total program is designed to provide a comprehensive knowledge base in health and physical education pedagogy.

Certification Programs

- Health and Physical Education Certification

Majors

- Health and Physical Education: Teacher Education (BSEd)

Minors

- Minor in Aquatics
- Minor in Coaching
- Minor in Adapted Physical Activity

Health and Physical Education Certification (Post-Baccalaureate Program)

Physical Education Department

Requirements

Persons possessing a bachelor's degree may apply for admission to the post- baccalaureate program leading to health and physical education teacher 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 96 credits of coursework, including a required student teaching experience.

Health and Physical Education: Teacher Education (BSEd)

Health and Physical Education

Requirements for the Bachelor of Science in Education

The requirements leading to teacher certification in K-12 health and physical education parallel the accreditation standards and guidelines of the National Association of Sport and Physical Education and of the Pennsylvania Department of Education. The curriculum is designed to prepare future health and physical education teachers for the challenge of teaching K-12 students about the importance of physical activity and health.

The specific course of study and the requirements leading to teacher certification administered by the Department of Physical Education are available in the departmental office, from the student's advisor, online at www.sru.edu/pe, and from the Teacher Education Policy Manual, available in 105 McKay Education Building and on the College of Education homepage.

The guidelines on admission, professional conduct, and student teaching for this department are subject to change. Current requirements for the College of Education as a whole may be found in the Teacher Education Policy Manual.

Degree Completion in Four Years Health and Physical Education: Teacher Education (BSEd)

Completion Hours: 120

Freshman Year - Total Hours: 32

- Liberal Studies - Credits: 6
- CDEV 248 - Human Development and Education Credits: 3
- ENGL 101 - College Writing I Credits: 3
- ENGL 103 - College Writing II Credits: 3
(P see footnotes)
- ENGL 210 - Interpreting Literature Credits: 3
- MATH 113 - Mathematics as a Liberal Art Credits: 3
Math 113 or Higher
- PE 107 - Aquatic Fundamentals Credits: 3
- PE 141 - Personal Physical Fitness Credits: 1
- PE 152 - Practical Introduction to Teaching Physical Education Credits: 3
- PE 191 - Foundations of Physical Education Credits: 2
(F see footnotes)
- PE 192 - Diversity Issues in Physical Education Credits: 2
(S see footnotes)

Sophomore Year - Total Hours: 33

- Liberal Studies - Credits: 9
- COMM 200 - Public Speaking Credits: 3
(P see footnotes)
- DANC 105 - Dance Fundamentals Credits: 1
- HLTH 262 - Health Foundations Credits: 3
- MATH 113 - Mathematics as a Liberal Art Credits: 3
MATH 113 or higher
- PE 106 - Gymnastics Fundamentals Credits: 3
(S see footnotes)
- PE 202 - Technology for Physical Education Teacher Education Credits: 3
- PE 241 - Outdoor Pursuits Credits: 3
- PE 243 - Movement Education Credits: 2
- PE 274 - Assessment Strategies in Physical Education Credits: 3

Junior Year - Total Hours: 29

- Liberal Studies - Credits: 3
- PE 357 - Territory Activities & Games (F) Credits: 3
- PE 359 Striking/Fielding Activities & Games (S) Credits: 2
- PE 360 - Anat. & Phys. Bases of Phys. Act. Credits: 3
- PE 227 - Introduction to Adapted Physical Activity Credits: 3
- HLTH 362 - School Health Education Teaching Methods Credits: 3
(A, P see footnotes)
- PE 242 - Fitness Education Credits: 3
(P see footnotes)
- PE 352 - Secondary Physical Education Teaching Methods Credits: 3
(A, P see footnotes)
- PE 356 - Net/Wall Activities and Games Credits: 3
- PE 359 - Striking/Fielding Activities and Games Credits: 2
(S see footnotes)
- PE 383 - Motor Development and Learning Credits: 3
(A, P, F see footnotes)

Senior Year - Total Hours: 26

- HLTH 462 - Field Experience in School Health Education Methods Credits: 3
(A, P see footnotes)
- PE 358 - Lifetime/Leisure Activities and Games Credits: 3
- PE 452 - Field Experience in Elementary PE Methods Credits: 3
(A, P see footnotes)
- PE 455 - Student Teaching - Physical Education Credits: 12
(A, P see footnotes)
- PE 468 - Senior Seminar in Physical and Health Education Teacher Education Credits: 2
(A, P see footnotes)
- SEFE 342 - Educational Psychology Credits: 3

Footnotes

(P) = Prerequisite Required

(A) = Acceptance to Teacher Certification Required

(W) = Waiver from Liberal Studies Hours

(S) = Offered Spring Semester Only

(F) = Offered Fall Semester Only

Minor in Adapted Physical Activity

Physical Education Department

"I cannot imagine the last four years of my life without the incredible experiences of this minor. Not only was it an incredible learning experience; but it was an unforgettable experience of what it means to touch peoples' lives and be touched back in the best possible way and that is through the heart."

Marla Aron '02

The Adapted Physical Activity program is a minor designed to prepare students in exercise science, teacher education, therapeutic recreation, and athletic training programs to assess, develop, implement, and evaluate programs of physical education and fitness exercise for individuals with disabilities. The Americans with Disabilities Act (ADA) and the Individuals with Disabilities Education Act (IDEA) are two federal laws that provide access and education to all walks of life for people with disabilities. This will result in an increase of participation and subsequent knowledge for planning appropriate programs for individuals with disabilities.

Employers in school districts, fitness agencies, and sport organizations are actively recruiting individuals with experience working with people with disabilities. Graduates of the program have been extremely successful securing jobs in their chosen fields or receiving acceptance into graduate programs in adapted physical activity, physical therapy, or other related professions.

Students will acquire knowledge and skills through a comprehensive program of class and practical experiences in this 27-credit program. Students can also take advantage of participating in state and national conferences, developing grant writing skills and supervisory roles in one or more of the community service-learning practical programs.

*Students entering the MS degree will earn 21 credits in the minor. ERS463 and ERS468 will count toward graduate credits as ERS663 and ERS668.

Requirements for the Minor in Adapted Physical Activity

Theory Core Courses - Credits: 27

- PE 250 - Equine Assisted Activities Credits: 3
- PE 262 - Adapted Aquatics Credits: 3
- PE 227 - Introduction to Adapted Physical Activity Credits: 3
- PE 287 - Adapted and Therapeutic Exercise Credits: 3
- PE 355 - Assessment Techniques in Adapted Physical Activity Credits: 3

- PE 364 - Biomechanics of Individuals with Disabilities Credits: 3
- PE 266 - Disability Sport in the 21st Century: A Global Perspective Credits: 3
- PE 460 - Program Design in Adapted Physical Activity Credits: 3
- PE 473 - Advanced Study of Disability in Physical Activity Credits: 3

Minor in Aquatics

Physical Education Department

It is the student's responsibility to meet the requirements as outlined herein. The faculty advisor for the Aquatics minor, Mr. Robert E. Ogoreuc, will offer assistance.

Requirements for the Minor - Credits: 19

Aquatic Core - Credits: 11

- PE 107 - Aquatic Fundamentals Credits: 3
- PE 262 - Adapted Aquatics Credits: 3
- PE 263 - Lifeguarding Credits: 3
- PE 348 - Aquatic Leadership Credits: 2

Aquatic Instructor Courses - Credits: 6

- PE 363 - Lifeguarding Instructor Credits: 3
- PE 446 - Water Safety Instruction Credits: 3

Aquatic Electives - Credits: 2

Select two courses:

- PE 187 - Flat-water Canoe Tripping Credits: 1
- PE 188 - Sailing Credits: 1
- PE 189 - Basic Canoeing Credits: 1
- PE 236 - Introduction to Kayaking Credits: 2
- PE 345 - Teaching and Coaching of Water Polo Credits: 3
- PE 349 - Skin and Scuba Diving Credits: 1

Minor in Coaching

Physical Education Department

Three semester hours of practicum experiences are required for the Minor in Coaching. Practicum experiences include working with one athletic team (college, high school, or community) for 50 hours. The student must complete three different experiences (one credit each), and PETE majors must complete all practicum experiences prior to student

teaching. The student must have completed one coaching minor elective course prior to the first practicum experience.

Students must have current TB test and Act 34 and Act 151 Clearances FBI finger print check if coaching experiences take place in public schools.

Students must possess and maintain current Red Cross CPR for the Professional Rescuer and Community First Aid certifications.

Coaching Minor Required Courses

- PE 110 - Strength/Resistance Training Credits: 1
- PE 270 - Psychological and Sociological Bases of Sport Credits: 3
- PE 301 - Sports Officiating Credits: 1
- PE 369 - Philosophy and Psychology of Coaching Credits: 3
- PE 383 - Motor Development and Learning Credits: 3

Coaching Minor Elective Classes

Choose two courses

- PE 106 - Gymnastics Fundamentals Credits: 3
- PE 242 - Fitness Education Credits: 3
- PE 345 - Teaching and Coaching of Water Polo Credits: 3
- PE 356 - Net/Wall Activities and Games Credits: 3
- PE 357 - Territory Activities and Games Credits: 3
- PE 358 - Lifetime/Leisure Activities and Games Credits: 3
- PE 359 - Striking/Fielding Activities and Games Credits: 2
- PE 446 - Water Safety Instruction Credits: 3

Secondary Education/Foundations of Education

114 McKay Education Building
724-738-2041

Secondary Education/Foundations of Education

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.

Chair

Edwin Christmann

Secretary
Kay Castor

Faculty
Richard Altenbaugh, Padma Anand, John Badgett, Edwin Christmann, Jeffrey Lehman, Mark Mraz, Caryn Trapp,
Junko Yamamoto, John Hicks

The mission of the department is to provide secondary education majors with the knowledge, skills, and dispositions required 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 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 the PRAXIS series 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 academic discipline and by one 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 advisor. 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 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.

Majors

- Education - English Emphasis (BSEd)
- Education - French Emphasis (BSEd)
- Education - Social Studies - History Emphasis (BSEd)
- Education - Spanish Emphasis (BSEd)

Education - English (BSEd)

Secondary Education/ Foundations of Education

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. Students should consult their advisor to plan a course of study for this 120-hour program that leads to a bachelor's degree and teacher certification. You should meet with your advisor when requesting/scheduling courses.

Teacher Education Policy Manual

Education - French (BSEd)

Secondary Education / Foundations of Education

This program track prepares students for careers teaching French in secondary schools. 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. Students should consult their advisor to plan a course of study for this 120-hour program that leads to a bachelor's degree and teacher certification. You should meet with your advisor when requesting/scheduling courses.

Teacher Education Policy Manual

Education - Social Studies - History (BSEd)

Secondary Education / Foundations of Education

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 state-approved teaching license. Students should consult their advisor to plan a course of study for this 120-hour program that leads to a bachelor's degree and teacher certification. You should meet with your advisor when requesting/scheduling courses.

Teacher Education Policy Manual

Education - Spanish (BSEd)

Secondary Education / Foundations of Education

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.

Teacher Education Policy Manual

Basic Skills Courses

Exemption is possible from these courses according to performance on the placement test.

- SPAN 101 - Spanish Language & Culture I Credits: 3
- SPAN 102 - Spanish Language & Culture II Credits: 3
- SPAN 103 - Spanish Language & Culture III Credits: 3
- SPAN 200 - Spanish Grammar and Composition I Credits: 3
- SPAN 201 - Spanish Conversation I Credits: 3
- SPAN 220 - Reading in Spanish Credits: 3

Required Spanish Courses

- SPAN 300 - Spanish Grammar and Composition II Credits: 3
- SPAN 350 - Spanish Linguistics and Phonetics Credits: 3
- SPAN 400 - Spanish Grammar and Composition III Credits: 3
- SPAN 401 - Spanish Conversation III Credits: 3

Choose one of the following conversation classes:

- SPAN 301 - Spanish Conversation II Credits: 3
- SPAN 302 - Communication in Spanish for the Elementary Classroom Credits: 3

Choose one of the following civilization courses:

- SPAN 305 - Spanish Civilization Credits: 3
- SPAN 307 - U.S. Latino Cultures Credits: 3
- SPAN 309 - Hispanic Civilization for the K-12 Classroom Credits: 3
- SPAN 326 - The Civilization of Spanish America: Precolumbian to 19th Century Credits: 3
- SPAN 328 - The Civilization of Spanish America: 19th Century to Present Credits: 3

Choose one of the following literature survey courses:

- SPAN 318 - Hispanic Children's Literature for the K-12 Classroom Credits: 3
- SPAN 330 - Spanish Literature 1800 to Present Credits: 3
- SPAN 332 - Spanish American Literature - 19th Century to Present Credits: 3

Choose one of the following literature courses:

- SPAN 431 - Spanish Literature - Medieval to 18th Century Credits: 3
- SPAN 432 - Spanish-American Literature: Precolumbian to 19th Century Credits: 3

Spanish Electives

For students who exempt any of the required core. Any Spanish course may be used in this block except SPAN 210.

Education Courses - Credits: 37

Oral proficiency rating of Intermediate High is prerequisite for SPAN 323. Oral proficiency rating of Advanced Low is prerequisite for SEFE 455. SEFE 455 and SPED 313 are taken in the same semester.

- CDEV 248 - Human Development and Education Credits: 3
- SEFE 342 - Educational Psychology Credits: 3
- SEFE 200 - Introduction to Education Credits: 3
- SEFE 230 - Production and Utilization of Instructional Technology Credits: 3
- SEFE 270 - Educational Measurements, Assessment and Evaluation Credits: 3
- SEFE 329 - Methods of Instruction in Secondary Content Areas Credits: 3
- SEFE 323 - Teaching World Languages Credits: 3
- SEFE 426 - Practicum in Secondary Education Credits: 1
- SEFE 380 - History and Philosophy of Education Credits: 3
- SPED 430 - Positive Behavior Strategies Credits: 3
- SEFE 455 - Student Teaching - Secondary Education Credits: 12, 9, 6,3

Study Abroad Highly Recommended

Students should plan to spend a summer or semester in a country where Spanish is spoken. Credits earned may be used to fill the above requirements.

Middle Level English Education (Beginning Fall 2010)

Secondary Education/Foundations of Education

Follow the checklist provided by the Secondary Education/Foundations of Education department to complete Liberal Studies requirements.

Liberal Studies Requirements

See Secondary Education/Foundations of Education departmental checklist for course requirements and recommendations.

Professional Education

- SPED 100 - Overview of Special Education Credits: 3
- SEFE 230 - Production and Utilization of Instructional Technology Credits: 3
- SEFE 245 - Middle Level Learning Theory Credits: 3
- SEFE 250 - Pre, Early, & Adolescent Development Credits: 3
- SEFE 270 - Educational Measurements, Assessment and Evaluation Credits: 3
- SEFE 300 - Middle Level Cognitive Development Credits: 3
- SEFE 325 - Teaching in the Middle Level Grades Credits: 3
- SEFE 326 - ELL Strategies and Practice Credits: 3
- SEFE 337 - Teaching Middle Level Language Arts Credits: 3
- SEFE 338 - Standards-Based Instruction & Assessment in the Inclusionary Classroom Credits: 3
- SEFE 380 - History and Philosophy of Education Credits: 3
- SEFE 422 - Practicum in the Middle-Level Grades Credits: 1
- SEFE 456 - Student Teaching - Middle Level Grades Credits: 12
- SPED 315 - Special Education Issues in Diverse Secondary Classrooms Credits: 3

Specialization (English Certification Area)

Choose 21 semester hours from the following course list. All grades must be "C" or above.

- ENGL 204 - Composition and Rhetoric Credits: 3
- ENGL 305 - Practicum: Teaching Writing Credits: 3
- ENGL 312 - Shakespeare Credits: 3
or ENGL317, British Literature I
- ENGL 328 - Young Adult Literature Credits: 3
- ENGL 331 - Historical Development of the English Language Credits: 3
or ENGL333, Concepts of Linguistics
- ENGL 332 - Traditional Grammar Credits: 3
- ENGL 318 - British Literature II Credits: 3

- ENGL 319 - American Literature I Credits: 3
or ENGL320, American Literature II
- ENGL 402 - World Literature Credits: 3
- ENGL 403 - Literary Criticism Credits: 3

Middle Level Mathematics (Beginning Fall 2010)

Secondary Education/Foundations of Education

Follow the checklist provided by the Secondary Education/Foundations of Education department to complete Liberal Studies requirements.

Liberal Studies Requirements

See Secondary Education/Foundations of Education departmental checklist for course requirements and recommendations.

Professional Education

- SPED 100 - Overview of Special Education Credits: 3
- SEFE 230 - Production and Utilization of Instructional Technology Credits: 3
- SEFE 245 - Middle Level Learning Theory Credits: 3
- SEFE 250 - Pre, Early, & Adolescent Development Credits: 3
- SEFE 270 - Educational Measurements, Assessment and Evaluation Credits: 3
- SEFE 300 - Middle Level Cognitive Development Credits: 3
- SEFE 311 - Teaching of Mathematics in the Middle School Credits: 3
- SEFE 325 - Teaching in the Middle Level Grades Credits: 3
- SEFE 326 - ELL Strategies and Practice Credits: 3
- SEFE 338 - Standards-Based Instruction & Assessment in the Inclusionary Classroom Credits: 3
- SEFE 422 - Practicum in the Middle-Level Grades Credits: 1
- SEFE 380 - History and Philosophy of Education Credits: 3
- SEFE 456 - Student Teaching - Middle Level Grades Credits: 12
- SPED 315 - Special Education Issues in Diverse Secondary Classrooms Credits: 3

Specialization (Mathematics Certification Area)

Choose 18 total semester hours from the following course list. All grades must be "C" or above.

Required:

- MATH 131 - Discrete Mathematics Credits: 3
- MATH 225 - Calculus I Credits: 4

Electives

- MATH 122 - Matrices and Linear Programming Credits: 3

- MATH 125 - Precalculus Credits: 4
- MATH 153 - Elementary Statistics II Credits: 3
- MATH 230 - Calculus II Credits: 4
- MATH 231 - Calculus III Credits: 4
- MATH 235 - Modern Concepts of Mathematics Credits: 3
- MATH 240 - Linear Algebra and Differential Equations Credits: 3
- MATH 252 - Introduction to Statistical Modeling Credits: 3

Middle Level Science (Beginning Fall 2010)

Secondary Education/Foundations of Education

Follow the checklist provided by the Secondary Education/Foundations of Education department to complete Liberal Studies requirements.

Liberal Studies Requirements

See Secondary Education/Foundations of Education departmental checklist for course requirements and recommendations.

Professional Education

- SPED 100 - Overview of Special Education Credits: 3
- SEFE 230 - Production and Utilization of Instructional Technology Credits: 3
- SEFE 245 - Middle Level Learning Theory Credits: 3
- SEFE 250 - Pre, Early, & Adolescent Development Credits: 3
- SEFE 270 - Educational Measurements, Assessment and Evaluation Credits: 3
- SEFE 300 - Middle Level Cognitive Development Credits: 3
- SEFE 325 - Teaching in the Middle Level Grades Credits: 3
- SEFE 326 - ELL Strategies and Practice Credits: 3
- SEFE 338 - Standards-Based Instruction & Assessment in the Inclusionary Classroom Credits: 3
- SEFE 349 - Teaching of Science in the Middle School Credits: 3
- SEFE 380 - History and Philosophy of Education Credits: 3
- SEFE 422 - Practicum in the Middle-Level Grades Credits: 1
- SEFE 456 - Student Teaching - Middle Level Grades Credits: 12
- SPED 315 - Special Education Issues in Diverse Secondary Classrooms Credits: 3

Specialization (Science Certification Area)

Choose 21 semester hours from the following course list. All grades must "C" or above.

- BIOL 105 - Environmental Biology Credits: 3
- CHEM 108 - General Chemistry II Credits: 3
AND CHEM112, Chemistry Lab
- EGEO 101 - Physical Geology Credits: 3
AND EGEO111, Physical Geology Lab
- EGEO 201 - Earth Materials and Processes Credits: 3

or EGEO121, Meteorology/Lab

- PHYS 201 - Elements of Physics I/ Lab Credits: 4
- PHYS 202 - Elements of Physics II/ Lab Credits: 4
- PHYS 317 - Space Science Credits: 3

Middle Level Social Studies (Beginning Fall 2010)

Secondary Education/Foundations of Education

Follow the checklist provided by the Secondary Education/Foundations of Education department to complete Liberal Studies requirements.

Liberal Studies Requirements

See Secondary Education/Foundations of Education departmental checklist for course requirements and recommendations.

Professional Education

- SPED 100 - Overview of Special Education Credits: 3
- SEFE 230 - Production and Utilization of Instructional Technology Credits: 3
- SEFE 245 - Middle Level Learning Theory Credits: 3
- SEFE 250 - Pre, Early, & Adolescent Development Credits: 3
- SEFE 270 - Educational Measurements, Assessment and Evaluation Credits: 3
- SEFE 300 - Middle Level Cognitive Development Credits: 3
- SEFE 324 - Methods for Teaching English as a Second Language and Bilingual Education Credits: 3
- SEFE 325 - Teaching in the Middle Level Grades Credits: 3
- SEFE 335 - Teaching Middle Level Social Studies Credits: 3
- SEFE 338 - Standards-Based Instruction & Assessment in the Inclusionary Classroom Credits: 3
- SEFE 380 - History and Philosophy of Education Credits: 3
- SEFE 422 - Practicum in the Middle-Level Grades Credits: 1
- SEFE 456 - Student Teaching - Middle Level Grades Credits: 12
- SPED 315 - Special Education Issues in Diverse Secondary Classrooms Credits: 3

Specialization (Social Studies Certification Area) - Credits: 30

Additional courses to reach 30 credits toward Social Studies Certification will be earned in the Liberal Studies program. Check with your academic advisor for guidance.

Choose one World History course

- HIST 151 - Ancient and Medieval World Credits: 3
- HIST 152 - Rise of the Modern World Credits: 3
- HIST 153 - Twentieth Century World Credits: 3

Choose one American History course

- HIST 201 - Colonial America to 1825 Credits: 3
- HIST 202 - United States, 1825-1900 Credits: 3
- HIST 203 - U.S. History Since 1900 Credits: 3

PA History Required

- HIST 435 - Pennsylvania Credits: 3

Choose one Non-Western History course

- HIST 362 - Africa North of the Zambezi Credits: 3
- HIST 363 - Southern Africa Credits: 3
- HIST 370 - History and the Bible Credits: 3
- HIST 371 - History of Jews Credits: 3
- HIST 380 - Egyptology Credits: 3
- HIST 381 - East Asian Military Traditions Credits: 3
- HIST 382 - Modern Asian Pacific Rim Credits: 3
- HIST 386 - Modern China Credits: 3
- HIST 462 - The Contemporary Middle East Credits: 3

Special Education

112 Special Education Building
724-738-2085

Special Education

The Special Education Department is dedicated to the professional development of pre-service and in-service teachers, administrators, and related professionals in the field of Special Education. Our specialized programs, both on-campus and web-based, are centered on research-based classroom experiences and extensive field work in self-contained and inclusive settings, schools and agency settings. We believe that collaboration, service, professionalism, and leadership, combined with a strong knowledge base, are key components in the development of model professionals who are dedicated to individuals with exceptionalities throughout their lifespan.

Chair

Dennis T. Fair

Secretary

Linda Forrest

Faculty

Rebecca Badgett, Richael Barger-Anderson, Robert Bost, Patrick Grant, Robert Isherwood, Jodi Katsafanas, Michelle McCollin, Joseph Merhaut, Mike Monfore Ryan

The guidelines on admission, professional conduct, and student teaching for this department include, and may go beyond, those required for the College of Education as a whole. Details may be found in the Teacher Education Policy Manual.

The special education department's programs are for students who choose to pursue careers working with exceptional children who are identified or those who differ significantly from the "average" child to the extent that special instructional methods, materials, and/or related services are required for their education and treatment.

The department offers an undergraduate education program that includes courses in liberal studies, professional education, elementary education, and special education. Students are required to complete a minimum of 20 hours involved in direct contact with individuals in a diverse educational setting prior to their supervised teaching assignments at the junior/senior levels. Throughout the undergraduate program students are required to participate in experience-based learning in order to maximize their development as competent and effective future educators.

Majors

- Community Programs for Americans with Disabilities (BS) - Adapted Physical Activity
- Community Programs for Americans with Disabilities (BS) - Non-Profit Management
- Special Education Certification and Dual Certification (SPED/ELEd)

Minors

- Minor in Exceptionalities

Community Programs for Americans with Disabilities (BS) - Adapted Physical Activity

Special Education Department

(no teacher certification)

Students may elect to major in special education without working for a teaching certificate. The program, Community Programs for Americans with Disabilities (CPAD) prepares professionals for a variety of community-based roles providing services for children and adults with disabilities. These roles include: case managers for intermediate care facilities, house managers for community residences, supervisors for sheltered workshops, and directors for community living arrangement programs. Students conclude the CPAD program with a 12-credit internship within a local community-based facility.

Foundations - 12 credits

- ELEC 100 - Early Childhood Education Theory & Practice Credits: 3
- SPED 121 - High Incidence Disabilities Credits: 3
- SPED 122 - Low Incidence Disabilities Credits: 3
- SPED 230 - Developmental Disorders Credits: 3

CPAD Block - 12 credits

- SPED 341 - Life Management for Persons with Disabilities Credits: 3
- SPED 342 - Seminar in CPAD Credits: 3
- SPED 343 - Americans with Disabilities Credits: 3
- PE 460 - Program Design in Adapted Physical Activity Credits: 3

Adapted Physical Activity Block - 21 credits

- PE 227 - Introduction to Adapted Physical Activity Credits: 3
- PE 262 - Adapted Aquatics Credits: 3
- PE 266 - Disability Sport in the 21st Century: A Global Perspective Credits: 3
- PE 287 - Adapted and Therapeutic Exercise Credits: 3
- PE 355 - Assessment Techniques in Adapted Physical Activity Credits: 3
- PE 364 - Biomechanics of Individuals with Disabilities Credits: 3
- PE 473 - Advanced Study of Disability in Physical Activity Credits: 3

Practicum - 3 credits

- SPED 410 - CPAD Practicum Credits: 3

Internship - 12 credits

- SPED 450 - Internship Credits: 12

Community Programs for Americans with Disabilities (BS) - Non-Profit Management

Special Education

(no teacher certification)

Students may elect to major in special education without working for a teaching certificate. The program, Community Programs for Americans with Disabilities (CPAD) prepares professionals for a variety of community-based roles providing services for children and adults with disabilities. These roles include: case managers for intermediate care facilities, house managers for community residences, supervisors for sheltered workshops, and directors for community living arrangement programs. Students conclude the CPAD program with a 12-credit internship within a local community-based facility.

Foundations - 15 credits

- ELEC 100 - Early Childhood Education Theory & Practice Credits: 3

- ELEC 200 - Child Development Typical Credits: 3
- SPED 121 - High Incidence Disabilities Credits: 3
- SPED 122 - Low Incidence Disabilities Credits: 3
- SPED 230 - Developmental Disorders Credits: 3

CPAD Block - 9 credits

- SPED 341 - Life Management for Persons with Disabilities Credits: 3
- SPED 342 - Seminar in CPAD Credits: 3
- SPED 343 - Americans with Disabilities Credits: 3

Non-Profit Leadership Block - 18 credits

- PROF 205 - Accounting for Decision Makers Credits: 3
- PROF 304 - Urban Sociology Credits: 3
- PROF 320 - Community Change and Development Credits: 3
- PROF 321 - Minority Groups Credits: 3
- PROF 325 - Social and Ethical Issues in Philanthropy and Fundraising Credits: 3
- PROF 342 - Sociology of Aging Credits: 3

Practicum - 3 credits

- SPED 410 - CPAD Practicum Credits: 3

Internship - 12 credits

- SPED 450 - Internship Credits: 12

Electives as needed to reach 120 total credits

Minor in Exceptionalities

Special Education Department

Requirements for the Minor

Students who are studying in psychology, social work, music therapy, recreation, and teacher education may find the minor in exceptionalities to be a desirable enhancement to their major career fields. The minor is a prescribed program of 15 credits of special education courses. The Minor in Exceptionalities program does not lead to certification in special education.

Level I

One course required

- SPED 121 - High Incidence Disabilities Credits: 3

Level II

Select two courses

- SPED 122 - Low Incidence Disabilities Credits: 3
- SPED 325 - Interventions in the Inclusive Classroom Credits: 3

Level III

Two courses required

- SPED 430 - Positive Behavior Strategies Credits: 3
- SPED 432 - Intervention in the Content Areas Credits: 3

Special Education Certification and Dual Certification (SPEd/ELEd)

Special Education Department

The university is authorized by the Pennsylvania Department of Education to provide certification courses and practical experiences designed to meet requirements for the Cognitive, Behavioral, and Physical Disabilities (CBPD) certificate in special education. The teaching certificate enables graduates to teach children identified as having mental retardation, learning disabilities, physical disabilities, or behavior disorders in school placements from kindergarten through grade twelve.

While students may declare the major in special education and work for a single teaching certificate (CBPD), most students opt for the dual certification program. Students may declare the major in special education and work for a single teaching certificate, the comprehensive M/PH certificate. Students may declare the special education/elementary education major and study for elementary education teacher certification and special education certification. The special education/elementary education certification program includes credits beyond the minimum required for the baccalaureate degree. The Teacher Education Policy Manual describes procedures for students interested in pursuing multiple teaching certificates.

An integral component of pre-professional programs in special education is the requirement of a practicum experience for credit. Practicum is part of the Special Education Professional Semester which integrates strategy courses with a field experience in local school districts.

Requirements for the Major

The specific course of study and requirements leading to teacher certification in special education are available in the Department of Special Education or from the student's advisor. See also Teacher Education Policy Manual, available in 105 McKay Education Building or on the College of Education homepage.

Requirements Outside the Major

These courses will satisfy a portion of the student's Liberal Studies block requirements

- ENGL 101 - College Writing I Credits: 3
- ENGL 103 - College Writing II Credits: 3
- ENGL 210 - Interpreting Literature Credits: 3
- COMM 200 - Public Speaking Credits: 3
- PHYS 101 - Concepts of Science I/ Lab Credits: 3
- MATH 210 - Elementary Mathematics I Credits: 3
- MATH 310 - Elementary Mathematics II Credits: 3

Foundations - Credits: 22-23

- ELEC 100 - Early Childhood Education Theory & Practice Credits: 3
- ELEC 200 - Child Development Typical Credits: 3
- ELEC 285 - Integrating Creative Expression through the Arts Credits: 3
- ELEC 348 - Leadership, Advocacy & Program Development Credits: 3
- SPED 121 - High Incidence Disabilities Credits: 3
- SPED 230 - Developmental Disorders Credits: 3
- PE 243 - Movement Education Credits: 2
OR DANC223, Creative Dance

Diversity Block - Credits: 9

- ELEC 230 - Field-Based Child Development Typical Credits: 3
- ELEC 237 - ELL Strategies and Practice for Early Childhood Education Credits: 3
- ELEC 281 - Family and Community Diversity and Partnerships Credits: 3

Early Literacy Block - Credits: 6

- ELEC 314 - Developmental Formal & Informal Assessment Credits: 3
- ELEC 337 - Literacy Practices for the Emergent Learner(PreK-grade 1) Credits: 3

Block 1- Credits: 10

- ELEC 311 - Mathematics & Literacy Teaching Lab Pre K - 4 Credits: 1
- ELEC 330 - Literacy Practices for the Developing Learner, Grades 2 - 4 Credits: 3
- ELEC 340 - Mathematics Methods and Strategies for PRE K - 4 Teachers Credits: 3
- SPED 325 - Interventions in the Inclusive Classroom Credits: 3

Block 2 - Credits: 15

- ELEC 420 - Early Childhood Field Experience Credits: 3
- ELEC 440 - ECE Curriculum Integration: Theory into Practice Credits: 3
- ELEC 460 - Instructional Strategies for Science and Technology Credits: 3
- ELEC 470 - Social Studies & Citizenship Credits: 3
- SPED 326 - Special Education Law and Procedures Credits: 3

Special Education Professional Semester - Credits: 15

- SPED 430 - Positive Behavior Strategies Credits: 3
- SPED 431 - Behavior Disorders and Autism Credits: 3
- SPED 432 - Intervention in the Content Areas Credits: 3
- SPED 433 - Assessment Strategies in Special Education Credits: 3
- SPED 434 - Professional Collaboration and Ethical Practices Credits: 3

Student Teaching - Credits: 12

All coursework in previous areas must be completed prior to Student Teaching

- ELEC 455 - Student Teaching: Early Childhood Credits: 12, 6, 3
- SPED 455 - Student Teaching - Special Education Credits: 12, 6, 3

Sport Management

014 West Gym
724-738-2060

Sport Management

Our mission is to provide a learning environment that:

- Prepares students for a variety of careers in the sport industry
- Fosters independent critical thinking and effective problem solving
- Includes faculty who are committed to quality teaching, research and service
- Promotes collaborative efforts among faculty and students
- Develops students who have a commitment to personal and professional competency
- Emphasizes student accountability for academic performance and ethical behavior
- Prepares students to serve a diverse population in a global society

Chair

Catriona T. Higgs

Secretary

Herman Boler

Faculty

Robertha Abney, Brian Crow, Catriona Higgs

The Department of Sport Management offers both undergraduate and graduate programs. The SRU sport management undergraduate program has been in existence since the mid 1970's and in that period has witnessed exponential growth and increased national prestige. The sport industry, due to its wide variety of positions, places unique demands on those involved in its management. These positions require management, marketing, accounting, finance, economics, communications, and legal skills specific to the sport setting. Therefore the preparation of a new kind of sport/business specialist is necessary. The present curriculum offers an excellent base in specific sport management courses and many of the sport management students complete various minors in communication, business and other specialized areas.

The curriculum continues to be reviewed and adapted to meet the growing changes in the sport management field. Evaluations from senior student interns and agency supervisors create the basis of the university's considerations along with program standards developed jointly by two professional organizations (NASPE and NASSM). The Sport Management Program Review Council of NASPE/NASSM has approved less than 20% of the top programs in the United States. We are one of the few in Pennsylvania to be an approved sport management program and Slippery Rock University is proud to be included in that select group.

Majors

- Sport Management (BS)

Minors

- Minor in Sport Management

Minor in Sport Management

Sport Management

Requirements for the Minor - Credits: 25

The specific course of study for this major is available from the chair of the Department of Sport Management or from the student's advisor. The student must have at least an overall GPA of 2.50 to graduate with a minor in Sport Management.

- SPMT 150 - Practical Application Credits: 1
- SPMT 194 - Introduction to Sport Management Credits: 3
- SPMT 286 - Sport Communication Credits: 3
- SPMT 294 - Sport Management and Ethics Credits: 3
- SPMT 394 - Sport Marketing Credits: 3
- SPMT 406 - Sport Facility and Event Management Credits: 3
- SPMT 450 - Sport Management Internship Credits: 12
- SPMT 494 - Sport Management Senior Seminar Credits: 3

Sport Management (BS)

Sport Management Department

"The sports industry is fast paced and extremely competitive. The practical experience stressed in Slippery Rock's Sport Management program prepared me for the "real world" expectations of the industry. Even after years in collegiate athletics I find myself consistently referring back to principles learned at Slippery Rock. I know my experience at The Rock laid the foundation for the success I have achieved"

**David A. Sabolcik, Jr., SRU/98
Director of Annual Giving**

Recent estimates describe sport as one of the ten largest industries in the United States encompassing over \$190 billion dollars. This industry, due to its wide variety of positions, places unique demands on those involved in its management including skills in such areas as communications, public relations, facility management, marketing, budgeting, and legal aspects specific to sport settings.

The sport management faculty has identified international sport as a future trend for sport management majors. It is recognized that the impact of sport on an international setting is fertile ground for tremendous development. Many recent developments demonstrate the globalization of sport and these developments indicate the continued dynamic nature accompanying the growth of sport management worldwide.

Providing our sport management majors with the opportunity to gain knowledge and hands on experience is paramount for SRU's growth as a leader in undergraduate sport management in the United States.

Requirements for the Major - Credits: 58

This major is designed to prepare students with the necessary sport business concepts, management, marketing and public relation skills to become successful managers in sport-related agencies. These agencies are diverse and include, professional sports, sport marketing firms, intercollegiate athletic departments, YMCA/YWCA's, sporting goods sales, fitness clubs, sport arenas, the Olympics, commercial recreational facilities and other sport-related agencies. A 12-credit internship is required in a sport-related agency during the last semester of the program. Students are encouraged to secure a minor in business.

Specialization Courses - Credits: 52

- SPMT 150 - Practical Application Credits: 1
(01-02-03-04)
- SPMT 194 - Introduction to Sport Management Credits: 3
- SPMT 196 - Global Sport Management Credits: 3
- SPMT 269 - American Sport in the 21st Century Credits: 3
- SPMT 286 - Sport Communication Credits: 3
- SPMT 294 - Sport Management and Ethics Credits: 3
- SPMT 315 - Diversity Issues in Sport Management Credits: 3
- SPMT 394 - Sport Marketing Credits: 3
- SPMT 396 - Sport Enterprise Credits: 3
- SPMT 406 - Sport Facility and Event Management Credits: 3
- SPMT 450 - Sport Management Internship Credits: 12
- SPMT 486 - Sport Law Credits: 3
- SPMT 494 - Sport Management Senior Seminar Credits: 3
- SPMT 499 - Sport Management Research Methods Credits: 3

Required Support Courses - Credits: 6

- MGMT 351 - Organizational Behavior Credits: 3
- MRKT 330 - Principles of Marketing Credits: 3

Sport Management Electives - Credits: 15

Select 15 credit hours of 300 level (or above) classes from Accounting, Communication, Economics, Finance, Management or Marketing.

College of Health, Environment & Sciences

325 Physical Therapy Building
724-738-4862

Dean

Susan Hannam

Assistant to the Dean

Wendy Stuhldreher

Administrative Assistant

Stacey Booth

Secretary

Robin Campbell

Departments

Biology
Chemistry
Exercise and Rehabilitative Sciences
Geography, Geology, and the Environment
Mathematics
Nursing
Parks and Recreation/Environmental Education
Physics
Psychology
Public Health and Social Work
School of Physical Therapy

Other Programs

Institute for the Environment
Pennsylvania Center for Environmental Education
McKeever Environmental Learning Center

The primary mission of the College of Health, Environment, and Science is to provide quality undergraduate and graduate programs that prepare students for a variety of human service, science, and environmental professions. The major fields of study leading to a bachelor of science, bachelor of science in education, bachelor of arts, or bachelor of science in nursing are described under the appropriate departments, which include: health and safety, exercise and rehabilitative sciences, nursing, parks and recreation/environmental education, biology, chemistry and physics, geography, geology, and the environment, mathematics, and psychology. The natural sciences and mathematics programs offer a wide range of opportunities that enhance students' awareness of the natural environment and prepare students to engage in logical thought processes. Curricula provide a broad liberal arts foundation and a specialized body of knowledge in a selected area of study. Many programs incorporate a wide range of applied learning opportunities, such as laboratories, field experiences, and internships. Following completion of the undergraduate program, many students pursue graduate study in the health professions including medicine, pharmacy and chiropractic, or advanced graduate work in their area of specialization. Students pursuing teacher education programs in environmental education are expected to meet all admission and retention criteria as described in the teacher education section.

In addition, the College offers an interdisciplinary program in gerontology, health informatics, medical technology, cytotechnology and other areas of specialization.

Institute for the Environment

The Institute for the Environment at Slippery Rock University started operation in 1994. Its mission is to provide interdisciplinary, interuniversity, and international opportunities for faculty, students, staff, and community members to work together for the improvement of the total environment (physical, biological, human). Institute members will serve as environmental leaders through scholarly endeavors such as research, grant writing, curriculum development, university and community service, and international experience.

McKeever Environmental Learning Center

Sandy Lake, PA
724-376-1000

Director

Francis Bires

Secretary

Kathy Powell

The McKeever Environmental Learning Center is a public service institute for the State System of Higher Education administered by Slippery Rock University of Pennsylvania. It is the only facility within the system dedicated to the specific mission of providing environmental education to the citizens of the commonwealth. The center has been in operation since 1974, providing exemplary programming for students of all ages in the form of resident or day field trips, teacher workshops, educational seminars and special events for the public. Students from both private and public systems of higher education also complete eight weeks of their student teaching assignments at McKeever to enhance their teaching skills as future educators.

A Retreat Center consisting of 2 houses accommodating 20 people is available for staff/faculty get-aways, long range planning sessions and retreats. Visit the center's web site at www.mckeever.org.

Pennsylvania Center for Environmental Education (PCEE)

164 S. Main Street
Slippery Rock, PA
724-738-9020

Director

Kathleen Paul

Secretary

Dixie Wolfe

The Pennsylvania Center for Environmental Education (PCEE), administered by Slippery Rock University and located in downtown Slippery Rock, is the commonwealth's "one stop shop" for environmental education resources. PCEE was established in 1996 to promote and disseminate environmental education information and materials. Through its online website, partnerships and on site office technology, PCEE links professionals and private citizens throughout

Pennsylvania with environmental tools and information. An extensive Environmental Education Reference Library at the PCEE office is available (by appointment) to SRU students and local teachers.

Visit the center's website at www.pcee.org and discover links to meet all of your environmental needs: from nature centers and energy-saving products to professional development and funding sources, PCEE links you to the environment!

Biology

120 Patterson Hall
724-738-2023

Biology

The fundamental mission of the department of Biology is to provide students with a comprehensive, contemporary understanding of the biological sciences. The goal of these efforts is to foster an appreciation for the complexities of living systems and to promote the development of competent biologists and scientifically literate citizens equipped for life-long learning.

Chair

Jerry Chmielewski

Secretary

Deborah Andrews

Faculty

Simon Beeching, Jerry Chmielewski, Dean DeNicola, Wayne Forbes, Stacy Hrizo, Dave Krayesky, Jack Layne, Susan Rehorek, Mark Shotwell, William Sigmund, Carolyn Steglich, Steven Strain

“Slippery Rock has an amazing Biology program. The professors are very supportive and I thought of them as my family away from home. Work hard and don’t expect an easy ride – the rewards and satisfaction you receive after graduation make it all worth it though.”

Angela Hollis, MD ‘99

Our curriculum introduces the student to basic biological principles at the molecular, cellular, organismal, and population levels. The degree programs offered by the Department of Biology provide either breadth of training in the biological sciences, concentrations in botany or zoology, or concentrations in the paramedical fields of Medical Technology or Cytotechnology. Several year plus degree options are also available, thus facilitating smooth transition to degrees in physical therapy at Slippery Rock University, osteopathic medicine at Lake Erie College of Osteopathic Medicine (LECOM), pharmacy at the LECOM School of Pharmacy and chiropractic at Logan University of Chiropractic (see Pre-Professional Programs). Specialized opportunities exist for participation in undergraduate research and for off campus study (e.g. international experiences, internships, marine science).

Graduates may select careers in academia, business, health profession, teaching, industry, or government. Whatever their individual specializations, the biology faculty share a commitment to students and have a genuine concern for their professional development.

Students majoring or minoring in biology must maintain at least a 2.000 average in biology. Before progressing to a 200-level course, students must earn a 2.000 in 100-level basic requirement biology courses. Students may register in 200-level biology courses in any order but must maintain a biology average of 2.000 or better, before progressing to another course. A student must repeat any 200-level course that brings the biology average below a 2.000. Students

must complete the 200 core sequence before progressing to 300- and 400-level courses in the major. Students should complete all 200-level biology requirements by the end of their sophomore year.

Other Programs

- Marine Science

Certification Programs

- Teacher Certification in Biology

Majors

- Biology (BA)
- Biology (BS) - Cytotechnology Track
- Biology (BS) - Medical Technology Track
- Biology (BS) - Professional Track

Minors

- Minor in Biology
- Minor in Marine Science

Pre-Professional Programs

- Chiropractic - Biology
- Osteopathic Medicine
- Pharmacy - Biology
- Pre-medical, -dental, -veterinary, -optometry, -chiropractic, -pharmacy, and -podiatry

Biology (BA)

See the Department of Biology for more information.

Requirements for the Major - Credits: 32

Biology Courses - Credits: 32

Basic Requirements - Credits: 17

- BIOL 104 - Principles of Biology Credits: 4
- BIOL 201 - General Botany Credits: 4
- BIOL 212 - General Zoology Credits: 4
- BIOL 250 - Genetics Credits: 4
- BIOL 492 - Biology Seminar Credits: 1

Additional requirements - Credits: 9

- BIOL 330 - Microbiology Credits: 3

- BIOL 340 - Vertebrate Anatomy Credits: 3
or BIOL 465, Plant Anatomy
- BIOL 370 - Molecular Biology Credits: 3
- BIOL 401 - Ecology Credits: 3
- BIOL 410 - Animal Physiology Credits: 3
or BIOL 451, Plant Physiology

Electives - Credits: 6

Select two courses from the above or any approved 300 or 400-level biology majors course. Additional electives may be selected from the Marine Science offerings.

Chemistry Courses - Credits: 12

- CHEM 107 - General Chemistry I Credits: 3
- CHEM 108 - General Chemistry II Credits: 3
- CHEM 111 - General Chemistry I Lab Credits: 1
- CHEM 112 - General Chemistry II Lab Credits: 1
- CHEM 201 - Organic Chemistry I Credits: 3
- CHEM 211 - Organic Chemistry Laboratory I Credits: 1

Mathematics Course - Credits: 4

- MATH 125 - Precalculus Credits: 4

Physics Course - Credits: 3

- PHYS 201 - Elements of Physics I/ Lab Credits: 4

Recommended Courses

- Any CPSC course
- CHEM 202 - Organic Chemistry II Credits: 3
- CHEM 212 - Organic Chemistry Laboratory II Credits: 1

Biology (BS) - Cytotechnology Track

Department of Biology

Cytotechnologists are highly skilled laboratory professionals who enjoy excellent opportunities in the present job market, which include hospital laboratories, private clinics and cancer research laboratories. In our 3+1 program the student spends three years in coursework at Slippery Rock University and one calendar year in clinical and didactic study at an American Medical Association accredited hospital school of cytotechnology.

During the three years on campus the student earns a minimum of 91 credits. Upon the successful completion of the clinical 12 months, the university accepts 29 semester credits in transfer and awards the bachelor of science degree. Because of the nature of the cytotechnology curriculum, transfer students are strongly urged to earn 64 credits at Slippery Rock University.

Slippery Rock University is formally affiliated with the Fletcher Allen Health Care, Burlington, VT, and the School of Cytotechnology, Albany Medical College, Albany, NY.

Note: A 2.000 average must be maintained in BIOL 104, 210, 213, 214, 215, 216, 217, and 250 before cytotechnology students can move on to the next required course. See also Department of Biology guidelines for further restrictions.

Requirements for the Major - Credits: 50

Biology Courses - Credits: 26

- BIOL 104 - Principles of Biology Credits: 4
- BIOL 210 - Medical Microbiology Credits: 3
- BIOL 213 - Medical Immunology Credits: 1
- BIOL 214 - Medical Parasitology Credits: 1
- BIOL 215 - Medical Mycology Credits: 1
- BIOL 216 - Anatomy and Physiology Credits: 3
- BIOL 217 - Anatomy and Physiology Credits: 3
- BIOL 250 - Genetics Credits: 4
- BIOL 335 - Cell Biology Credits: 3
- BIOL 470 - Histology Credits: 3

Chemistry Courses - Credits: 16

- CHEM 107 - General Chemistry I Credits: 3
- CHEM 108 - General Chemistry II Credits: 3
- CHEM 111 - General Chemistry I Lab Credits: 1
- CHEM 112 - General Chemistry II Lab Credits: 1
- CHEM 201 - Organic Chemistry I Credits: 3
- CHEM 202 - Organic Chemistry II Credits: 3
- CHEM 211 - Organic Chemistry Laboratory I Credits: 1
- CHEM 212 - Organic Chemistry Laboratory II Credits: 1

Mathematics Course - Credits: 4

- MATH 225 - Calculus I Credits: 4

Physics Course - Credits: 4

- PHYS 211 - General Physics I/ Lab Credits: 4

Biology (BS) - Medical Technology Track

Department of Biology

Slippery Rock University's medical technology program involves three academic years of study on campus and one calendar year at an approved, affiliated school of medical technology or one acceptable to SRU. During the first three years of the program the student must complete a minimum of 91 semester credits.

After the sophomore year, the student applies for admission to a school of medical technology where acceptance is on a competitive basis. Successful completion of the internship program results in the awarding of the bachelor of science degree. Certification as a medical technologist is obtained by passing the Board of Registry Medical Technologists examination of the American Society of Clinical Pathologists and/or the Clinical Laboratory Scientist examination of the National Certification Agency for Medical Laboratory Personnel. Because of the nature of the medical technology curriculum, transfer students are strongly urged to earn 64 credits at Slippery Rock University.

Slippery Rock University is formally affiliated with the Altoona Hospital, Altoona, PA; Rochester General Hospital, Rochester, NY; St. Vincent Health Center, Erie, PA; WCA Hospital, Jamestown, NY; and York Hospital, York, PA.

Note: A 2.000 average must be maintained in BIOL 104, 210, 213, 214, 215, 216, 217 and 250 before medical technology students can move on to the next required course. See also Department of Biology guidelines for further restrictions.

Requirements for the Major - Credits: 50

Required Courses

Biology Courses - Credits: 26

- BIOL 104 - Principles of Biology Credits: 4
- BIOL 210 - Medical Microbiology Credits: 3
- BIOL 213 - Medical Immunology Credits: 1
- BIOL 214 - Medical Parasitology Credits: 1
- BIOL 215 - Medical Mycology Credits: 1
- BIOL 216 - Anatomy and Physiology Credits: 3
- BIOL 217 - Anatomy and Physiology Credits: 3
- BIOL 250 - Genetics Credits: 4
- BIOL 330 - Microbiology Credits: 3
- BIOL 335 - Cell Biology Credits: 3
- or
- BIOL 370 - Molecular Biology Credits: 3

Chemistry Courses - Credits: 16

- CHEM 107 - General Chemistry I Credits: 3
- CHEM 108 - General Chemistry II Credits: 3
- CHEM 111 - General Chemistry I Lab Credits: 1
- CHEM 112 - General Chemistry II Lab Credits: 1
- CHEM 201 - Organic Chemistry I Credits: 3
- CHEM 202 - Organic Chemistry II Credits: 3

- CHEM 211 - Organic Chemistry Laboratory I Credits: 1
- CHEM 212 - Organic Chemistry Laboratory II Credits: 1

Mathematics Courses - Credits: 4

- MATH 225 - Calculus I Credits: 4

Physics Courses - Credits: 4

- PHYS 211 - General Physics I/ Lab Credits: 4

Biology (BS) - Professional Track

See the Department of Biology for more information.

Requirements for the Major - Credits: 41

Independent Study Option - Credits: 41

Basic Requirements - Credits: 20

Biology Courses:

- BIOL 104 - Principles of Biology Credits: 4
- BIOL 201 - General Botany Credits: 4
- BIOL 212 - General Zoology Credits: 4
- BIOL 250 - Genetics Credits: 4
- BIOL 490 - Independent Study Credits: 1 to 3
- BIOL 492 - Biology Seminar Credits: 1

Additional Requirements - Credits: 15

- BIOL 310 - Plant Systematics Credits: 3
- BIOL 325 - Biometry Credits: 3
- BIOL 330 - Microbiology Credits: 3
- BIOL 340 - Vertebrate Anatomy Credits: 3
- BIOL 370 - Molecular Biology Credits: 3
- BIOL 401 - Ecology Credits: 3
- BIOL 410 - Animal Physiology Credits: 3
- BIOL 451 - Plant Physiology Credits: 3

Electives - Credits: 6

Select two courses from the above or any approved 300 or 400-level biology major courses. Additional electives may be selected from the Marine Science offerings.

Non-Independent Study Option - Credits: 41

As in the Independent Study track except substitute an additional 300- or 400-level majors course in biology in place of BIOL 490. Additional electives may be selected from the Marine Science offerings.

Chemistry Courses - Credits: 19

- CHEM 107 - General Chemistry I Credits: 3
- CHEM 108 - General Chemistry II Credits: 3
- CHEM 111 - General Chemistry I Lab Credits: 1
- CHEM 112 - General Chemistry II Lab Credits: 1
- CHEM 201 - Organic Chemistry I Credits: 3
- CHEM 202 - Organic Chemistry II Credits: 3
- CHEM 211 - Organic Chemistry Laboratory I Credits: 1
- CHEM 212 - Organic Chemistry Laboratory II Credits: 1

Plus One Advanced Elective From:

- CHEM 335 - Biochemistry I Credits: 3
or advanced chemistry course approved by Department of Biology chairperson.

Mathematics Course - Credits: 4

- MATH 225 - Calculus I Credits: 4

Physics Courses - Credits: 7

- PHYS 211 - General Physics I/ Lab Credits: 4
- PHYS 213 - General Physics III/ Lab Credits: 3
or a 300-400 level biology elective

Recommended Courses:

Any CPSC course

Chiropractic - Biology

Department of Biology

Logan University

Under the provisions of this program, students will matriculate at Slippery Rock University (SRU) for a minimum of 90 semester hours in course work leading toward the Bachelor of Science Degree in Biology. Students are admitted at Logan University (LCC) only as first year doctorate of chiropractic students. Upon completion of the first year of studies at LCC a maximum of 34 LCC credits may be transferred toward completion of the Bachelor of Science Degree in Biology at SRU. An official transcript must be sent from LCC to the Dean of the College of Health, Environment, and Science at SRU, and the student must request application materials for graduation. While enrolled at SRU, students will complete all required course work as outlined below and described in the SRU Catalog.

Students should be aware of the following major points as they apply to this agreement:

1. The acceptance of transfer credits or testing toward completion of degree requirements shall be governed by current policies at SRU. However, no more than 20 credits of required courses, and NONE of the science credits required for admission to LCC may be earned via examination or transfer from another school.
2. All students will complete a minimum of 100 hours of volunteer work with a licensed chiropractic professional prior to applying to LCC.
3. Students who earn less than a 3.25 GPA, but at least a 2.75 GPA will be eligible for admission to LCC, and will receive appropriate consideration in the admission process for having completed the SRU Pre-Chiropractic Program, but will not receive the assurance of a seat reserved for students earning a 3.25 or higher GPA.
4. Students will make application to LCC one year in advance of their desired entrance date and will complete all required application procedures thereafter in a timely manner, including submission of recommendation and a satisfactory interview.
5. Students enrolled in the Pre-Chiropractic Program from SRU who successfully complete all course work in the first two 15 week trimesters at LCC with C's or better will be granted the Bachelor of Science degree in Biology from SRU, provided they have met all other graduation requirements.
6. Students shall pay the appropriate tuition and fees to each institution for all course work taken at that institution. During their first year of study at LCC, students shall not be registered for courses at SRU, but shall pay any fees required to maintain their registration toward the baccalaureate degree. Upon completion of the first year of study at LCC, students shall be responsible for any fees regularly charged by SRU for transfer of credits and awarding the baccalaureate degree.

Required Courses at SRU:

Biology Courses - Credits: 25

- BIOL 104 - Principles of Biology Credits: 4
- BIOL 201 - General Botany Credits: 4
- BIOL 212 - General Zoology Credits: 4
- BIOL 250 - Genetics Credits: 4
- BIOL 330 - Microbiology Credits: 3
- BIOL 492 - Biology Seminar Credits: 1

Chemistry Courses - Credits: 19

- CHEM 107 - General Chemistry I Credits: 3
- CHEM 108 - General Chemistry II Credits: 3
- CHEM 111 - General Chemistry I Lab Credits: 1
- CHEM 112 - General Chemistry II Lab Credits: 1
- CHEM 201 - Organic Chemistry I Credits: 3
- CHEM 202 - Organic Chemistry II Credits: 3

- CHEM 211 - Organic Chemistry Laboratory I Credits: 1
- CHEM 212 - Organic Chemistry Laboratory II Credits: 1
- CHEM 335 - Biochemistry I Credits: 3

Mathematics Course - Credits: 4

- MATH 225 - Calculus I Credits: 4

Physics Courses - Credits: 7

- PHYS 211 - General Physics I/ Lab Credits: 4
- PHYS 213 - General Physics III/ Lab Credits: 3

Marine Science

Coordinators

Simon Beeching, Tamra Schiappa

Marine biology, marine ecology, marine geology and geophysics, chemical oceanography, and physical oceanography are career areas that are best approached through an undergraduate major in one of the basic sciences of biology, chemistry, geology or physics, or through mathematics. Slippery Rock University, through its membership in the Marine Science Consortium, offers students interested in ocean-related phenomena an opportunity to pursue that interest through a series of summer courses offered at the Wallops Island Marine Science Center, near the Atlantic Ocean in the Virginia eastern shore region. Four three-week summer sessions are offered.

Students interested in marine studies will pursue a major in one of the natural sciences or mathematics at SRU, augmenting their studies with summer courses at the Wallops Island Marine Science Center. The number of summer courses taken will depend on the students' interests and the majors they pursue on campus. Individual programs may be tailored in consultation with an advisor, and the University offers a minor in Marine Science.

The Marine Science Consortium pools the talents and resources of 16 colleges and universities in the mid-Atlantic States. Classrooms, wet and dry laboratories, computer room, a workshop, dock facilities, dormitories, apartments, a cafeteria and recreational facilities are available at or near the Wallops Island Station. Several research and training vessels are available for work along the Atlantic coast and the Chesapeake Bay. Some courses offered at the Marine Science Center may be applied to the liberal studies requirement in the natural sciences so that any Slippery Rock University student, regardless of major, may take advantage of a first-hand experience in the marine environment. Advisement from one of the Slippery Rock University faculty members associated with the consortium is recommended for any student using Marine Science Consortium courses to fulfill the liberal studies requirement in science. Students should contact the Department of Geography, Geology, and the Environment or the Department of Biology for names of the advisors.

Minor in Biology

Department of Biology

Requirements for the Minor - Minimum Credits: 17

Required Courses - Credits: 17

One 100-level course with lab.(4 Semester Hours)

- BIOL 100 - Introductory Biology Laboratory Credits: 1
- BIOL 101 - General Biology Credits: 3
- BIOL 102 - Human Biology Credits: 3
- BIOL 104 - Principles of Biology Credits: 4

200 Level Requirement (8 Semester hours)

8 semester hours required. Choose two of the following:

- BIOL 201 - General Botany Credits: 4
- BIOL 212 - General Zoology Credits: 4
- BIOL 250 - Genetics Credits: 4

300/400 Level Requirements

300 and 400 Level Courses. (minimum of 5 semester hours)

- BIOL 305 - Wetlands and Aquatic Plants Credits: 3
- BIOL 306 - Freshwater Biomonitoring Credits: 3
- BIOL 310 - Plant Systematics Credits: 3
- BIOL 311 - Entomology Credits: 3
- BIOL 320 - Ornithology Credits: 3
- BIOL 325 - Biometry Credits: 3
- BIOL 330 - Microbiology Credits: 3
- BIOL 335 - Cell Biology Credits: 3
- BIOL 340 - Vertebrate Anatomy Credits: 3
- BIOL 343 - Embryology Credits: 3
- BIOL 345 - Introduction to Biological Electron Microscopy Credits: 2
- BIOL 350 - Evolution Credits: 3
- BIOL 357 - Environmental Microbiology Credits: 4
- BIOL 360 - Field Botany Credits: 3
- BIOL 370 - Molecular Biology Credits: 3
- BIOL 371 - Vertebrate Field Zoology Credits: 3
- BIOL 401 - Ecology Credits: 3
- BIOL 405 - Animal Physiological Ecology Credits: 4
- BIOL 410 - Animal Physiology Credits: 3
- BIOL 430 - Pathogenic Microbiology Credits: 3
- BIOL 450 - Biology Internship Credits: Up to 12
- BIOL 451 - Plant Physiology Credits: 3
- BIOL 465 - Plant Anatomy Credits: 3
- BIOL 470 - Histology Credits: 3
- BIOL 490 - Independent Study Credits: 1 to 3
- BIOL 492 - Biology Seminar Credits: 1
- BIOL 498 - Selected Topics Credits: 1 to 3

Pymatuning Laboratory of Ecology

Additional elective courses include:

- BIOL 301 - Forest Ecology Credits: N/A
- BIOL 302 - Ecology of Amphibians & Reptiles Credits: N/A
- BIOL 303 - Behavioral Ecology Credits: 3
- BIOL 307 - Vertebrate Ecology Credits: 3
- BIOL 308 - Aquatic Ecosystem Management / Lab Credits: N/A
- BIOL 321 - Wildlife Management Credits: 3
- BIOL 322 - Conservation Biology Credits: N/A
- BIOL 326 - Field Methods in Biogeography Credits: 3
- BIOL 327 - Limnology Credits: 3
- BIOL 373 - Ichthyology Credits: N/A
- BIOL 375 - Ecology of Fish / Lab Credits: 4

Marine Science Offerings

Additional electives may be selected from the Marine Science offerings.

- MARS 221 - Marine Invertebrates Credits: 3
- MARS 241 - Marine Biology Credits: 3
- MARS 260 - Marine Ecology Credits: 3
- MARS 270 - Coastal Vegetation Credits: 3
- MARS 300 - Behavior of Marine Organisms Credits: 3
- MARS 320 - Marine Microbiology Credits: 3
- MARS 330 - Tropical Invertebrates Credits: 3
- MARS 342 - Marine Botany Credits: 3
- MARS 343 - Marine Ichthyology Credits: 3
- MARS 344 - Anatomy of Marine Chordates Credits: 3
- MARS 350 - Physiology of Marine Invertebrates Credits: 3
- MARS 398 - Developmental Biology of Marine Organisms Credits: 3
- MARS 420 - Marine Micropaleontology Credits: 3
- MARS 431 - Ecology of Marine Plankton Credits: 3
- MARS 492 - Marine Mammals Credits: 3
- MARS 500 - Problems in Marine Science Credits: 3

Minor in Marine Science

The Department of Biology

Requirements for the Minor - Minimum Credits: 26-27

Required Courses

Biology Courses - Credits: 3/4

- BIOL 101 - General Biology Credits: 3
or
- BIOL 104 - Principles of Biology Credits: 4

Chemistry Courses - Credits: 8

- CHEM 107 - General Chemistry I Credits: 3
- CHEM 108 - General Chemistry II Credits: 3
- CHEM 111 - General Chemistry I Lab Credits: 1
- CHEM 112 - General Chemistry II Lab Credits: 1

Environmental Geosciences Courses - Credits: 3

- EGEO 131 - Oceanography Credits: 3

Marine Science Courses - Credits: 12

- MARS 241 - Marine Biology Credits: 3
- MARS 331 - Chemical Oceanography Credits: 3
- MARS 362 - Marine Geology Credits: 3
plus 3 additional credits from the Marine Science course list.

Osteopathic Medicine

Biology Department

Lake Erie College of Osteopathic Medicine (LECOM)

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 medicine at LECOM. This program is comprised of two phases: Phase I consists of the first three years of undergraduate education at SRU; Phase II consists of the remaining 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 in Phase I at SRU and the first four semesters (pre-clinical) of LECOM's Academic curriculum.

To be eligible for the "3+4" Program, SRU students must satisfy the requirements listed below for the Bachelor of Science degree in Biology at SRU for the "3+4" program, and indicate interest to enter into the "3+4" Program during their sophomore year. To gain final acceptance to Phase II of the "3+4" Program, students must apply through the American Association of Colleges of Osteopathic Medicine (AACOMAS) to LECOM by August 30 beginning the third year. A LECOM Secondary application must also be completed prior to scheduling an Admissions Interview. Letters of recommendation and supporting documentation, including certified transcripts from all undergraduate and graduate institutions attended, must be submitted for review by LECOM.

Admissions to LECOM is subject to the applicant's meeting the following criteria:

1. SAT minimum 1100
2. High School Grade Point Average 3.4 or better
3. High School Class Rank Top 25%
4. Slippery Rock University GPA (by end of junior year) 3.3 or better
5. MCAT (taken at the end of the junior year or earlier) 24 minimum total score; no lower than 7 in any category.
6. Consideration is also given to personal traits and demonstrated desire to become an osteopathic physician.
7. Appropriate letters of recommendation

Students successful in Phase I will be interviewed by LECOM in the third year prior to admission to Phase II of the "3+4" program. Final acceptance of candidates to Phase II of the "3+4" Program will be determined by LECOM.

Students will be awarded the Bachelor of Science degree in Biology from SRU upon receipt of an official transcript from LECOM indicating successful completion (grade of "C" or better in each course) of the first year of LECOM's curriculum. Students will be awarded the degree of Doctor of Osteopathic Medicine by LECOM after successfully completing the complete four-year medical curriculum, successfully passing COMLEX I and COMLEX II of the National Board of Osteopathic Medicine Examiners, and otherwise satisfying all other requirements as identified by LECOM for graduation.

Required courses at SRU:

Biology Courses - Credits: 25

- BIOL 104 - Principles of Biology Credits: 4
- BIOL 201 - General Botany Credits: 4
- BIOL 212 - General Zoology Credits: 4
- BIOL 250 - Genetics Credits: 4
- BIOL 330 - Microbiology Credits: 3
- BIOL 340 - Vertebrate Anatomy Credits: 3
- BIOL 410 - Animal Physiology Credits: 3

Chemistry Courses - Credits: 19

- CHEM 107 - General Chemistry I Credits: 3
- CHEM 108 - General Chemistry II Credits: 3
- CHEM 111 - General Chemistry I Lab Credits: 1
- CHEM 112 - General Chemistry II Lab Credits: 1
- CHEM 201 - Organic Chemistry I Credits: 3
- CHEM 202 - Organic Chemistry II Credits: 3
- CHEM 211 - Organic Chemistry Laboratory I Credits: 1
- CHEM 212 - Organic Chemistry Laboratory II Credits: 1
- CHEM 335 - Biochemistry I Credits: 3
(or courses approved by the Biology Department Chairperson)

Mathematics Course - Credits: 4

- MATH 225 - Calculus I Credits: 4

Physics Courses - Credits: 7

- PHYS 211 - General Physics I/ Lab Credits: 4
- PHYS 213 - General Physics III/ Lab Credits: 3

Pharmacy - Biology

Department of Biology

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 pre-pharmacy 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.

The “2+3” Accelerated Pharmacy Program is an early entry pre-pharmacy program that will give students the opportunity to complete their pharmacy education in two phases: Phase I consists of the first two years of undergraduate education at SRU; and Phase II consists of the remaining three years of pharmacy education at LECOM School of Pharmacy.

- Each year a list of every student enrolled in Phase I of the program should be submitted to the LECOM School of Pharmacy Admissions Office no later than October 15.
- LECOM Supplemental applications for admission to the LECOM School of Pharmacy must be submitted to the Director of the Pre-Pharmacy Program by January 10 of the year of matriculation into Phase II of the program. Students applying for Phase II of the Program must also complete an on-line PharmCAS Application by January 10 of the year of matriculation. The Director of the Pre-Pharmacy Program will forward the LECOM application to the Office of Admissions at the LECOM School of Pharmacy by February 1 of the year of matriculation into Phase II.
- LECOM School of Pharmacy will not accept advanced placement credit for prerequisite courses.
- LECOM School of Pharmacy will not accept credit given for CLEP courses.
- LECOM School of Pharmacy will not accept students into Phase I of the program.
- Students who have taken Phase I courses in high school must supplement each course with an additional, higher level course in the same discipline.
- LECOM School of Pharmacy will only accept applications from U.S. citizens and permanent residents.
- The student must be enrolled full-time at the undergraduate institution and complete the program in the time-frame specified in the agreement.
- Students must fulfill all Phase I entrance requirements as specified in the agreement.
- For the students in the 2+3 agreement, all Phase I courses must be taken during a student's four consecutive semesters at the affiliate institution.
- Students cannot take any Phase I courses during the summer.
- The LECOM School of Pharmacy will not accept any student who has repeated courses in Phase I of the program.
- Students must demonstrate that they can handle a full course load. Therefore, the student should not withdraw from any Phase I course which would result in the reduction of their course load.
- If applying through the agreement, the LECOM School of Pharmacy is the student's first choice. If the student is accepted into the LECOM program, the student should not accept an offer from another institution.
- Any Phase I course cannot be taken pass/fail.
- All questions from students accepted into the agreement should be directed to the institutions pre-pharmacy advisor.

For admission to Phase I of the Program, students must fulfill the following requirements:

1. SAT scores (or ACT scores) - 1170 (total of 26)
2. High School Grade Point Average - 3.5 or better out of 4.0
3. Recommendation - Two letters of recommendation
4. Candidate potential - Evidence of scholarly activities and desire to become a pharmacist

For admission to Phase II of the Program, students must fulfill the following requirements:

1. Complete the pre-pharmacy curriculum in Phase I of the "2+3" Accelerated Pharmacy Program, as described below.
2. Earn a minimum GPA of 3.4 in Phase I of the program with no individual grade lower than a "C".
3. Earn a GPA of 3.4 or higher for science and mathematics courses.
4. Submit two letters of recommendation. One of these letters must be from the Health Professions Committee at SRU. The letter will address 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.
5. Demonstrates leadership potential and commitment to the pharmacy profession.
6. Submit a completed application for admission to the LECOM School of Pharmacy.
7. Complete an in-person interview at LECOM.
 - **Beginning with the students applying to the LECOM School of Pharmacy in Fall 2007, the Pharmacy College Admissions Test (PCAT) is strongly recommended.**

Prospective students should contact LECOM directly for anticipated admission guidelines at 814.866.6641 or at pharmacy@lecom.edu. The Doctor of Pharmacy 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 faculty and administration of LECOM School of Pharmacy.

Additional information is available at www.lecom.edu/pharmacy/agreement/affiliation.htm.

Required courses at SRU:

Biology Courses - Credits: 11

- BIOL 104 - Principles of Biology Credits: 4
- BIOL 250 - Genetics Credits: 4
- BIOL 325 - Biometry Credits: 3

Chemistry Courses - Credits: 16

- CHEM 107 - General Chemistry I Credits: 3
- CHEM 108 - General Chemistry II Credits: 3
- CHEM 111 - General Chemistry I Lab Credits: 1
- CHEM 112 - General Chemistry II Lab Credits: 1
- CHEM 201 - Organic Chemistry I Credits: 3
- CHEM 202 - Organic Chemistry II Credits: 3
- CHEM 211 - Organic Chemistry Laboratory I Credits: 1
- CHEM 212 - Organic Chemistry Laboratory II Credits: 1

Mathematics Course - Credits: 4

- MATH 225 - Calculus I Credits: 4

Physics Courses - Credits: 4

- PHYS 211 - General Physics I/ Lab Credits: 4

Other Courses - Credits: 30

- Computer Science
- College Writing I & II
- Public Speaking
- Economics
- Psychology or Sociology
- Behavioral Science
- Liberal Studies (9)

Pre-medical, -dental, -veterinary, -optometry, -pharmacy, and -podiatry

Biology Department

120 Patterson Hall
724-738-2023

Students interested in these pre-professional programs are requested to contact the chairperson of the Department of Biology. These professional schools do not generally indicate a preference for a particular major. However, they do encourage students to have a liberal arts background with an ability to communicate and a strong concentration in the sciences. Students are advised to take at least one year of biology coursework, two years of chemistry (two semesters of general chemistry and two semesters of organic chemistry), one year of physics (8 credits), and mathematics through calculus.

Teacher Certification in Biology

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.

Chemistry

272 Advanced Technology and Science Hall
724-738-2031

Chemistry

- 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.

Chair

Paul Birckbichler

Secretary

Cheryl Dolan

Faculty

Paul Birckbichler, Min Soo Lim, John Seiders, Mary Sisak, Donald Zapien, Susan Zirpoli

“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

Certification Programs

- Teacher Certification in Chemistry

Majors

- Chemistry (BA)
- Chemistry (BS) - Biochemistry Track
- Chemistry (BS) - Environmental Track
- Chemistry (BS) - Forensic Track
- Chemistry (BS) - Traditional Track

Minors

- Minor in Chemistry

Pre-Professional Programs

- Pharmacy - Chemistry

Chemistry (BA)

Chemistry Department

A chemistry major studies the chemical properties of substances in order to develop the ability to make discoveries and to solve the vast array of problems associated with existing technologies. Four programs of study leading to a bachelor of science degree and one leading to a bachelor of arts degree are available. The bachelor of arts program allows

students to choose more elective courses in order to link chemistry with some other interest such as marketing/sales or patent law. The bachelor of science programs in biochemistry, environmental chemistry, forensic chemistry and general chemistry prepare students for postgraduate education and careers in industry, government, medicine and education. 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 chemists must have.

The science and math course requirements taken during the first two years in our programs are almost identical. Consequently, students do not have to choose a specific specialization until their junior year.

A pharmacy option in the biochemistry program enables students to take advantage of a 3 + 3 affiliation agreement with the Lake Erie College of Osteopathic Medicine's School of Pharmacy. Admission to the three-year pharmacy part of the program is competitive (see Pre-professional Programs).

All of our students are strongly encouraged to do research under the direction of one of our faculty. Three laboratories exist solely for student research, and student/faculty research is supported by modern analytical instrumentation in our spectroscopy and chromatography laboratories.

SRU graduates perform research and development at large corporations and small companies. Others are high school teachers and university professors. Some eventually move into careers in management or sales. Many have completed postgraduate programs in chemistry, engineering, medicine and other science related areas. The chemistry faculty at Slippery Rock University help students develop career goals that match their interests and this is reflected in the wide variety of careers our graduates pursue.

College-Wide Requirements:

- CHEM 107 - General Chemistry I Credits: 3
- CHEM 111 - General Chemistry I Lab Credits: 1
- MATH 225 - Calculus I Credits: 4
- PHYS 211 - General Physics I/ Lab Credits: 4

Requirements for the Major - Credits: 38-39

Chemistry Courses - Credits: 31-32

Plus 3-4 credits from CHEM 302, 337, 442, 460, 475

Students must earn at least a "C" or better in CHEM 108, CHEM 112, CHEM 201, and CHEM 202 to register for Chemistry courses numbered 300 or above.

- CHEM 108 - General Chemistry II Credits: 3
- CHEM 112 - General Chemistry II Lab Credits: 1
- CHEM 201 - Organic Chemistry I Credits: 3
- CHEM 202 - Organic Chemistry II Credits: 3

- CHEM 211 - Organic Chemistry Laboratory I Credits: 1
- CHEM 212 - Organic Chemistry Laboratory II Credits: 1
- CHEM 321 - Physical Chemistry Laboratory I Credits: 1
- CHEM 335 - Biochemistry I Credits: 3
- CHEM 336 - Biochemistry Laboratory I Credits: 1
- CHEM 350 - Analytical Chemistry Credits: 3
- CHEM 351 - Analytical Chemistry Lab Credits: 1
- CHEM 425 - Instrumental Analysis Credits: 3
- CHEM 426 - Instrumental Analysis Laboratory Credits: 1

Mathematics Courses - Credits: 4

- MATH 230 - Calculus II Credits: 4

Physics Courses - Credits: 3

- PHYS 213 - General Physics III/ Lab Credits: 3

Chemistry (BS) - Biochemistry Concentration

Chemistry Department

A chemistry major studies the chemical properties of substances in order to develop the ability to make discoveries and to solve the vast array of problems associated with existing technologies. Four programs of study leading to a bachelor of science degree and one leading to a bachelor of arts degree are available. The bachelor of arts program allows students to choose more elective courses in order to link chemistry with some other interest such as marketing/sales or patent law. The bachelor of science programs in biochemistry, environmental chemistry, forensic chemistry and general chemistry prepare students for postgraduate education and careers in industry, government, medicine and education. 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 chemists must have.

The science and math course requirements taken during the first two years in our programs are almost identical. Consequently, students do not have to choose a specific specialization until their junior year.

A pharmacy option in the biochemistry program enables students to take advantage of a 3 + 3 affiliation agreement with the Lake Erie College of Osteopathic Medicine's School of Pharmacy. Admission to the three-year pharmacy part of the program is competitive (see Pre-professional Programs).

All of our students are strongly encouraged to do research under the direction of one of our faculty. Three laboratories exist solely for student research, and student/faculty research is supported by modern analytical instrumentation in our spectroscopy and chromatography laboratories.

SRU graduates perform research and development at large corporations and small companies. Others are high school teachers and university professors. Some eventually move into careers in management or sales. Many have completed postgraduate programs in chemistry, engineering, medicine and other science related areas. The chemistry faculty at Slippery Rock University help students develop career goals that match their interests and this is reflected in the wide variety of careers our graduates pursue.

Chemistry College Wide Requirements

- CHEM 107 - General Chemistry I Credits: 3
- CHEM 111 - General Chemistry I Lab Credits: 1
- MATH 225 - Calculus I Credits: 4
- PHYS 211 - General Physics I/ Lab Credits: 4

Requirements for the Major - Credits: 59

Required Chemistry Courses - Credits: 32

Students must earn at least a "C" or better in CHEM 108, CHEM 112, CHEM 201, and CHEM 202 to register for Chemistry courses numbered 300 or above.

- CHEM 107 - General Chemistry I Credits: 3
- CHEM 108 - General Chemistry II Credits: 3
- CHEM 111 - General Chemistry I Lab Credits: 1
- CHEM 112 - General Chemistry II Lab Credits: 1
- CHEM 201 - Organic Chemistry I Credits: 3
- CHEM 202 - Organic Chemistry II Credits: 3
- CHEM 211 - Organic Chemistry Laboratory I Credits: 1
- CHEM 212 - Organic Chemistry Laboratory II Credits: 1
- CHEM 321 - Physical Chemistry Laboratory I Credits: 1
- CHEM 335 - Biochemistry I Credits: 3
- CHEM 336 - Biochemistry Laboratory I Credits: 1
- CHEM 350 - Analytical Chemistry Credits: 3
- CHEM 351 - Analytical Chemistry Lab Credits: 1
- CHEM 425 - Instrumental Analysis Credits: 3
- CHEM 426 - Instrumental Analysis Laboratory Credits: 1

Additional Chemistry Requirements - 4 Credits

- CHEM 337 - Biochemistry II Credits: 3
- CHEM 338 - Biochemistry Laboratory II Credits: 1

Required Math and Science - 35 Credits

- BIOL 104 - Principles of Biology Credits: 4
- BIOL 250 - Genetics Credits: 4
- BIOL 330 - Microbiology Credits: 3
- BIOL 335 - Cell Biology Credits: 3
- BIOL 370 - Molecular Biology Credits: 3
- MATH 230 - Calculus II Credits: 4
- MATH 225 - Calculus I Credits: 4
- MATH 152 - Elementary Statistics I Credits: 3
- PHYS 211 - General Physics I/ Lab Credits: 4
- PHYS 213 - General Physics III/ Lab Credits: 3

Chemistry (BS) - Environmental Chemistry Concentration

Chemistry Department

A chemistry major studies the chemical properties of substances in order to develop the ability to make discoveries and to solve the vast array of problems associated with existing technologies. Four programs of study leading to a bachelor of science degree and one leading to a bachelor of arts degree are available. The bachelor of arts program allows students to choose more elective courses in order to link chemistry with some other interest such as marketing/sales or patent law. The bachelor of science programs in biochemistry, environmental chemistry, forensic chemistry and general chemistry prepare students for postgraduate education and careers in industry, government, medicine and education. 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 chemists must have.

The science and math course requirements taken during the first two years in our programs are almost identical. Consequently, students do not have to choose a specific specialization until their junior year.

A pharmacy option in the biochemistry program enables students to take advantage of a 3 + 3 affiliation agreement with the Lake Erie College of Osteopathic Medicine's School of Pharmacy. Admission to the three-year pharmacy part of the program is competitive (see Pre-professional Programs).

All of our students are strongly encouraged to do research under the direction of one of our faculty. Three laboratories exist solely for student research, and student/faculty research is supported by modern analytical instrumentation in our spectroscopy and chromatography laboratories.

SRU graduates perform research and development at large corporations and small companies. Others are high school teachers and university professors. Some eventually move into careers in management or sales. Many have completed postgraduate programs in chemistry, engineering, medicine and other science related areas. The chemistry faculty at Slippery Rock University help students develop career goals that match their interests and this is reflected in the wide variety of careers our graduates pursue.

Chemistry College Wide Requirements

- CHEM 107 - General Chemistry I Credits: 3
- CHEM 111 - General Chemistry I Lab Credits: 1
- MATH 225 - Calculus I Credits: 4
- PHYS 211 - General Physics I/ Lab Credits: 4

Requirements for the Major - Credits: 67

Chemistry Courses - Credits: 32

Students must earn at least a "C" or better in CHEM 108, CHEM 112, CHEM 201, and CHEM 202 to register for Chemistry courses numbered 300 or above.

- CHEM 107 - General Chemistry I Credits: 3
- CHEM 108 - General Chemistry II Credits: 3
- CHEM 111 - General Chemistry I Lab Credits: 1
- CHEM 112 - General Chemistry II Lab Credits: 1
- CHEM 201 - Organic Chemistry I Credits: 3
- CHEM 202 - Organic Chemistry II Credits: 3
- CHEM 211 - Organic Chemistry Laboratory I Credits: 1
- CHEM 212 - Organic Chemistry Laboratory II Credits: 1
- CHEM 321 - Physical Chemistry Laboratory I Credits: 1
- CHEM 335 - Biochemistry I Credits: 3
- CHEM 336 - Biochemistry Laboratory I Credits: 1
- CHEM 350 - Analytical Chemistry Credits: 3
- CHEM 351 - Analytical Chemistry Lab Credits: 1
- CHEM 425 - Instrumental Analysis Credits: 3
- CHEM 426 - Instrumental Analysis Laboratory Credits: 1

Additional Chemistry Requirements - 4 Credits

- CHEM 340 - Air Quality Assessment Credits: 4
- CHEM 370 - Water Quality Assessment Credits: 4

Required Math and Science - 31 Credits

- BIOL 104 - Principles of Biology Credits: 4
- BIOL 357 - Environmental Microbiology Credits: 4
- EGEO 451 - Geochemistry Credits: 4
- EGEO 453 - Geotechniques: Geochemistry Credits: 1
- MATH 152 - Elementary Statistics I Credits: 3
- MATH 225 - Calculus I Credits: 4
- MATH 230 - Calculus II Credits: 4
- PHYS 211 - General Physics I/ Lab Credits: 4
- PHYS 213 - General Physics III/ Lab Credits: 3

Chemistry (BS) - Forensic Track

Chemistry Department

A chemistry major studies the chemical properties of substances in order to develop the ability to make discoveries and to solve the vast array of problems associated with existing technologies. Four programs of study leading to a bachelor of science degree and one leading to a bachelor of arts degree are available. The bachelor of arts program allows students to choose more elective courses in order to link chemistry with some other interest such as marketing/sales or

patent law. The bachelor of science programs in biochemistry, environmental chemistry, forensic chemistry and general chemistry prepare students for postgraduate education and careers in industry, government, medicine and education. 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 chemists must have.

The science and math course requirements taken during the first two years in our programs are almost identical. Consequently, students do not have to choose a specific specialization until their junior year.

A pharmacy option in the biochemistry program enables students to take advantage of a 3 + 3 affiliation agreement with the Lake Erie College of Osteopathic Medicine's School of Pharmacy. Admission to the three-year pharmacy part of the program is competitive (see Pre-professional Programs).

All of our students are strongly encouraged to do research under the direction of one of our faculty. Three laboratories exist solely for student research, and student/faculty research is supported by modern analytical instrumentation in our spectroscopy and chromatography laboratories.

SRU graduates perform research and development at large corporations and small companies. Others are high school teachers and university professors. Some eventually move into careers in management or sales. Many have completed postgraduate programs in chemistry, engineering, medicine and other science related areas. The chemistry faculty at Slippery Rock University help students develop career goals that match their interests and this is reflected in the wide variety of careers our graduates pursue.

Chemistry College Wide Requirements

- CHEM 107 - General Chemistry I Credits: 3
- CHEM 111 - General Chemistry I Lab Credits: 1
- MATH 225 - Calculus I Credits: 4
- PHYS 211 - General Physics I/ Lab Credits: 4

Requirements for the Major - Credits: 59

Chemistry Courses - Credits: 32

Students must earn at least a "C" or better in CHEM 108, CHEM 112, CHEM 201, and CHEM 202 to register for Chemistry courses numbered 300 or above.

- CHEM 108 - General Chemistry II Credits: 3
- CHEM 112 - General Chemistry II Lab Credits: 1
- CHEM 201 - Organic Chemistry I Credits: 3
- CHEM 202 - Organic Chemistry II Credits: 3
- CHEM 211 - Organic Chemistry Laboratory I Credits: 1
- CHEM 212 - Organic Chemistry Laboratory II Credits: 1
- CHEM 321 - Physical Chemistry Laboratory I Credits: 1
- CHEM 335 - Biochemistry I Credits: 3
- CHEM 336 - Biochemistry Laboratory I Credits: 1
- CHEM 350 - Analytical Chemistry Credits: 3
- CHEM 351 - Analytical Chemistry Lab Credits: 1
- CHEM 415 - Forensic Analysis Credits: 3
- CHEM 416 - Forensic Analysis Lab Credits: 1

- CHEM 425 - Instrumental Analysis Credits: 3
- CHEM 426 - Instrumental Analysis Laboratory Credits: 1

Mathematics Courses - Credits: 7

- MATH 152 - Elementary Statistics I Credits: 3
- MATH 230 - Calculus II Credits: 4

Physics Courses - Credits: 3

- PHYS 213 - General Physics III/ Lab Credits: 3

Biology Courses - Credits: 11

- BIOL 104 - Principles of Biology Credits: 4
- BIOL 250 - Genetics Credits: 4
- BIOL 370 - Molecular Biology Credits: 3

Sociology Courses - Credits: 6

- CRIM 205 - Introduction to Criminology and Criminal Justice Systems Credits: 3
- CRIM 343 - Criminal Investigations Credits: 3

Chemistry (BS) - Traditional Track

Chemistry Department

A chemistry major studies the chemical properties of substances in order to develop the ability to make discoveries and to solve the vast array of problems associated with existing technologies. Four programs of study leading to a bachelor of science degree and one leading to a bachelor of arts degree are available. The bachelor of arts program allows students to choose more elective courses in order to link chemistry with some other interest such as marketing/sales or patent law. The bachelor of science programs in biochemistry, environmental chemistry, forensic chemistry and general chemistry prepare students for postgraduate education and careers in industry, government, medicine and education. 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 chemists must have.

The science and math course requirements taken during the first two years in our programs are almost identical. Consequently, students do not have to choose a specific specialization until their junior year.

A pharmacy option in the biochemistry program enables students to take advantage of a 3 + 3 affiliation agreement with the Lake Erie College of Osteopathic Medicine's School of Pharmacy. Admission to the three-year pharmacy part of the program is competitive (see Pre-professional Programs).

All of our students are strongly encouraged to do research under the direction of one of our faculty. Three laboratories exist solely for student research, and student/faculty research is supported by modern analytical instrumentation in our spectroscopy and chromatography laboratories.

SRU graduates perform research and development at large corporations and small companies. Others are high school teachers and university professors. Some eventually move into careers in management or sales. Many have completed postgraduate programs in chemistry, engineering, medicine and other science related areas. The chemistry faculty at Slippery Rock University help students develop career goals that match their interests and this is reflected in the wide variety of careers our graduates pursue.

College-Wide Requirements:

- CHEM 107 - General Chemistry I Credits: 3
- CHEM 111 - General Chemistry I Lab Credits: 1
- MATH 225 - Calculus I Credits: 4
- PHYS 211 - General Physics I/ Lab Credits: 4

Requirements for the Major

Required Courses for the Chemistry (BS) – Traditional Track

Chemistry Courses Credits: 32

- CHEM 107 - General Chemistry I Credits: 3
- CHEM 108 - General Chemistry II Credits: 3
- CHEM 111 - General Chemistry I Lab Credits: 1
- CHEM 112 - General Chemistry II Lab Credits: 1
- CHEM 201 - Organic Chemistry I Credits: 3
- CHEM 202 - Organic Chemistry II Credits: 3
- CHEM 211 - Organic Chemistry Laboratory I Credits: 1
- CHEM 212 - Organic Chemistry Laboratory II Credits: 1
- CHEM 321 - Physical Chemistry Laboratory I Credits: 1
- CHEM 335 - Biochemistry I Credits: 3
- CHEM 336 - Biochemistry Laboratory I Credits: 1
- CHEM 350 - Analytical Chemistry Credits: 3
- CHEM 351 - Analytical Chemistry Lab Credits: 1
- CHEM 425 - Instrumental Analysis Credits: 3
- CHEM 426 - Instrumental Analysis Laboratory Credits: 1

Additional Chemistry Requirements - 7 Credits

- CHEM 302 - Physical Chemistry II Credits: 3
- CHEM 442 - Inorganic Chemistry Credits: 3
- CHEM 452 - Physical Inorganic Chemistry Laboratory Credits: 1

Chemistry Elective Courses - 4 Credits

Select 4 credits from the following:

- CHEM 337 - Biochemistry II Credits: 3
- CHEM 338 - Biochemistry Laboratory II Credits: 1
- CHEM 415 - Forensic Analysis Credits: 3
- CHEM 416 - Forensic Analysis Lab Credits: 1
- CHEM 460 - Polymer Chemistry Credits: 3
- CHEM 475 - Advanced Organic Synthesis Credits: 5
- CHEM 496 - Research Credits: 1 to 3
- CHEM 490 - Independent Study Credits: 1 to 3

Required Math and Science Courses- 27 Credits

- BIOL 104 - Principles of Biology Credits: 4
- MATH 225 - Calculus I Credits: 4
- MATH 230 - Calculus II Credits: 4
- MATH 231 - Calculus III Credits: 4
- PHYS 211 - General Physics I/ Lab Credits: 4
- PHYS 212 - General Physics II/ Lab Credits: 4
- PHYS 213 - General Physics III/ Lab Credits: 3

Minor in Chemistry

Chemistry Department

Requirements for the Minor

Required Courses

Option A:

- CHEM 107 - General Chemistry I Credits: 3
- CHEM 108 - General Chemistry II Credits: 3
- CHEM 111 - General Chemistry I Lab Credits: 1
- CHEM 112 - General Chemistry II Lab Credits: 1
- CHEM 201 - Organic Chemistry I Credits: 3
- CHEM 202 - Organic Chemistry II Credits: 3
- CHEM 211 - Organic Chemistry Laboratory I Credits: 1
- CHEM 212 - Organic Chemistry Laboratory II Credits: 1
- CHEM 335 - Biochemistry I Credits: 3

- CHEM 336 - Biochemistry Laboratory I Credits: 1
- CHEM 337 - Biochemistry II Credits: 3

Option B:

- CHEM 107 - General Chemistry I Credits: 3
- CHEM 108 - General Chemistry II Credits: 3
- CHEM 111 - General Chemistry I Lab Credits: 1
- CHEM 112 - General Chemistry II Lab Credits: 1
- CHEM 201 - Organic Chemistry I Credits: 3
- CHEM 211 - Organic Chemistry Laboratory I Credits: 1
- CHEM 302 - Physical Chemistry II Credits: 3
- CHEM 321 - Physical Chemistry Laboratory I Credits: 1
- CHEM 322 - Physical Chemistry Laboratory II Credits: 1
- CHEM 350 - Analytical Chemistry Credits: 3
- CHEM 351 - Analytical Chemistry Lab Credits: 1

Pharmacy - Chemistry

Chemistry Department

A 3+3 affiliation agreement with the Lake Erie College of Medicine's School of Pharmacy (LECOM) would give the students in SRU's Biochemistry program a pharmacy option. Students selecting this option would receive a B.S. degree in Chemistry (Biochemistry Concentration) after completing the first year of a 3-year doctoral program at LECOM. Twenty-seven credits, including 9 in chemistry, 4 in biology, and 6 in liberal studies, would be transferred from LECOM to SRU at that time.

- Each year a list of every student enrolled in Phase I of the program should be submitted to the LECOM School of Pharmacy Admissions Office no later than October 15.
- LECOM Supplemental applications for admission to the LECOM School of Pharmacy must be submitted to the Director of the Pre-Pharmacy Program by January 10 of the year of matriculation into Phase II of the program. Students applying for Phase II of the Program must also complete an on-line PharmCAS Application by January 10 of the year of matriculation. The Director of the Pre-Pharmacy Program will forward the LECOM application to the Office of Admissions at the LECOM School of Pharmacy by February 1 of the year of matriculation into Phase II.
- **LECOM School of Pharmacy will not accept advanced placement credit for prerequisite courses.**
- LECOM School of Pharmacy will not accept credit given for CLEP courses.
- LECOM School of Pharmacy will not accept students into Phase I of the program.
- **Students who have taken Phase I courses in high school must supplement each course with an additional, higher level course in the same discipline.**
- LECOM School of Pharmacy will only accept applications from U.S. citizens and permanent residents.
- The student must be enrolled full-time at the undergraduate institution and complete the program in the time-frame specified in the agreement.
- Students must fulfill all Phase I entrance requirements as specified in the agreement.
- Students cannot take any Phase I courses during the summer.
- The LECOM School of Pharmacy will not accept any student who has repeated courses in Phase I of the program.

- **Students must demonstrate that they can handle a full course load. Therefore, the student should not withdraw from any Phase I course which would result in the reduction of their course load.**
- **If applying through the agreement, the LECOM School of Pharmacy is the student's first choice. If the student is accepted into the LECOM program, the student should not accept an offer from another institution.**
- **Any Phase I course cannot be taken pass/fail.**
- **All questions from students accepted into the agreement should be directed to the institutions pre-pharmacy advisor.**

For admission to Phase I of the Program, students must fulfill the following requirements:

1. SAT scores (or ACT scores) - 1170 (total of 26)
2. High School Grade Point Average - 3.5 or better out of 4.0
3. Candidate potential - Evidence of scholarly activities and desire to become a pharmacist

For admission to Phase II of the Program, students must fulfill the following requirements:

1. Complete the pre-pharmacy curriculum in Phase I of the "3+3" Accelerated Pharmacy Program, as described below.
 2. Earn a minimum GPA of 3.4 in Phase I of the program with no individual grade lower than a "C".
 3. Earn a GPA of 3.4 or higher for science and mathematics courses.
 4. Submit two letters of recommendation. One of these letters must be from the Health Professions Committee at SRU. The letter will address 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.
 5. Demonstrates leadership potential and commitment to the pharmacy profession.
 6. Submit a completed application for admission to the LECOM School of Pharmacy.
- **Beginning with the students applying to the LECOM School of Pharmacy in Fall 2007, an in-person interview at LECOM is required.**
 - **Beginning with the students applying to the LECOM School of Pharmacy in Fall 2007, the Pharmacy College Admissions Test (PCAT) is strongly recommended.**

All courses from LECOM transfer to the B.S. Chemistry program – Biochemistry/Pharmacy option. Four LECOM courses replace four SRU courses from our current Biochemistry program. The SRU courses are Microbiology (Biol 330), Cell Biology (Biol 335), Molecular Biology (Biol 370) and either Analytical Chemistry (Chem 350, 351) or Instrumental Analysis (Chem 425, 426).

Required courses at SRU:

Biology Courses - Credits: 8

- BIOL 104 - Principles of Biology Credits: 4
- BIOL 250 - Genetics Credits: 4

Chemistry Courses - Credits: 28

- CHEM 107 - General Chemistry I Credits: 3
- CHEM 108 - General Chemistry II Credits: 3
- CHEM 111 - General Chemistry I Lab Credits: 1
- CHEM 112 - General Chemistry II Lab Credits: 1
- CHEM 201 - Organic Chemistry I Credits: 3
- CHEM 202 - Organic Chemistry II Credits: 3
- CHEM 211 - Organic Chemistry Laboratory I Credits: 1
- CHEM 212 - Organic Chemistry Laboratory II Credits: 1

- CHEM 321 - Physical Chemistry Laboratory I Credits: 1
- CHEM 335 - Biochemistry I Credits: 3
- CHEM 336 - Biochemistry Laboratory I Credits: 1
- CHEM 337 - Biochemistry II Credits: 3
- CHEM 338 - Biochemistry Laboratory II Credits: 1

Chemistry Electives - Credits: 4

- CHEM 350 - Analytical Chemistry Credits: 3
- CHEM 351 - Analytical Chemistry Lab Credits: 1
- CHEM 425 - Instrumental Analysis Credits: 3
- CHEM 426 - Instrumental Analysis Laboratory Credits: 1

Mathematics Courses - Credits: 11

- MATH 152 - Elementary Statistics I Credits: 3
- MATH 225 - Calculus I Credits: 4
- MATH 230 - Calculus II Credits: 4

Physics Courses - Credits: 7

- PHYS 211 - General Physics I/ Lab Credits: 4
- PHYS 213 - General Physics III/ Lab Credits: 3

Teacher Certification in Chemistry

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 chemistry must earn a bachelor of arts or a bachelor of science degree in chemistry 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.

Exercise and Rehabilitative Sciences

304 Patterson Hall
724-738-4864

Exercise and Rehabilitative Sciences

Chair

Patricia Pierce

Assistant Chairs

Jeffrey Lynn

Jacqueline Williams

Secretary

Deborah Glenn
Connie Schmidt

Faculty

Jonathan Anning, Susan Herman, Beth Larouere, Jeffrey Lynn, Patricia Pierce, William Ryan, Marketa Schublova, Bonnie Siple, Kimberly Smith, Jacqueline Williams, Scott Zema

The Department of Exercise and Rehabilitative Sciences houses two well-established and accredited undergraduate programs, athletic training and exercise science. Both programs provide extensive opportunities for hands-on experiences in work sites through internships/practicums.

Majors

- Athletic Training (BS)
- Exercise Science (BS)

Athletic Training (BS)

Exercise and Rehabilitative Sciences

"The virtues of the Athletic Training Faculty, Staff, and Students constitute the confidence I now possess for personal learning and my educating of others. Slippery Rock University served as the keystone necessary for me to achieve my goals in education, clinical experience, and sport injury research."

Anthony House, ATC '05
UNLV Graduate Assistant
Kinesiology/ATEP Administration

The Athletic Training Education Program (ATEP) prepares selected undergraduate students with the knowledge, skills, and abilities to provide care to athletes and the physically active within the six domains of athletic training practice. The Slippery Rock University Athletic Training Education Program is accredited by the Commission on Accreditation of Athletic Training Education (<http://www.caate.net/>). Students fulfilling the total 120 credit hours of academic program requirements will graduate with a bachelor of science degree and a major in athletic training.

SRU sponsors a unique accelerated ATEP that allows athletic training students to graduate in December of their senior (fourth) year. This is accomplished with a highly structured curriculum that is sequenced over three and a half (3.5)

years or seven (7) semesters including six (6) required credits in the summer. This "accelerated" program allows SRU's athletic training students to graduate a semester early, sit for the Board of Certification (BOC) credentialing examination before their peers at other universities and be more competitive for graduate assistantships, employment and seats in other medical preparation programs.

Upon formal acceptance into the professional strand of the ATEP, students must acquire and maintain athletic training student liability insurance and professional rescuer level first aid and cardiopulmonary resuscitation certifications. These are acquired in advance of enrollment in the clinical course Practicum in Athletic Training (ERS 387), which is taken four times over four consecutive semesters to total 12 credits. This is the equivalent of a 12-credit internship. Instead of finishing all coursework and then completing an internship, the athletic training student participates in his or her clinical experience under the direct supervision of an approved clinical instructor (certified athletic trainer or other medical professional) while taking the relevant coursework. Thus, there is immediate opportunity for application of theory to practice. Although most of the clinical experience takes place on-campus with SRU's certified athletic trainers and varsity athletic teams, all athletic training students are required to spend at least one rotation off-campus with one of our approved clinical instructors at an affiliate site. Athletic training students are required to provide their own transportation to and from the off-campus affiliate sites.

Athletic training students are active, dues-paying members of the SRU Athletic Training Association, National Athletic Trainers' Association (NATA), Eastern Athletic Trainers' Association (EATA), and Pennsylvania Athletic Trainers' Society (PATS). They often attend the annual conferences of those professional organizations and participate in various field trips, surgical observations, and physicians' clinics. Many athletic training students have pursued external internships with the assistance of the faculty. Some of these include internships with the Pittsburgh Steelers, Pittsburgh Pirates, New York Jets and the Wide World of Sports Complex at Disney World in Orlando, FL. Rock athletic training students are some of the most successful students in being awarded NATA and EATA sponsored scholarships.

Student-athletes participating in varsity sports sponsored by the SRU Athletic Department who are granted admission to the ATEP should make the program coordinator aware of their active participation in their respective sport. Although the ATEP faculty work very hard with the coaching staff to support student-athletes in their attempt to participate in varsity athletics while matriculating through the ATEP, success is dependent upon each student's ability to manage their time effectively while maintaining required standards of academic performance in the didactic (classroom) and clinical education portions of the ATEP. Because all sports are different and all sport seasons vary in time and intensity, not all student-athletes will progress through the ATEP the same way. In order to meet the minimum standards of completion of the ATEP, student-athletes will be required to enroll one additional semester (4 years or 8 semesters total) or more to guarantee that a quality educational and clinical experience has been achieved and that all competencies and proficiencies have been successfully mastered.

Additional costs related to the Athletic Training Education Program

\$40.00	Required/Approved Uniforms (minimum of one uniform shirt)
85.00	NATA Membership Annual Dues (includes NATA, EATA & PATS)
10.00	SRU Athletic Trainers' Association Annual Dues
35.00	Athletic Training Student Liability Insurance Annual Fee
25.00	Laboratory Fees (Approximate)
60.00	PA Criminal Background Check, PA Child Abuse History Clearance, FBI Fingerprinting Clearance
50.00	Minimum for Transportation to off-campus clinical rotation (Cost dependent on location of assignment [range of 3 to 22 miles from SRU], cost of gas during specific semester of off campus assignment, and opportunities to car pool.)

*All costs are subject to change.

Policy for Application to the Athletic Training Education Program

University acceptance to pursue the athletic training major does NOT guarantee admission into the professional strand of the ATEP.

Technical Standards for the SRU Athletic Training Education Program

The ATEP at Slippery Rock University is a rigorous and intense program that places specific requirements and demands on the students enrolled in the program. An objective of this program is to prepare graduates to enter a variety of employment settings and to render care to a wide spectrum of individuals engaged in physical activity. The technical standards set forth by the ATEP establish the essential qualities considered necessary for students admitted to this program to achieve the knowledge, skills, and competencies of an entry-level athletic trainer, as well as meet the expectations of the program's accrediting agency (CAATE). All students must meet the following abilities and expectations. In the event a student is unable to fulfill these technical standards the student will not be admitted to the program.

Compliance with the programs technical standards does not guarantee a student's eligibility for the BOC credentialing examination.

Candidates for selection to the Athletic Training Education Program must demonstrate:

1. The mental capacity to assimilate, analyze, synthesize, integrate concepts and problem solve to formulate assessment and therapeutic judgments and to be able to distinguish deviations from the norm.
2. Sufficient postural and neuromuscular control, sensory function, and coordination to perform appropriate physical examination using accepted techniques; and accurately, safely and efficiently use equipment and materials during assessments and the treatment of patients.
3. The ability to communicate effectively and sensitively with patients and colleagues, including individuals from different cultural and social backgrounds; this includes, but is not limited to, the ability to establish rapport with patients and communicate judgments and treatment information effectively. Students must be able to understand and speak with English language at a level consistent with competent professional practice.
4. The ability to record the physical examination results and treatment plan clearly and accurately.
5. The capacity to maintain composure and continue to function well during periods of high stress.
6. The perseverance, diligence and commitment to complete the Athletic Training Education Program as outlined and sequenced.
7. Flexibility and the ability to adjust to changing situations and uncertainty in clinical situations.
8. Affective skills and appropriate demeanor and rapport that relate to professional education and quality patient care.

Candidates for selection to the professional strand of the ATEP will be required to verify that they understand and meet these technical standards. The Office of Diversity and Equal Opportunity will evaluate a student who states that he/she cannot meet the program's technical standards as outlined in the Office of Diversity and Equal Opportunity policies. All athletic training students are required to have a physical examination upon admittance into the professional strand of the education program. Students are required to use the SRU pre-participation examination form. This will be done to ensure that each student's physical and mental health will permit him or her to meet the established technical standards.

Admission into the professional strand of the ATEP is competitive. The number of seats in the program is limited because of the faculty-to-student ratio recommended for accreditation. Formal application to the professional strand of the ATEP must be completed by March of the student's freshman (first) year on campus. Formal application for admission consideration requires the following evidence:

1. Completion of ERS 107 (Introduction to Athletic Training) at Slippery Rock University with a minimum grade of "B."
2. Completion of ERS 101 (Applied Anatomy) with a minimum grade of "B".
3. A cumulative QPA of 2.750 or above in athletic training major courses and overall.
4. Completion of 50 hours of athletic training observation under a BOC certified athletic trainer (these 50 hours may be accumulated with the start of the fall semester of the student's first year on campus). The 50 hours must also be verified by the supervising the certified athletic trainer being observed. Licensed physical therapists that also hold the ATC credential may be observed as well.
5. Active membership in the Slippery Rock University Athletic Training Association.

6. Letter of application/intent, resume, and SRU transcript or Rocktalk printout of grades.
7. Letter of recommendation from the BOC certified athletic trainer who supervised the athletic training observation.
8. A 500-word essay on a topic to be announced each year.

Applicants will be ranked on the basis of QPA. Top ranked applicants will be scheduled for a personal interview. Final admission decisions will be made on the basis of academic, personal, and professional qualifications as evidenced by the student's application materials and interview responses. Students will be notified of admission decisions by the end of the freshman (first) year. Because the number of applicants may exceed the available seats, meeting the minimum criteria does not guarantee acceptance into the program. Students who have been selected for admission to the ATEP officially begin the professional strand of the major during the sophomore (second) year.

Policy for Retention in the Athletic Training Program

Students who are accepted into the professional strand of the ATEP are required to satisfy didactic and clinical education requirements throughout their remaining semesters in the program. Specifically, students must maintain a major and overall QPA at or above 2.75 and may not receive a grade of "D" or more than two grades of "C" in required major courses while enrolled in the professional strand of the ATEP. Failure to maintain the minimum requirements for didactic and clinical education will result in one semester of probation. Students who must repeat a major course requirement may have to do so with the next cohort. If the deficiencies are not corrected to the satisfaction of the faculty by the end of the probationary period, the student will be permanently dismissed from the program. Upon recommendation of the faculty, students achieving compliance with the minimum standards following a probationary status will be permitted to complete the ATEP, which may require additional semesters.

Board of Certification Credentialing Examination

Athletic training students who successfully complete all of the program requirements and receive the ATEP coordinator's endorsement are eligible to take the BOC credentialing examination administered by the BOC. Slippery Rock University graduates obtaining BOC certification are eligible for state certification by the Pennsylvania State Boards of Medicine and Osteopathic Medicine, as well as with other state regulatory agencies.

Transfer Students and Upperclassmen

The Athletic Training Education Program requires 3.5 full years (seven semesters and two summers) of coursework and a clinical experience in a structured and sequenced curriculum. Due to this rigorous program, transfer students and upperclassmen declaring a major in athletic training are placed at the freshman level. As required for all other ATEP students, transfer students and upperclassmen must complete the above application process and coursework.

Requirements for the Major - Credits: 63

- ERS 101 - Applied Anatomy Credits: 3
- ERS 107 - Introduction to Athletic Training Credits: 3
- ERS 201 - Exercise Physiology Credits: 3
- ERS 202 - Biomechanics Credits: 3
- ERS 217 - Care and Prevention of Athletic Injuries Credits: 3
- ERS 277 - Integrative Approach to Athletic Training Credits: 3
(taken two times)
- ERS 307 - Concepts in General Medicine for the Physically Active Credits: 3
- ERS 317 - Therapeutic Modalities Theory Credits: 3
- ERS 337 - Physical Examination of the Athlete Credits: 3
- ERS 347 - Theory of Therapeutic Techniques in Rehabilitation Credits: 3
- ERS 357 - Application of Therapeutic Techniques Credits: 3
- ERS 387 - Practicum in Athletic Training Credits: 3

(taken 4 times)

- ERS 407 - Current Strategies in Athletic Training Credits: 3
- ERS 427 - Mastery in Athletic Training Credits: 3
- HLTH 424 - Nutrition and Exercise Credits: 3
- PE 270 - Psychological and Sociological Bases of Sport Credits: 3

Requirements Under Liberal Studies - Credits: 21

- BIOL 216 - Anatomy and Physiology Credits: 3
- BIOL 217 - Anatomy and Physiology Credits: 3
- CDEV 248 - Human Development and Education Credits: 3
- MATH 152 - Elementary Statistics I Credits: 3
- PHYS 201 - Elements of Physics I/ Lab Credits: 4
- PSYC 105 - Introduction to Psychology Credits: 3

Degree Completion in 3.5 Years Athletic Training (BS)

Completion Hours: 120

Freshman Year - Total Hours: 30

- Liberal Studies/Electives - Credits: 15
- CDEV 248 - Human Development and Education Credits: 3
- ERS 107 - Introduction to Athletic Training Credits: 3
- ERS 101 - Applied Anatomy Credits: 3
- MATH 152 - Elementary Statistics I Credits: 3
- PSYC 105 - Introduction to Psychology Credits: 3

Sophomore Year - Total Hours: 33

- Liberal Studies/Electives - Credits: 12
- BIOL 216 - Anatomy and Physiology Credits: 3
- BIOL 217 - Anatomy and Physiology Credits: 3
- ERS 217 - Care and Prevention of Athletic Injuries Credits: 3
- ERS 277 - Integrative Approach to Athletic Training Credits: 3
(1 and 2)
- ERS 337 - Physical Examination of the Athlete Credits: 3
- ERS 387 - Practicum in Athletic Training Credits: 3
(1)

Summer - Total Hours: 3

- ERS 307 - Concepts in General Medicine for the Physically Active Credits: 3

Junior Year - Total Hours: 33

- Liberal Studies/Electives - Credits: 8
- ERS 317 - Therapeutic Modalities Theory Credits: 3
- ERS 347 - Theory of Therapeutic Techniques in Rehabilitation Credits: 3
- ERS 357 - Application of Therapeutic Techniques Credits: 3
- ERS 201 - Exercise Physiology Credits: 3
- ERS 387 - Practicum in Athletic Training Credits: 3
(2 and 3)
- PE 270 - Psychological and Sociological Bases of Sport Credits: 3
- PHYS 201 - Elements of Physics I/ Lab Credits: 4

Summer - Total Hours 3

- ERS 407 - Current Strategies in Athletic Training Credits: 3

Senior Year - Total Hours: 18

- Liberal Studies/Electives - Credits: 6
- ERS 202 - Biomechanics Credits: 3
- ERS 387 - Practicum in Athletic Training Credits: 3
(4)
- ERS 427 - Mastery in Athletic Training Credits: 3
- HLTH 424 - Nutrition and Exercise Credits: 3

Exercise Science (BS)

Exercise and Rehabilitative Sciences

"Slippery Rock's Exercise Science program has prepared me immensely for graduate school. In my current graduate course, the professor asked how many students were held accountable for physical activity in any of their undergraduate courses. Three students raised their hands. Each of the three students were previous graduates of Slippery Rock's Exercise Science program! Not one other student in a class of over 30 was able to say that as an undergraduate student. I would not have chosen any other undergraduate program other than Exercise Science to prepare me for graduate level work".

Natalie Donnelly '07, Slippery Rock University Graduate

"The extensive hands-on experience that is incorporated into the SRU Exercise Science program, as well as the energetic and caring staff, more than prepared me for a job in the field. Faculty helped me to develop the skills necessary to seek out opportunities in the field even as an undergraduate student. These experiences, together with the excellent curriculum, helped me to secure a position as Health & Fitness Director at the YMCA even before finishing my internship".

Renae Wilson '07 Slippery Rock University Graduate

The Exercise Science major prepares undergraduate students with the knowledge, skills and abilities to work as professionals in the health and fitness industry. Exercise Science professionals are skilled in evaluating health behaviors and risk factors, conducting fitness assessments, developing and implementing safe and effective exercise prescriptions, and motivating individuals to modify negative health habits and maintain positive lifestyle behaviors. Exercise Science professionals perform these activities in commercial, university, corporate, or community settings where their clients participate in health promotion, fitness and sports performance activities.

The Exercise Science program at Slippery Rock University is one of the most prestigious programs of its kind in the country. Students are prepared to become leaders in the industry while developing expertise in utilizing cutting edge technology and hands on learning experiences under the careful supervision of a student-centered faculty. The curriculum provides a strong science base including anatomy, exercise physiology, and biomechanics, and then allows application of this knowledge in practical experiences working with "real" people. As graduates from the Exercise Science program, students are prepared for a wide range of careers or continued education in areas such as exercise physiology, physical therapy, cardiac rehabilitation, occupational therapy, and chiropractics.

The Exercise Science Program became one of the first six schools in the nation to receive the maximum five-year accreditation from the Commission on Accreditation of Allied Health Programs (CAAHEP), the largest programmatic accreditor in the health-sciences field. The program is also endorsed by the National Strength and Conditioning Association. With a degree in Exercise Science from Slippery Rock University, students are recognized as qualified and respected professionals in the field.

Mission Statement

The mission of the Exercise Science Program at Slippery Rock University is to develop competent and contributing entry-level professionals in the field of exercise science in the cognitive (knowledge), psychomotor (skills) and affective (abilities) learning domains. This is accomplished by providing quality academic preparation that incorporates both classroom and supervised practical experiences.

Program Outcomes

1. Professional Interaction and Communication - To interact and communicate effectively by presenting information in oral, written, and technology formats; collaborating with professionals and peers; expressing ideas clearly; and giving and receiving feedback. (Cognitive, Psychomotor)
2. Professional Competence - To utilize knowledge, skills, and abilities to evaluate health behavior and risk factors; develop, implement, and evaluate exercise and wellness programs, and employ behavioral strategies to motivate individuals to adopt and maintain positive lifestyle behaviors. (Cognitive, Psychomotor)
3. Professional Ethics and Conduct - To demonstrate behavior that preserves the integrity of a profession, prevents misrepresentation, and protects the consumer. (Affective)
4. Professional and Personal Development - To continuously improve knowledge, skills, and abilities and to uphold a professional image through actions and appearance. (Cognitive, Psychomotor, Affective)
5. Professional Decision Making (Problem Solving) - To demonstrate critical thinking by making decisions based on multiple perspective and evidence-based practice. (Cognitive, Psychomotor, Affective)

Policy for admission into the Exercise Science Major

University acceptance to pursue the Exercise Science major does NOT guarantee admission into the Exercise Science program. Formal application to the Exercise Science Major must be completed by the student according to the following procedures:

1. It is the student's responsibility to submit an Application to the Major form to the ERS Department Office (Patterson 304) in the semester in which he/she is enrolled in 48 credit hours.
2. The application must be submitted by December 1st in the Fall and May 1st in the Spring.

3. Entering transfers from other universities or SRU students changing their major to Exercise Science with earned credits beyond 48 have a one-semester extension.

4. By the beginning of the semester following application, students will receive notification of acceptance or denial to the major according to the following:

- a. Acceptance - The student has fulfilled all major requirements in the section Prerequisites For Admission to Exercise Science Program (see MY ROCK AUDIT), including completion of courses and required Career Exploration, and has an overall and major QPA of 2.75. Once the student has been accepted into the Exercise Science Major it will take the student at least three semesters to complete the curriculum plus a 12-credit internship.
- b. First Denial - Not fulfilling the requirements as stated above will result in a first denial. Failure to submit an application will also result in a first denial. Students who are denied for the first time are not permitted to take Required Upper Level courses. Students must reapply for a second time the following semester.
- c. Second Denial - If students do not meet the requirements again, they are denied the second time. Failure to submit an application will also result in a second denial. In the case of a second denial, students are not retained in the major and their major is changed to Exploratory. (Students may enroll in Required Basic Courses during this time). Students are not permitted to reapply to the Exercise Science Major for one year following a second denial. If after one year the student has an overall and major QPA of 2.75, he/she may reapply and repeat the application process as stated previously.

Policy for retention in the Exercise Science Major

Students who are admitted into the program must maintain a major and overall QPA of 2.75 and earn a “C” or better in ALL Required Upper Level Courses. Students are not permitted to do their internship unless they have met QPA and grade standards for Required Upper Level Courses. Failure to maintain academic standards will result in a one semester probationary period in which the student must remedy any deficiencies. If he/she is not able to attain the necessary QPA requirements or grade standards by the end of the probationary period, he/she will be removed from the program permanently.

Policy for changing to the Exercise Science Major

Any student changing his/her major to Exercise Science MUST have an overall QPA of 2.75.

Additional Costs Associated with the Exercise Science Major

Students are required to maintain current CPR/AED and Student Professional Liability Insurance while enrolled in ERS412 and current First Aid, CPR/AED and Student Professional Liability Insurance while enrolled in ERS450 at their own cost.

Requirements for the Major - Credits: 54

Required Courses

Required Basic Courses - Credits: 21

- ERS 100 - Introduction to Exercise Science: Careers and Content Credits: 3
- ERS 101 - Applied Anatomy Credits: 3
- ERS 200 - Measurement and Statistical Application in Exercise Science Credits: 3
- ERS 201 - Exercise Physiology Credits: 3
- ERS 202 - Biomechanics Credits: 3

- ERS 301 - Exercise Leadership: Group Fitness Credits: 3
- ERS 302 - Exercise Leadership: Resistance Training Credits: 3

Required ES Upper Level Courses - Credits: 33

Note: Acceptance into major necessary to take the following courses. Students must earn a "C" or better in all of the following courses.

- HLTH 424 - Nutrition and Exercise Credits: 3
- ERS 400 - Wellness Promotion and Programming Credits: 3
- ERS 401 - Fitness Assessment Credits: 3
- ERS 402 - Exercise Prescription Credits: 3
- ERS 410 - Clinical Exercise Physiology Credits: 3
- ERS 411 - Exercise Science: Special Populations and Conditions Credits: 3
- ERS 412 - Exercise Science: Senior Synthesis Credits: 3
- ERS 450 - Exercise Science Internship Credits: 12

College/Department Requirements (Liberal Studies) - Credits: 15

- BIOL 216 - Anatomy and Physiology Credits: 3
- BIOL 217 - Anatomy and Physiology Credits: 3
- HLTH 314 - Nutrition and Health Credits: 3
- MATH 152 - Elementary Statistics I Credits: 3
- PHYS 201 - Elements of Physics I/ Lab Credits: 4

Other Liberal Studies - Credits: 37

Electives: Credits 14

- PE 227 - Introduction to Adapted Physical Activity Credits: 3
- ERS 330 - Stress Management Credits: 3
- ERS 430 - Seminar in Strength and Conditioning Credits: 3
- ERS 431 - Health and Fitness in the Older Adult Credits: 3
- ERS 432 - Pediatric Exercise Science Credits: 3
- ERS 433 - Research Methods in Exercise Science Credits: 3
- SAFE 205 - First Aid and Safety Credits: 3

Geography, Geology, and the Environment

319 Advanced Technology and Science Hall
724-738-2048

Geography, Geology, and the Environment

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.

Chair

Jack Livingston

Secretary

Cindy Schnur

Faculty

Patrick Burkhart, Patricia Campbell, Xianfeng Chen, James Hathaway, Jack Livingston, Carolyn Prorok, Tamra Schiappa, Langdon Smith, Julie Snow, Michael Stapleton, Jialing Wang, Michael Zieg

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.

Certification Programs

- Teacher Certification in Earth and Space Science

Majors

- Environmental Geoscience (BA)
- Environmental Geoscience (BS) - Track in Environmental Science
- Environmental Geoscience (BS) - Track in Geology
- Geography (BA)
- Geography (BS) - Track in Environmental Studies
- Geography (BS)-Applied Geographic Technology
- Geography (BS)- Track in Environment and Society

Minors

- Minor in Environmental Science
- Minor in Geographic Information Technology
- Minor in Geography
- Minor in Geology
- Minor in Meteorology

Environmental Geoscience (B.S) - Track in Geology

Geography, Geology and the Environment

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.

Major Requirements - Credits: 62

Core Requirements - Credits: 13

- EGEO 101 - Physical Geology Credits: 3
- EGEO 201 - Earth Materials and Processes Credits: 3
- EGEO 202 - Earth History Credits: 3
- EGEO 203 - Quantitative Methods Credits: 3
- EGEO 212 - Earth History Lab Credits: 1

Required Related Courses (7 credits - also included in Liberal Studies)

- CHEM 108 - General Chemistry II Credits: 3
- CHEM 112 - General Chemistry II Lab Credits: 1
- PHYS 213 - General Physics III/ Lab Credits: 3

Geology Track Requirements - Credits: 42

Core Requirements - Credits: 22

- EGEO 103 - Concepts of Evolution and the Fossil Record Credits: 3
- EGEO 271 - Geotechniques: Lab Credits: 2
- EGEO 272 - Geotechniques: Geologic Reports Credits: 1
- EGEO 304 - Paleontology Laboratory Credits: 1
- EGEO 327 - Structural Geology Credits: 3
- EGEO 351 - Mineralogy Credits: 4
- EGEO 352 - Petrology Credits: 4
- EGEO 362 - Stratigraphy Credits: 3
- EGEO 482 - Senior Seminar Credits: 1

Electives - Credits: 9

- EGEO 241 - Geomorphology Credits: 3
- EGEO 242 - Glacial Geology Credits: 3
- EGEO 323 - Planetary Geology Credits: 3
- EGEO 328 - Plate Tectonics Credits: 3
- EGEO 360 - Introduction to Hydrology Credits: 3
- EGEO 448 - X-ray Spectrometry Credits: 3
- EGEO 451 - Geochemistry Credits: 4
- EGEO 453 - Geotechniques: Geochemistry Credits: 1
- EGEO 460 - Hydrogeology Credits: 3

- EGEO 476 - Geotechniques: Geophysics Credits: 1
- EGEO 498 - Selected Topics Credits: 1 to 3

Field Camp - minimum 4 credits

4 credits minimum at an acceptable field station

Related Courses - Credits: 7

- GES 325 - Introduction to Geographic Information Science Credits: 3
- GES 410 - Remote Sensing Credits: 3
- MATH 230 - Calculus II Credits: 4

Environmental Geoscience (BA)

Geography, Geology and the Environment

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.

Requirements for the Major - Credits: 42

Required Courses - Credits: 13

- EGEO 101 - Physical Geology Credits: 3
- EGEO 201 - Earth Materials and Processes Credits: 3
- EGEO 202 - Earth History Credits: 3
- EGEO 203 - Quantitative Methods Credits: 3
- EGEO 212 - Earth History Lab Credits: 1

Required Related Courses- Credits: 4

- CHEM 108 - General Chemistry II Credits: 3
- CHEM 112 - General Chemistry II Lab Credits: 1

Program Requirements - Credits: 22

Core Requirements - Credits: 9

- EGEO 121 - Meteorology Credits: 3
- EGEO 241 - Geomorphology Credits: 3
- EGEO 271 - Geotechniques: Lab Credits: 2
- EGEO 272 - Geotechniques: Geologic Reports Credits: 1

Electives - Credits: 13

- Any EGEO course at the 200 level or higher
- GES 325 - Introduction to Geographic Information Science Credits: 3
- GES 410 - Remote Sensing Credits: 3
- GES 425 - Advanced Geographic Information Systems Credits: 3
- MARS 362 - Marine Geology Credits: 3

Modern Language Requirement - Credits: 0-9

Must satisfy language requirement at the 103 level

Environmental Geoscience (BS) - Track in Environmental Science

Geography, Geology and the Environment

Coordinator

Michael Stapleton

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 480 must be completed during the summer after your Junior or Senior year.

Requirements for the Major - Credits: 61

Required Core Courses - Credits: 13

- EGEO 101 - Physical Geology Credits: 3
- EGEO 201 - Earth Materials and Processes Credits: 3
- EGEO 202 - Earth History Credits: 3
- EGEO 203 - Quantitative Methods Credits: 3
- EGEO 212 - Earth History Lab Credits: 1

Required Related Courses (7 credits - also included in Liberal Studies)

- CHEM 108 - General Chemistry II Credits: 3
- CHEM 112 - General Chemistry II Lab Credits: 1
- PHYS 213 - General Physics III/ Lab Credits: 3

Environmental Science Track Requirements - Credits: 41

Core Requirements - Credits: 20

- BIOL 357 - Environmental Microbiology Credits: 4
- BIOL 401 - Ecology Credits: 3
- EGEO 121 - Meteorology Credits: 3
- EGEO 360 - Introduction to Hydrology Credits: 3
- EGEO 451 - Geochemistry Credits: 4
- GES 324 - Environmental Law and Policy Credits: 3

Electives - Credits: 9 (minimum)

Marine Science Summer Course may also be selected

- BIOL 305 - Wetlands and Aquatic Plants Credits: 3
- BIOL 306 - Freshwater Biomonitoring Credits: 3
- CHEM 240 - Industrial Hygiene Credits: 3
- CHEM 340 - Air Quality Assessment Credits: 4
- CHEM 370 - Water Quality Assessment Credits: 4
- CHEM 430 - Industrial Pollution Control Engineering Credits: 3
- EGEO 241 - Geomorphology Credits: 3
- EGEO 327 - Structural Geology Credits: 3
- EGEO 328 - Plate Tectonics Credits: 3
- EGEO 340 - Air Pollution Meteorology Credits: 3
- EGEO 453 - Geotechniques: Geochemistry Credits: 1
- EGEO 460 - Hydrogeology Credits: 3
- EGEO 476 - Geotechniques: Geophysics Credits: 1
- GES 315 - Cartography I Credits: 3
- GES 325 - Introduction to Geographic Information Science Credits: 3

- GES 410 - Remote Sensing Credits: 3

Required Internship, Research or Additional Elective - Minimum Credits: 3

Eligibility for an internship requires that students complete 16 credits at the 200 level or above in core and elective courses and gpa of 2.000 or higher for all core and elective courses.

- ENVS 450 - Environmental Science Internship Credits: Up to 12
- ENVS 480 - Environmental Systems Analysis Credits: 3
 - **Or choose an additional 300 or 400 level course from the above list of electives**

Required Related Courses - Credits: 9

- BIOL 101 - General Biology Credits: 3
- BIOL 325 - Biometry Credits: 3
- CHEM 200 - Fundamentals of Organic Chemistry Credits: 3

Geography (BA)The BA Geography program has been placed on moratorium for a three-year period of suspension. During this period the programs may continue to be offered to previously enrolled students, but cannot admit new students.12/8/2009

Geography, Geology and the Environment

Students in the BA Geography program study the links between humans and their environment as well as the links between one area of the earth's surface with another. The geography BA student investigates the nature of places on the earth's surface as well as the geographic study of environmental, economic, cultural, and political processes. 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 geography BA 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, geographic information systems, 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: federal, state, regional, and local government; National Park Service, Peace Corps, real estate developers, companies dealing with insurance, transportation, communications, and international trade, environmental consulting, scientific and research groups, and museums.

Requirements for the Major - Credits: 37

Specialization: Liberal Arts Geography

Core Courses - Credits: 15

- GES 150 - The Natural Environment Credits: 3
- GES 302 - Cultural Geography Credits: 3
- GES 331 - Economic Geography Credits: 3
- GES 444 - World Environmental Thought Credits: 3
- GES 489 - Field Studies Credits: 3

Regional Courses (Select 9 Credits from the Following)

- GES 107 - Environments and Peoples of the Developed World Credits: 3
or
- GES 109 - Environments and Peoples of the Developing World Credits: 3
- GES 201 - Latin America and the Caribbean Credits: 3
or
- GES 202 - United States and Canada Credits: 3
or
- GES 204 - Post-Soviet Union Credits: 3
- GES 303 - Asia Credits: 3
or
- GES 308 - Europe Credits: 3

Technique Courses - Credits: 7 - Two Required and One Elective

- GES 115 - Map Reading and Interpretation Credits: 1
- GES 220 - General Methods of Fieldwork Credits: 3
- GES 315 - Cartography I Credits: 3
or
- GES 325 - Introduction to Geographic Information Science Credits: 3

Elective G&ES Courses (Select 6 Credits at the 300 or 400 Level)

Footnote

* Indicates course in major.

Geography (BS) - Track in Environment and Society

Geography, Geology, and the Environment

The B.S. Geography track in Environment and Society creates a third emphasis covering a core of geographical knowledge while giving deeper exploration of human geography.

Track becomes active in Fall 2010.

Major Requirements - 46 credits

Basic Core

- GES 150 - The Natural Environment Credits: 3
- GES 302 - Cultural Geography Credits: 3
- GES 315 - Cartography I Credits: 3
- GES 331 - Economic Geography Credits: 3
- GES 489 - Field Studies Credits: 3

Techniques Core

- GES 115 - Map Reading and Interpretation Credits: 1
- GES 220 - General Methods of Fieldwork Credits: 3
- GES 325 - Introduction to Geographic Information Science Credits: 3

Environment and Society Track Requirements

Regional Geography: Choose one course from the following

- GES 303 - Asia Credits: 3
- GES 307 - Australia Credits: 3
- GES 309 - Africa Credits: 3

Planning and Policy: Choose one course from the following

- GES 215 - Rural and Urban Planning Credits: 3
- GES 324 - Environmental Law and Policy Credits: 3

Human Geography: Choose one course from the following

- GES 345 - Population Analysis Credits: 3
- GES 375 - Geography of Intolerance Credits: 3

Additional Environment and Society courses

- GES 244 - Environmental Justice Credits: 3
- GES 444 - World Environmental Thought Credits: 3

Electives: Choose any three 300/400 level G&ES courses (9 credits)

Geography (BS) - Track in Environmental Studies

Coordinator

Jack Livingston

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.

Requirements for the Major - Credits: 55

Required Core Courses - Credits: 15

- GES 135 - Introduction to Environmental Problems Credits: 3
- GES 150 - The Natural Environment Credits: 3
- GES 235 - Conservation Credits: 3
- GES 324 - Environmental Law and Policy Credits: 3
- GES 489 - Field Studies Credits: 3

Techniques Core - Credits: 10

- GES 115 - Map Reading and Interpretation Credits: 1
- GES 220 - General Methods of Fieldwork Credits: 3
- GES 315 - Cartography I Credits: 3
- GES 325 - Introduction to Geographic Information Science Credits: 3

Social Science Core Courses - Credits: 6

- ECON 315 - Environmental Economics Credits: 3
- or
- GES 331 - Economic Geography Credits: 3
- PHIL 324 - Environmental Ethics Credits: 3

Natural Science Core Courses - Credits: 9

Please choose three of the courses below:

- BIOL 105 - Environmental Biology Credits: 3
- CHEM 107 - General Chemistry I Credits: 3
- EGEO 100 - Environmental Geology Credits: 3
- PHYS 204 - Environmental Biophysics Credits: 3

Research Skills - Credits: 3

Please choose one of the courses below:

- BIOL 325 - Biometry Credits: 3
- MATH 152 - Elementary Statistics I Credits: 3
- PSYC 221 - Introduction to Behavioral Statistics Credits: 3
- SOWK 317 - Statistical Methods Credits: 3

Environmental Studies Electives - Credits: 12

Choose four classes:

- BIOL 120 - Practical Botany Credits: 3
- BIOL 207 - Land Plants and Their Environment Credits: 3
- BIOL 208 - Introduction to Wildlife Management Credits: 3
- BIOL 305 - Wetlands and Aquatic Plants Credits: 3
- BIOL 306 - Freshwater Biomonitoring Credits: 3
(* See footnote)
- CHEM 270 - Industrial Chemistry Credits: 3
(* See footnote)
- CHEM 340 - Air Quality Assessment Credits: 4
(* See footnote)
- CHEM 370 - Water Quality Assessment Credits: 4
(* See footnote)
- ECON 315 - Environmental Economics Credits: 3
(* See footnote)
- EGEO 121 - Meteorology Credits: 3
- EGEO 131 - Oceanography Credits: 3
- EGEO 201 - Earth Materials and Processes Credits: 3
- EGEO 340 - Air Pollution Meteorology Credits: 3
(* See footnote)
- EGEO 451 - Geochemistry Credits: 4
(* See footnote)
- ENGL 205 - Introduction to Professional Writing Credits: 3
(* See footnote)
- ENGL 410 - Literature of the Environment Credits: 3
- GES 215 - Rural and Urban Planning Credits: 3
- GES 244 - Environmental Justice Credits: 3
- GES 245 - Population and Resources Credits: 3
- GES 355 - Earth's Changing Climate Credits: 3

- (* See footnote)
- GES 331 - Economic Geography Credits: 3
 - HIST 445 - Environmental Thought in the United States Credits: 3
 - HLTH 310 - Environmental Health Credits: 3
-
- POLS 200 - State and Local Government Credits: 3
 - PREE 213 - Environmental Resource Analysis Credits: 3
(* See footnote)
 - PREE 412 - Open Space Planning Credits: 3
 - SAFE 218 - Hazard Analysis and Legislative Compliance Credits: 3
 - SAFE 318 - Principles of Industrial Hygiene Credits: 3
(* See footnote)
 - SAFE 348 - Hazardous Materials and Waste Management Credits: 3

Footnotes

* Check course prerequisite(s)

Environmental Studies students are required to perform 100 service-learning hours of their choosing.

Geography (BS)-Track in Applied Geographic Technology

Geography, Geology and the Environment

Students in the Applied Geographic Technology geography 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.

Requirements for the Major - Credits: 55

Specialization: Applied Geographic Technology

Core Courses - Credits: 27

- GES 100 - Discover Geography Credits: 3
- GES 135 - Introduction to Environmental Problems Credits: 3
- GES 150 - The Natural Environment Credits: 3
- GES 215 - Rural and Urban Planning Credits: 3
- GES 235 - Conservation Credits: 3
- GES 302 - Cultural Geography Credits: 3
- GES 324 - Environmental Law and Policy Credits: 3
- GES 331 - Economic Geography Credits: 3
- GES 489 - Field Studies Credits: 3

Technique Courses - Credits: 13

- GES 115 - Map Reading and Interpretation Credits: 1
- GES 220 - General Methods of Fieldwork Credits: 3
- GES 315 - Cartography I Credits: 3
- GES 325 - Introduction to Geographic Information Science Credits: 3
- GES 425 - Advanced Geographic Information Systems Credits: 3

Technique Electives (Select 6 Credits)

- GES 410 - Remote Sensing Credits: 3
- or
- GES 415 - Cartography II Credits: 3
- or
- PREE 412 - Open Space Planning Credits: 3

Regional Elective (Select 3 Credits)

- GES 201 - Latin America and the Caribbean Credits: 3
- GES 202 - United States and Canada Credits: 3
- GES 204 - Post-Soviet Union Credits: 3
- GES 303 - Asia Credits: 3
- GES 308 - Europe Credits: 3
- GES 309 - Africa Credits: 3

Technical Communication - Credits: 3

- ENGL 205 - Introduction to Professional Writing Credits: 3

Elective G&ES Course - Credits: 3

(select 3 credits at the 200 level or above)

Footnote

* Indicates course in major.

Minor in Environmental Science

Geography, Geology and the Environment

Requirements for the Minor

No more than seven credit hours may count toward both a major and the environmental science minor.

Core Courses

- EGEO 201 - Earth Materials and Processes Credits: 3
- EGEO 202 - Earth History Credits: 3
- EGEO 212 - Earth History Lab Credits: 1
- EGEO 360 - Introduction to Hydrology Credits: 3
- EGEO 451 - Geochemistry Credits: 4

Elective Courses: select two courses from the following

- BIOL 305 - Wetlands and Aquatic Plants Credits: 3
- BIOL 306 - Freshwater Biomonitoring Credits: 3
- BIOL 357 - Environmental Microbiology Credits: 4
- BIOL 401 - Ecology Credits: 3
- CHEM 340 - Air Quality Assessment Credits: 4
- CHEM 370 - Water Quality Assessment Credits: 4
- EGEO 241 - Geomorphology Credits: 3
- EGEO 327 - Structural Geology Credits: 3
- EGEO 340 - Air Pollution Meteorology Credits: 3
- EGEO 460 - Hydrogeology Credits: 3
- GES 315 - Cartography I Credits: 3
- GES 324 - Environmental Law and Policy Credits: 3
- GES 325 - Introduction to Geographic Information Science Credits: 3
- GES 410 - Remote Sensing Credits: 3

Minor in Geographic Information Technology

Geography, Geology and the Environment

Requirements for the Minor

Required Courses - Credits: 21

- GES 220 - General Methods of Fieldwork Credits: 3
- GES 315 - Cartography I Credits: 3
(* see footnote)
- GES 325 - Introduction to Geographic Information Science Credits: 3
(* see footnote)
- GES 410 - Remote Sensing Credits: 3
- GES 415 - Cartography II Credits: 3
(* see footnote)
- GES 425 - Advanced Geographic Information Systems Credits: 3
(* see footnote)
- GES 450 - Internship Credits: Up to 12

Footnote

*Check prerequisite

Minor in Geography

Geography, Geology and the Environment

Requirements for the Minor

Required Courses - Credits: 21

Group I: (Select 6 Credits)

- GES 150 - The Natural Environment Credits: 3
- GES 302 - Cultural Geography Credits: 3
- GES 331 - Economic Geography Credits: 3

Group II: (Select 3 Credits)

- GES 202 - United States and Canada Credits: 3
- GES 301 - Geography of Rural Areas Credits: 3

Group III: (Select 3 Credits)

- GES 220 - General Methods of Fieldwork Credits: 3
- GES 315 - Cartography I Credits: 3
- GES 410 - Remote Sensing Credits: 3

Electives: - Credits: 9

Any three G&ES courses at the 200 level or above.

Minor in Geology

Geography, Geology and the Environment

Requirements for the Minor

Electives should be chosen only after consultation with the academic advisor. No more than six semester credits may count toward both a major and the geology minor.

Required Courses - Credits: 19

Geology Core - Credits: 10

- EGEO 101 - Physical Geology Credits: 3
- EGEO 111 - Physical Geology Lab Credits: 1
- EGEO 202 - Earth History Credits: 3
- EGEO 212 - Earth History Lab Credits: 1
- EGEO 271 - Geotechniques: Lab Credits: 2

Geology electives - Credits: 9 minimum

- a. At least three credits of geology courses at a level of 200 or higher.
- b. At least six credits of geology courses at a level of 300 or higher.

Minor in Meteorology

Geography, Geology and the Environment

Requirements for the Minor - Credits: 23-24

No more than nine semester credits may count toward both a major and the meteorology minor.

Required Courses - 17 credits

- EGEO 121 - Meteorology Credits: 3
- EGEO 340 - Air Pollution Meteorology Credits: 3
- GES 355 - Earth's Changing Climate Credits: 3
- GES 356 - Earth's Changing Climate Laboratory Credits: 1
- CPSC 140 - Introduction to Programming Principles Credits: 3
- MATH 230 - Calculus II Credits: 4

Elective Courses - Credits: 6 - 7

- MATH 240 - Linear Algebra and Differential Equations Credits: 3
- CHEM 340 - Air Quality Assessment Credits: 4

- EGEO 360 - Introduction to Hydrology Credits: 3
- PHYS 385 - Computational Physics Credits: 3
- ENVS 490 - Independent Study Credits:

Teacher Certification in Earth and Space Science

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 earth and space science must earn a bachelor of arts or a bachelor of science degree in discipline 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.

Mathematics

001 Patterson Hall
724-738-2061

Mathematics

The mission of the Mathematics Department at Slippery Rock University is focused on three areas:

1. to provide high quality programs to mathematics majors who plan to teach secondary mathematics, work in business or industry, or attend graduate school; to provide appropriate service courses for other programs; and to provide an exciting and relevant liberal studies experience for Slippery Rock students.
2. to expand the boundaries of mathematical knowledge and encourage and enable students to participate in scholarly research.
1. to provide service to the Slippery Rock University and wider communities.

Chair

Robert Buck

Secretary

Debra Dickey

Faculty

Robert Buck, Michael Detlefsen, Jeffrey Forrest, Elise Grabner, Gary Grabner, Mohammad Ismail, William Lindgren, Richard Marchand, J. Lyn Miller, Gary Roberts, Andrzej Szymanski, Robert Vallin

"The mathematics department (faculty) was instrumental in providing a learning atmosphere conducive to my development as a student and an individual. They accomplished this by being professionals and friends, as well as professors. In addition to learning the technical concepts as a mathematics major at SRU, the most valuable tool that I've developed is being able to make decisions analytically with confidence, in my profession and in life."

Andrew Wozniak, '98

Students who have the desire and the ability to major in mathematics will find a course of study that will meet their personal needs. Graduates are prepared for various career opportunities including jobs in actuarial science, finance,

business, insurance, government, statistics, industry, or education. Many students go on to do graduate work in various disciplines, including mathematics and professional schools.

SRU mathematics majors are employed in such diverse occupations as operations research analyst, consulting actuary, university professor, engineer, statistician, information analyst, auditor, international account executive, senior computer analyst, senior commercial loan officer, manager of performance monitoring, and teaching in both the private and public sectors.

Mathematics majors at Slippery Rock have the opportunity to participate in the Math Club and to join Kappa Mu Epsilon, a national mathematics honorary. Majors participate in senior research projects directed by faculty members. Math majors have attended and given presentations on their projects at national meetings of the Mathematical Association of America; meetings of the Allegheny Mountain Section of the Mathematical Association of America; the annual Mathematics and Statistics Student conference at Miami University of Ohio; the annual Pi Mu Epsilon meeting at Youngstown State University, and the annual State System of Higher Education Mathematical Association meeting. There are two or three students doing informal, paid internships in actuarial science and/or statistics each summer.

The Mathematics Department offers minors in Mathematics, Statistics, Actuarial Studies, Elementary School Mathematics, and Middle School Mathematics. Certificates* are available in Elementary School Mathematics and Middle School Mathematics. The department also offers a Certificate in Statistical Applications.

* This is not related to Pennsylvania State Certification.

Certificate Programs

- Certificate in Elementary School Mathematics
- Certificate in Middle School Mathematics
- Certificate in Statistical Applications

Certification Programs

- Teacher Certification in Mathematics

Majors

- Mathematics (BA)
- Mathematics (BS)

Minors

- Minor in Elementary School Mathematics
- Minor in Mathematics
- Minor in Mathematics - Actuarial Studies
- Minor in Middle School Mathematics
- Minor in Statistics

Certificate in Elementary School Mathematics

Mathematics Department

For certified teachers who have completed the equivalent of MATH 210 - Elementary Mathematics I, MATH 310 - Elementary Mathematics II, and ELEC 342 - Methods and Materials in Teaching Elementary Mathematics.

At least six post-baccalaureate credits of the mathematics courses required for the Certificate in Elementary School Mathematics must be taken at Slippery Rock University.

Note: This program is not related to Pennsylvania State Certification.

Requirements for the Certificate in Elementary School Mathematics

- MATH 118 - Elementary Geometry Credits: 3

And at Least Four Additional Courses From:

- MATH 113 - Mathematics as a Liberal Art Credits: 3
- MATH 122 - Matrices and Linear Programming Credits: 3
- MATH 125 - Precalculus Credits: 4
- MATH 131 - Discrete Mathematics Credits: 3
- MATH 152 - Elementary Statistics I Credits: 3
- MATH 153 - Elementary Statistics II Credits: 3
- MATH 252 - Introduction to Statistical Modeling Credits: 3

Admission Restricted to Certified Teachers Who Have Completed the Equivalent Of:

- ELEC 342 - The Teaching of Elementary Mathematics Credits: 3
- MATH 210 - Elementary Mathematics I Credits: 3
- MATH 310 - Elementary Mathematics II Credits: 3

Certificate in Middle School Mathematics

Mathematics Department

To earn a Certificate in Middle School Mathematics, at least six post-baccalaureate credits of mathematics courses required for the Certificate in Middle School Mathematics must be taken at Slippery Rock University.

This certificate is not related to Pennsylvania State Certification.

Requirements for the Certificate in Middle School Mathematics

For certified teachers who have completed the equivalent of MATH 210 - Elementary Mathematics I, MATH 310 - Elementary Mathematics II, and SEFE 311 - Teaching of Mathematics in Middle School.

- MATH 118 - Elementary Geometry Credits: 3
or MATH 304 - Geometric Structures
- MATH 225 - Calculus I Credits: 4

And at least three additional courses from Group A and B. At least one course must be from Group A.

Group A:

- MATH 131 - Discrete Mathematics Credits: 3
- MATH 153 - Elementary Statistics II Credits: 3
- MATH 230 - Calculus II Credits: 4
- MATH 235 - Modern Concepts of Mathematics Credits: 3
- MATH 240 - Linear Algebra and Differential Equations Credits: 3
- MATH 252 - Introduction to Statistical Modeling Credits: 3
- MATH 311 - Introduction to Operations Research Credits: 3
- MATH 320 - Theory of Numbers Credits: 3

Group B:

- MATH 113 - Mathematics as a Liberal Art Credits: 3
- MATH 122 - Matrices and Linear Programming Credits: 3
- MATH 152 - Elementary Statistics I Credits: 3

Admission Restricted to Certified Teachers Who Have Completed the Equivalent of:

- MATH 210 - Elementary Mathematics I Credits: 3
- MATH 310 - Elementary Mathematics II Credits: 3
- SEFE 311 - Teaching of Mathematics in the Middle School Credits: 3

Certificate in Statistical Applications

Mathematics Department

This certificate is intended for those who require a broad knowledge of statistics, but do not necessarily need a calculus-based statistical background. Some of these courses have prerequisites that must be met. At least six credit hours of the mathematics courses used for the Certificate in Statistical Applications must be taken at Slippery Rock University.

Requirements for the Certificate

- MATH 152 - Elementary Statistics I Credits: 3
- MATH 153 - Elementary Statistics II Credits: 3
- MATH 252 - Introduction to Statistical Modeling Credits: 3

Three Additional Courses:

At least one course must be from computer science.

- BIOL 325 - Biometry Credits: 3
- CPSC 323 - Data Base Systems Credits: 3
- CPSC 358 - Simulation Credits: 3
- ECON 318 - Intermediate Statistical Analysis Credits: 3
- HLTH 312 - Data Management for Health Science Credits: 3
- HLTH 313 - Biostatistics Credits: 3
- MATH 352 - Mathematical Statistics I Credits: 3
- MATH 353 - Mathematical Statistics II Credits: 3
- PSYC 421 - Advanced Behavioral Statistics Credits: 3

Mathematics (BA)

Mathematics Department

College-Wide Requirements:

- CHEM 107 - General Chemistry I Credits: 3
- CHEM 111 - General Chemistry I Lab Credits: 1
- MATH 225 - Calculus I Credits: 4
(* see footnote)
- PHYS 211 - General Physics I/ Lab Credits: 4

Requirements for the Major - Credits: 40

Required Courses

At least 6 credits of electives from approved mathematics courses 300 and above. In addition, candidates for the bachelor of arts degree must satisfactorily complete, either by placement or by coursework, the first three semesters of a foreign language.

- MATH 131 - Discrete Mathematics Credits: 3
(* see footnote)
- MATH 230 - Calculus II Credits: 4
(* see footnote)
- MATH 231 - Calculus III Credits: 4
- MATH 235 - Modern Concepts of Mathematics Credits: 3
(* see footnote)
- MATH 240 - Linear Algebra and Differential Equations Credits: 3
- MATH 309 - Linear Algebra Credits: 3
- MATH 313 - Introductory Analysis I Credits: 3
- MATH 314 - Introductory Analysis II Credits: 3
- MATH 325 - Abstract Algebra I Credits: 3
- MATH 490 - Independent Study Credits: 1 to 3
(a three-hour independent study thesis)
- MATH 491 - Mathematics Seminar Credits: 1

(to be taken two times)

Footnote

* Minimum grade of C required.

Residency Requirement for Mathematics Majors

To earn a Bachelor of Science or Bachelor of Arts degree in mathematics, all students must complete a minimum of 12 credit hours of mathematics courses at the 300 level or above at Slippery Rock University.

Mathematics (BS)

Mathematics Department

College-Wide Requirements:

- CHEM 107 - General Chemistry I Credits: 3
- CHEM 111 - General Chemistry I Lab Credits: 1
- MATH 225 - Calculus I Credits: 4
(* see footnote)
- PHYS 211 - General Physics I/ Lab Credits: 4

Requirements for the Major - Credits: 58

Required Courses

- MATH 131 - Discrete Mathematics Credits: 3
(* see footnote)
- MATH 230 - Calculus II Credits: 4
(* see footnote)
- MATH 231 - Calculus III Credits: 4
- MATH 235 - Modern Concepts of Mathematics Credits: 3
(* see footnote)
- MATH 240 - Linear Algebra and Differential Equations Credits: 3
- MATH 309 - Linear Algebra Credits: 3
- MATH 313 - Introductory Analysis I Credits: 3
- MATH 314 - Introductory Analysis II Credits: 3
- MATH 325 - Abstract Algebra I Credits: 3
- MATH 491 - Mathematics Seminar Credits: 1
(two one-hour seminar courses)

Competency in an approved computer language, and at least 12 additional hours selected from approved mathematics courses numbered above 300. The program must include one of the following sequences: 325-326; 307-308; 301-302; 320-325; 311-335; 309-315, 352-353. In addition, the requirements in one of several special interest areas, ranging from 14 to 16 hours, must be completed or the student has the option of taking a minor if available in the area of special interest. The special interest areas are Actuarial Science, Biology, Chemistry, Public Health, Computer Science, Economics, Finance, Environmental Geosciences, Mathematics

Graduate School, Philosophy, Physics, Pre-masters of Business Administration, Secondary Education, Psychology, and Statistics. Hours in special interest areas may be included among the required liberal studies courses. The College of Health, Environment, and Science requires that a candidate for the B.S. degree complete CHEM 107/111, MATH 225, and PHYS 211. Students must complete Math 131, 225, 230, and 235 with a grade of at least C before being allowed to register for upper division courses.

Footnote

* Minimum grade of C required.

Residency Requirement for Mathematics Majors

To earn a Bachelor of Science or Bachelor of Arts degree in mathematics, all students must complete a minimum of 12 credit hours of mathematics courses at the 300 level or above at Slippery Rock University.

Minor Actuarial Studies

Mathematics Department

To earn a minor in Actuarial Studies, at least 9 credit hours of mathematics courses used for a minor must be taken at Slippery Rock University. Students must also complete requirements for Society of Actuaries VEE credit in at least two areas.

Required Courses - Credits: 9

- MATH 280 - Theory of Interest Credits: 3
- MATH 352 - Mathematical Statistics I Credits: 3
- MATH 353 - Mathematical Statistics II Credits: 3

Electives - Credits: 15-18

Select five courses from the following.

ACCT 209, ACCT 210, ECON 201, and ECON 202 may not be used by students from the School of Business

MATH 225, MATH 230, and MATH 231 may not be used by Mathematics majors.

- ACCT 209 - Financial Accounting Credits: 3
- ACCT 210 - Managerial Accounting Credits: 3
- CPSC 323 - Data Base Systems Credits: 3
- CPSC 358 - Simulation Credits: 3
- ECON 201 - Principles of Macroeconomics Credits: 3
- ECON 202 - Principles of Microeconomics Credits: 3
- ECON 301 - Macroeconomic Analysis Credits: 3
- ECON 302 - Microeconomic Analysis Credits: 3
- ECON 312 - Critical Choices in Health Care Policy Credits: 3

- ECON 318 - Intermediate Statistical Analysis Credits: 3
- ENGL 205 - Introduction to Professional Writing Credits: 3
- ENGL 309 - Advanced Professional Writing Credits: 3
- FIN 320 - Managerial Finance Credits: 3
- FIN 321 - Investments Credits: 3
- FIN 323 - Financial Markets and Institutions Credits: 3
- FIN 328 - Long Term Financial Management Credits: 3
- FIN 329 - Principles of Insurance Credits: 3
- MATH 225 - Calculus I Credits: 4
- MATH 230 - Calculus II Credits: 4
- MATH 231 - Calculus III Credits: 4
- MATH 252 - Introduction to Statistical Modeling Credits: 3
- MATH 311 - Introduction to Operations Research Credits: 3
- MATH 315 - Numerical Mathematics Credits: 3
- MATH 335 - Mathematical Modeling Credits: 3

Minor in Elementary School Mathematics

Mathematics Department

Effective for students entering the program as of Spring 2007: To earn a minor in Elementary School Mathematics, at least nine credit hours of mathematics courses used for the Elementary School Mathematics minor must be taken at Slippery Rock University. Note: Some of these courses have prerequisites that must be met.

Requirements for the Minor

- ELEC 342 - The Teaching of Elementary Mathematics Credits: 3
- MATH 118 - Elementary Geometry Credits: 3
- MATH 210 - Elementary Mathematics I Credits: 3
- MATH 310 - Elementary Mathematics II Credits: 3

And at Least Three Additional Courses from:

- MATH 113 - Mathematics as a Liberal Art Credits: 3
- MATH 122 - Matrices and Linear Programming Credits: 3
- MATH 125 - Precalculus Credits: 4
- MATH 131 - Discrete Mathematics Credits: 3
- MATH 152 - Elementary Statistics I Credits: 3
- MATH 153 - Elementary Statistics II Credits: 3
- MATH 252 - Introduction to Statistical Modeling Credits: 3

Minor in Mathematics

Mathematics Department

To earn a Minor in Mathematics, at least nine credit hours of mathematics courses used for the mathematics minor must be taken at Slippery Rock University.

Requirements for the Minor

- MATH 225 - Calculus I Credits: 4
- MATH 230 - Calculus II Credits: 4
- MATH 231 - Calculus III Credits: 4

And One of the Following Tracks:

A. Pure Mathematics Track:

- MATH 235 - Modern Concepts of Mathematics Credits: 3

And at Least Two of the Following:

- MATH 304 - Geometric Structures Credits: 3
- MATH 309 - Linear Algebra Credits: 3
- MATH 313 - Introductory Analysis I Credits: 3
- MATH 314 - Introductory Analysis II Credits: 3
- MATH 320 - Theory of Numbers Credits: 3
- MATH 325 - Abstract Algebra I Credits: 3
- MATH 326 - Abstract Algebra II Credits: 3
- MATH 352 - Mathematical Statistics I Credits: 3

B. Applied Mathematics Track:

- MATH 240 - Linear Algebra and Differential Equations Credits: 3

And at Least Two of the Following:

- MATH 301 - Differential Equations I Credits: 3
- MATH 302 - Differential Equations II Credits: 3
- MATH 309 - Linear Algebra Credits: 3
- MATH 311 - Introduction to Operations Research Credits: 3
- MATH 315 - Numerical Mathematics Credits: 3
- MATH 331 - Mathematical Methods of Physics Credits: 3
Cross listed as PHYS 331. This may be used as a Mathematics course or a Physics course but not for both.
- MATH 335 - Mathematical Modeling Credits: 3
- MATH 352 - Mathematical Statistics I Credits: 3

Minor in Middle School Mathematics

Mathematics Department

To earn a minor in Middle School Mathematics, at least nine credit hours of mathematics courses used for the minor must be taken at Slippery Rock University. This program should prepare students to take the Praxis exam for middle school mathematics certification. Note: Some of these courses have prerequisites that must be met.

Requirements for the Minor

- MATH 118 - Elementary Geometry Credits: 3
or MATH 304 - Geometric Structures
May not be used by Mathematics majors as courses that count toward the Middle School Mathematics Minor.
- MATH 210 - Elementary Mathematics I Credits: 3
- MATH 225 - Calculus I Credits: 4
- MATH 310 - Elementary Mathematics II Credits: 3
- SEFE 311 - Teaching of Mathematics in the Middle School Credits: 3

Two Additional Courses are Required - At least one from Group A

Group A:

MATH 131, 230, 235, 240 and 320 may not be used by Mathematics majors as courses that count toward the Middle School Mathematics Minor.

- MATH 131 - Discrete Mathematics Credits: 3
- MATH 153 - Elementary Statistics II Credits: 3
- MATH 230 - Calculus II Credits: 4
- MATH 235 - Modern Concepts of Mathematics Credits: 3
- MATH 240 - Linear Algebra and Differential Equations Credits: 3
- MATH 252 - Introduction to Statistical Modeling Credits: 3
- MATH 311 - Introduction to Operations Research Credits: 3
- MATH 320 - Theory of Numbers Credits: 3

Group B:

- MATH 113 - Mathematics as a Liberal Art Credits: 3
- MATH 122 - Matrices and Linear Programming Credits: 3
- MATH 152 - Elementary Statistics I Credits: 3

Minor in Statistics

Mathematics Department

To earn a Minor in Statistics, at least nine credit hours of the mathematics courses used for the statistics minor must be taken at Slippery Rock University. Some of these courses have prerequisites that must be met. In particular, Mathematical Statistics I/II have Calculus II as a prerequisite.

Requirements for the Minor

No more than six credits may count toward both a mathematics major and a statistics minor.

- MATH 152 - Elementary Statistics I Credits: 3
- MATH 153 - Elementary Statistics II Credits: 3
- MATH 252 - Introduction to Statistical Modeling Credits: 3
- MATH 352 - Mathematical Statistics I Credits: 3
- MATH 353 - Mathematical Statistics II Credits: 3

And at Least 3 Courses From:

MATH 225, 230 and 231 may not be used by Mathematics major as courses that count toward the Statistics Minor.

- BIOL 325 - Biometry Credits: 3
- CPSC 323 - Data Base Systems Credits: 3
- CPSC 358 - Simulation Credits: 3
- ECON 318 - Intermediate Statistical Analysis Credits: 3
- HLTH 312 - Data Management for Health Science Credits: 3
- HLTH 313 - Biostatistics Credits: 3
- MATH 225 - Calculus I Credits: 4
- MATH 230 - Calculus II Credits: 4
- MATH 231 - Calculus III Credits: 4
- PSYC 421 - Advanced Behavioral Statistics Credits: 3

Teacher Certification in Mathematics

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 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.

Nursing

119 Behavioral Science Building
724-738-2065/2324

Nursing

Currently, the Department of Nursing offers two totally online programs: RN to BSN Completion Program and Certification in School Nursing. The RN to BSN Completion Program at Slippery Rock University offers a totally online program that leads to a bachelor of science in nursing. It 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 program is to prepare baccalaureate educated practitioners of nursing to provide 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.

Chair

Judith DePalma

Secretary

Joanne Santus

Faculty

Karen Cummins, Judith DePalma, Diana Jones, Kerry Risco, Mary Ann Thurkettle, Diane Tomasic, Debra Wolf

This program, which leads to a bachelor of science in nursing, is designed to meet the needs of registered nurses who are graduates of hospital diploma nursing programs or associate degree programs in nursing. The program is accredited by the National League for Nursing Accrediting Commission. To be eligible to begin the junior level clinical nursing courses, students must have completed 63 or more non-remedial college credits. The curriculum for the program includes two required supportive courses, and courses in the nursing major. The nursing curriculum includes theoretical and clinical content. The flexibility of the program enables the registered nurse to attend school on a part-time or full-time basis. Nursing and the two support courses are web-based and available to nursing students anytime, anywhere. The purpose of the program is to prepare practitioners of nursing to provide 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.

Students in the RN-BSN upper division nursing program are required to have a minimum of 2.500 QPA on entry to the nursing major and must maintain the 2.500 QPA throughout the nursing program from entry to exit. The students must have and maintain BOTH the cumulative 2.500 QPA and the nursing major 2.500 QPA. Students can elect to obtain a school nurse certificate, a minor or certificate in health care informatics, or a certificate in case management while completing their BSN. Other minors can also be pursued while enrolled in the BSN program.

Certification Programs

- Certification in School Nursing
- Majors
- Nursing (BSN)

Certification in School Nursing

The Certification in School Nursing is a 12 credit, totally online, program. The program can be completed across 3 semesters, or 1 full academic year (including a summer course). Applicants must have a baccalaureate degree in nursing or be enrolled in the SRU RN to BSN Completion program. Students in the RN to BSN Completion Program take the school nurse courses as electives. A minimum QPA of 2.8 is required for admission. The PA Department of Education requires two courses in college English (6 credits) and two courses in college mathematics (6 credits). English courses must include a writing course and a literature course.

Required Courses

- NURS 512 - Nursing Process with School Populations Credits: 3

- Fall semester only
- NURS 515 - Management of School Health Services by School Nurses Credits: 3
Spring semester only
- SPED 530 - Nursing Issues in Special Education Credits: 3
Summer only

Nursing (BSN)

Nursing Department

Requirements for the Major - Credits: 39

This totally online RN to BSN Completion program requires 33 credits of nursing and 6 credits of support courses. To be admitted an applicant must have a current licensure as a Registered Nurse, a minimum of 63 non-remedial college credits and a QPA of 2.5. All credits from Associate Degree programs are transferred in. Thirty credits are granted through advanced placement for diploma graduates. All students must also have a total of 48 credits in Liberal Studies for graduation.

Core Courses

- NURS 311 - Introduction to Health Care Informatics Credits: 3
- NURS 312 - Nursing in Transition Credits: 3
- NURS 322 - The Teaching-Learning Process in Nursing Credits: 3
- NURS 327 - Group Process for Nursing Credits: 3
- NURS 331 - Evidence Based Health Assessment and Promotion Credits: 3
- NURS 408 - Delivery of Nursing Care in a Managed Cared Environment/Clinical Credits: 3
- NURS 422 - Nursing Research Credits: 3
- NURS 426 - Community and Public Health Nursing Credits: 3
- NURS 440 - Nursing Case Management in Today's Healthcare Environment Credits: 3

Nursing Electives - Credits: 6

6 credits from the following:

- NURS 429 - Financial Management for Nursing Case Managers Credits: 3
- NURS 430 - Leadership in Nursing and Healthcare Systems Credits: 3
- NURS 433 - Innovative Technology for Healthy Communities Credits: 3
- NURS 498 - Selected Topics Credits: 3
- NURS 510 - Cardiovascular Function: Assessment and Treatment Credits: 3
- NURS 511 - Advanced Healthcare Informatics Credits: 3

Required Non-Nursing Courses - Credits: 6

- PHIL 325 - Medical/Health Care Ethics Credits: 3
- PROF 317 - Statistics for the Social Sciences Credits: 3

Degree Completion in Two Years

Total of 39 credits of Nursing and support credits are possible to be taken within a two year period of time. There is no statute of limitation, so courses can be taken as a part-time or full-time load.

Academic Standing

BSN majors must attain a grade of C or better in all nursing major theory courses and pass all practica. In the event that a final course grade of C or practicum grade of P is not attained, the course and/or practicum may be repeated one time. Failure to achieve the required theory or practicum grade on the second attempt will result in the removal of the student from the nursing major.

Parks and Recreation/Environmental Education

101 Eisenberg Building
724-738-2068

Parks and Recreation/Environmental Education

The mission of the Park and Resource Management program at Slippery Rock University is to provide students with the knowledge, skills and abilities to function as park and resource management professionals for a variety of federal, state and private agencies and organizations. The broad-based program provides detailed study in natural history and ecology, natural systems management, cultural resource management, visitor services management and contemporary issues in park and resource management. Coursework focused on the administrative, maintenance, planning and design aspects of park management is also featured.

To offer a quality undergraduate curriculum that prepares students for current entry-level practice in a variety of health and human service settings. The emphasis is on therapeutic recreation as a means to restore, remediate, and/or rehabilitate individuals with a diversity of disorders/disabilities. The program integrates coursework, practical experiences and professional activities as a foundation for the development of competent professionals.

The mission of the Resort Recreation Management/Tourism Program at Slippery Rock University is to develop entry level professionals in the fields of resort, conference group, community, and camping recreation and tourism with competencies in administration, leadership, programming, hospitality, and business skills. This is accomplished by providing quality academic preparation that incorporates both classroom and supervised practical experiences.

Chair

Daniel Dziubek

Secretary

Anita Culley

Faculty

Bruce Boliver, Jennifer Carben, Colleen Cooke, Daniel Dziubek, Deborah Hutchins, Paulette Johnson, Christopher Leininger, John Lisco, Randall Pitstick, Lalanda Stromp

The Department of Parks and Recreation/Environmental Education offers a diverse academic program. Science degrees offered include: Park and Resource Management, with tracks in Environmental Education/Interpretation and Outdoor Leadership; Resort Recreation Management/Tourism; and Therapeutic Recreation.

The department cooperates closely with a number of government and private agencies and organizations in an effort to provide quality academic and practicum experiences. Special study opportunities in interpretive services, park law enforcement, and park and open space planning are available. A cooperative education program, which permits students to alternate semesters of work and study, is available in cooperation with the U.S. Army Corps of Engineers and National Park Service.

The Seasonal Park Law Enforcement Program qualifies students for seasonal law enforcement commissions with the National Park Service, U.S. Fish and Wildlife Service, and other park agencies.

Cooperative agreements with a variety of resort, recreation, environment, and health-related agencies provide ample opportunities for students to acquire a sound base in the practical application of theory, knowledge, and skills provided in the classroom.

Graduates of the department's programs are currently employed in positions within the park, recreation, and environmental education fields. Many are serving as resort recreation directors, YMCA directors, therapeutic recreation specialists, national and state park rangers and managers, park naturalists, outdoor recreation planners, environmental educators, and other similar positions.

All parks and recreation majors must qualify for department advanced standing prior to enrollment in PREE 450. A copy of the requirements for advanced standing is available in the department office.

Majors

- Park & Resource Management (BS)
- Park & Resource Management (BS) - Track in Environmental Education/Interpretation
- Park & Resource Management (BS) - Track in Outdoor Leadership
- Resort Recreation Management/Tourism (BS)
- Therapeutic Recreation (BS)

Minor

- Therapeutic Recreation

Minor in Therapeutic Recreation: credits - 24

Parks and Recreation / Environmental Education

The Therapeutic Recreation course work provides students with direct experiences in assessment, planning, implementing, and evaluating programs to meet the needs of individuals from various populations including people with disabilities, adolescents at risk, and older adults. In the Department of Parks and Recreation, this minor would provide students with more experiences and skills in serving people with disabilities in the community or in the resort industry.

Required Courses: credits 21

- PREE 120 - Inclusive Leisure Services Credits: 3
- PREE 220 - Therapeutic Recreation Services Credits: 3
- PREE 314 - Clinical Aspects of Therapeutic Recreation Credits: 3
- PREE 319 - Client Assessment in Therapeutic Recreation Credits: 3

- PREE 320 - Therapeutic Recreation Program Design Credits: 3
- PREE 351 - Practicum Credits: 3
- PREE 423 - Therapeutic Recreation Interventions Credits: 3

Select one of the following courses - credits 3

- PREE 232 - Therapeutic Recreation for People with Physical Disabilities Credits: 3
- PREE 233 - Therapeutic Recreation for People with Mental Health and Psychosocial Disorders Credits: 3
- PREE 420 - Recreation and the Aging Process Credits: 3

Park & Resource Management (BS)

Parks and Recreation / Environmental Education

Professional Studies - Credits: 60

Core Courses - Required 27 Hours

- PREE 110 - Foundations of Parks and Recreation Credits: 3
- PREE 120 - Inclusive Leisure Services Credits: 3
- PREE 207 - Computer Aided Planning and Management Credits: 3
- PREE 318 - Park and Recreation Administration Credits: 3
- PREE 415 - Issues in Parks and Recreation Credits: 3
- PREE 450 - Internship Credits: 12

Track Studies - Required 33 Hours

- PREE 170 - Fundamentals of Park and Resource Management Credits: 3
- PREE 213 - Environmental Resource Analysis Credits: 3
- PREE 348 - Natural History of Ecosystems I Credits: 3
- PREE 349 - Natural History of Ecosystems II Credits: 3
- PREE 304 - Search and Rescue/Wilderness Medicine Credits: 3
- PREE 313 - Recreation Area Design Credits: 3
- PREE 351 - Practicum Credits: 3
- PREE 372 - Visitor Services Management Credits: 3
- PREE 377 - Cultural Resources Management Credits: 3
- PREE 378 - Parks, Wildlife and Wildlife Management Credits: 3
- PREE 475 - Park and Resource Management Credits: 3

Professional Electives - Required 12 Hours

Park and Open Space Planning

- GES 325 - Introduction to Geographic Information Science Credits: 3
- GES 425 - Advanced Geographic Information Systems Credits: 3

- PREE 211 - Outdoor Leadership Credits: 3
- PREE 412 - Open Space Planning Credits: 3
- PREE 413 - Site and Building Feasibility Studies Credits: 3

Park Law Enforcement

- PREE 271 - Law Enforcement Firearms Credits: 3
- PREE 371 - Fundamentals of National Park Service Law Enforcement Credits: 3
- PREE 374 - Federal Law & Park Policy Credits: 3
- PREE 471 - NPS Law Enforcement Credits: 3
- PREE 472 - Park Law Enforcement Credits: 3

Environmental Education/Interpretation

- PREE 210 - Resources for Outdoor Programming Credits: 3
- PREE 347 - Interpretive Methods and Programming Credits: 3
- PREE 361 - Environmental Teaching Credits: 3
- PREE 416 - Group Recreation Programming Credits: 3

Outdoor Leadership

- PREE 211 - Outdoor Leadership Credits: 3
- PREE 311 - Principles of Commercial Recreation/Tourism Credits: 3
- PREE 342 - Group Facilitation and Leadership Credits: 3
- PREE 347 - Interpretive Methods and Programming Credits: 3

Park & Resource Management (BS) - Track in Environmental Education/Interpretation

Parks and Recreation / Environmental Education

Professional Studies - Required 60 Hours

Core Courses - Required 24 Hours

- PREE 110 - Foundations of Parks and Recreation Credits: 3
- PREE 120 - Inclusive Leisure Services Credits: 3
- PREE 318 - Park and Recreation Administration Credits: 3
- PREE 415 - Issues in Parks and Recreation Credits: 3
- PREE 450 - Internship Credits: 12

Environmental Education/Interpretation Track Studies - Required 36 Hours

- PREE 170 - Fundamentals of Park and Resource Management Credits: 3

- PREE 210 - Resources for Outdoor Programming Credits: 3
- PREE 213 - Environmental Resource Analysis Credits: 3
- PREE 348 - Natural History of Ecosystems I Credits: 3
- PREE 349 - Natural History of Ecosystems II Credits: 3
- PREE 347 - Interpretive Methods and Programming Credits: 3
- PREE 351 - Practicum Credits: 3
- PREE 361 - Environmental Teaching Credits: 3
- PREE 372 - Visitor Services Management Credits: 3
- PREE 377 - Cultural Resources Management Credits: 3
- PREE 378 - Parks, Wildlife and Wildlife Management Credits: 3
- PREE 416 - Group Recreation Programming Credits: 3

Professional Electives - Required 12 Hours

Park and Open Space Planning

- GES 325 - Introduction to Geographic Information Science Credits: 3
- GES 425 - Advanced Geographic Information Systems Credits: 3
- PREE 313 - Recreation Area Design Credits: 3
- PREE 412 - Open Space Planning Credits: 3
- PREE 413 - Site and Building Feasibility Studies Credits: 3

Park Law Enforcement

- PREE 271 - Law Enforcement Firearms Credits: 3
- PREE 371 - Fundamentals of National Park Service Law Enforcement Credits: 3
- PREE 374 - Federal Law & Park Policy Credits: 3
- PREE 471 - NPS Law Enforcement Credits: 3
- PREE 472 - Park Law Enforcement Credits: 3

Park and Resource Management

- PREE 207 - Computer Aided Planning and Management Credits: 3
- PREE 304 - Search and Rescue/Wilderness Medicine Credits: 3
- PREE 313 - Recreation Area Design Credits: 3
- PREE 475 - Park and Resource Management Credits: 3

Outdoor Leadership

- PREE 211 - Outdoor Leadership Credits: 3
- PREE 304 - Search and Rescue/Wilderness Medicine Credits: 3
- PREE 311 - Principles of Commercial Recreation/Tourism Credits: 3
- PREE 342 - Group Facilitation and Leadership Credits: 3
- PREE 347 - Interpretive Methods and Programming Credits: 3

Park & Resource Management (BS) - Track in Outdoor Leadership

Parks and Recreation / Environmental Education

Professional Studies - Required 60 Hours

Core Courses - Required 24 Hours

- PREE 110 - Foundations of Parks and Recreation Credits: 3
- PREE 120 - Inclusive Leisure Services Credits: 3
- PREE 318 - Park and Recreation Administration Credits: 3
- PREE 415 - Issues in Parks and Recreation Credits: 3
- PREE 450 - Internship Credits: 12

Outdoor Leadership Track Studies - Required 36 Hours

- PREE 170 - Fundamentals of Park and Resource Management Credits: 3
- PREE 211 - Outdoor Leadership Credits: 3
- PREE 213 - Environmental Resource Analysis Credits: 3
- PREE 348 - Natural History of Ecosystems I Credits: 3
- PREE 349 - Natural History of Ecosystems II Credits: 3
- PREE 311 - Principles of Commercial Recreation/Tourism Credits: 3
- PREE 342 - Group Facilitation and Leadership Credits: 3
- PREE 351 - Practicum Credits: 3
- PREE 372 - Visitor Services Management Credits: 3
- PREE 377 - Cultural Resources Management Credits: 3
- PREE 378 - Parks, Wildlife and Wildlife Management Credits: 3
- PREE 475 - Park and Resource Management Credits: 3

Professional Electives - Required 12 Hours

Park and Open Space Planning

- GES 325 - Introduction to Geographic Information Science Credits: 3
- GES 425 - Advanced Geographic Information Systems Credits: 3
- PREE 313 - Recreation Area Design Credits: 3
- PREE 412 - Open Space Planning Credits: 3
- PREE 413 - Site and Building Feasibility Studies Credits: 3

Park Law Enforcement

- PREE 271 - Law Enforcement Firearms Credits: 3
- PREE 371 - Fundamentals of National Park Service Law Enforcement Credits: 3

- PREE 374 - Federal Law & Park Policy Credits: 3
- PREE 471 - NPS Law Enforcement Credits: 3
- PREE 472 - Park Law Enforcement Credits: 3

Park and Resource Management

- PREE 207 - Computer Aided Planning and Management Credits: 3
- PREE 304 - Search and Rescue/Wilderness Medicine Credits: 3
- PREE 313 - Recreation Area Design Credits: 3
- PREE 342 - Group Facilitation and Leadership Credits: 3
- PREE 347 - Interpretive Methods and Programming Credits: 3

Environmental Education/Interpretation

- PREE 210 - Resources for Outdoor Programming Credits: 3
- PREE 347 - Interpretive Methods and Programming Credits: 3
- PREE 361 - Environmental Teaching Credits: 3
- PREE 416 - Group Recreation Programming Credits: 3

Resort Recreation Management/Tourism (BS)

Parks and Recreation / Environmental Education

Core Courses - Credits: 24

- PREE 110 - Foundations of Parks and Recreation Credits: 3
- PREE 120 - Inclusive Leisure Services Credits: 3
- PREE 318 - Park and Recreation Administration Credits: 3
- PREE 415 - Issues in Parks and Recreation Credits: 3
- PREE 450 - Internship Credits: 12

Resort Recreation Management/Tourism Professional Courses - Credits: 33

- MRKT 330 - Principles of Marketing Credits: 3
- PREE 215 - Park and Recreation Public Relations Credits: 3
- PREE 230 - Recreation Leadership/Facilitation Credits: 3
- PREE 234 - Leisure Services Programming Credits: 3
- PREE 311 - Principles of Commercial Recreation/Tourism Credits: 3
- PREE 316 - Management of Leisure Services and Commercial Facilities Credits: 3
- PREE 351 - Practicum Credits: 3
- PREE 416 - Group Recreation Programming Credits: 3
- PREE 436 - Event Planning & Tournament Structure Credits: 3
- PROF 205 - Accounting for Decision Makers Credits: 3
or ACCT 209 - Fundamental Accounting I

Therapeutic Recreation (BS)

Parks and Recreation / Environmental Education

Therapeutic recreation specialists, also known as recreational therapists, use selective activities to address the physical, cognitive, and psychosocial needs of persons with illness or disability. Activity modalities and intervention techniques are utilized to improve function/health and to promote independence and wellness.

The bachelor of science degree emphasis in therapeutic recreation supplements a solid liberal studies foundation with course work related to human development/growth and movement. Field work, practicum, and a culminating internship assist students in gaining experience in a TR setting prior to graduation. In addition, students may choose from several specialty tracks which offer focused coursework to enhance knowledge and skills in a given area, i.e., mental health, rehabilitation, corrections, gerontology, and community. Minors are also available in related areas such as gerontology, exceptionalities, psychology, sociology, and adapted physical activity and rehabilitation.

The therapeutic recreation program is designed with the intent that students will meet the eligibility requirements to sit for the national certification exam administered by the National Council for Certification.

Core Courses - Credits: 24

- PREE 110 - Foundations of Parks and Recreation Credits: 3
- PREE 120 - Inclusive Leisure Services Credits: 3
- PREE 318 - Park and Recreation Administration Credits: 3
- PREE 415 - Issues in Parks and Recreation Credits: 3
- PREE 450 - Internship Credits: 12

Therapeutic Recreation Professional Courses - Credits: 36

- CDEV 248 - Human Development and Education Credits: 3
- ERS 101 - Applied Anatomy Credits: 3
- ERS 201 - Exercise Physiology Credits: 3
- PREE 220 - Therapeutic Recreation Services Credits: 3
- PREE 232 - Therapeutic Recreation for People with Physical Disabilities Credits: 3
- PREE 233 - Therapeutic Recreation for People with Mental Health and Psychosocial Disorders Credits: 3
- PREE 314 - Clinical Aspects of Therapeutic Recreation Credits: 3
- PREE 319 - Client Assessment in Therapeutic Recreation Credits: 3
- PREE 320 - Therapeutic Recreation Program Design Credits: 3
- PREE 351 - Practicum Credits: 3
- PREE 420 - Recreation and the Aging Process Credits: 3
- PREE 423 - Therapeutic Recreation Interventions Credits: 3

Therapeutic Recreation Certification Requirements

In addition to the 60 credits required in the Therapeutic Recreation major both PSYC 105 and 276 must be completed by the student to be eligible to take the NCTRC Certification Exam.

Physics

047 East Gym
724-738-2074

Physics

The mission of the Physics Department at Slippery Rock University is to service the Liberal Studies Program, provide content courses for other departments, and provide high-quality major and pre-engineering programs. The department is equally committed to each of these three areas and is actively involved in curriculum and program review on an ongoing basis. With regards to the Liberal Studies Program, the department aims to offer courses that compliment the "Seven Critical Goals Towards Becoming an Educated Person." The department also offers many courses that provide basic and advanced content to students with other majors. Finally, the department aims to provide major programs that allow technical specialization and flexibility to its graduates. Many possible career options are available to physics majors; the department's curriculum provides the training necessary to many of these options.

Chair

Ben Shaevitz

Secretary

Cheryl Dolan

Faculty

Ben Shaevitz, Athula Herat, Rizwan Mahmood, Krishna Mukherjee, Manuel Valera

"SRU physics is a small department that offers infinite possibilities for achievement. The SRU Physics department infuses classical and modern theory with advanced and up-to-date experimentation and teaching tools. The faculty is small and very personal, offering guidance based on the student's learning abilities rather than from a "textbook" viewpoint. The faculty is knowledgeable in both subject content as well as information presentation. If you are a great science student, or you are learning about science for the first time, the SRU Physics department will guide you through an intricate, student-friendly web of lecture, problem solving, experimentation, data analysis, and research. Whether you are training to be the next Heisenberg or Einstein, the next great engineer, the next great high school teacher, or simply learning problem solving skills to use in any workplace, the SRU Physics department is a gateway to success."

-Stephen Murray

B.s in Physics, Pre-Master in Education

Certification Programs

- Certification in Nanofabrication
- Teacher Certification in Physics

Majors

- Physics (BA)
- Physics (BS)

Minors

- Minor in Physics

Pre-Professional Programs

- Pre-metrology

Certification in Nanofabrication

Physics Department

Requirements for the Certification

Nanofabrication is a technology that grew out of making semiconductor chips. The need for faster computers has resulted in transistors getting smaller and smaller over time (~100 nanometers in length). These objects are so small that nanofabrication technology has become "machining at the atomic level" and it has spread from being used to make chips to being used to make a variety of technological innovations, including, artificial organs, tiny valves, and flat screen televisions. Nanofabrication and nanotechnology are engineering at the atomic length scale – a size range which until recently was only available to nature. Being able to engineer such small things opens the door to a multitude of new opportunities. These include making extremely fine diameter but incredibly strong fibers atom by atom, making extremely small probes that can look at individual strands of DNA for uses such as disease detection, and man-made capillary systems to bring nutrients to man-created replacement organs.

This Certification program is possible as part of an educational partnership between the SSHE System Universities and The Pennsylvania State University. Students wishing to earn a NMT Certificate must spend one semester at the Penn State Nanofabrication Facility in a hands-on nanofabrication "capstone experience." Students enrolled in the NMT program are required to take six courses (18 credit hours) at Penn State main campus. These courses can be taken in one semester (preferred) and or spread out to two or three semesters. These courses can be taken in any semester after sophomore year preferably summer or after graduation from Slippery Rock.

Requirements for entry into the Nanofabrication Program

- Introductory or General Chemistry with Laboratory
- College Algebra or higher math course
- Introductory Statistics
- Technical or Engineering Physics including electricity and circuits
- Microcomputer basics
- College Writing I
- Department recommendation

Minor in Physics

Physics Department

Requirements for the Minor

Two courses at or above the 300 level and the following:

- PHYS 211 - General Physics I/ Lab Credits: 4
- PHYS 212 - General Physics II/ Lab Credits: 4

- PHYS 213 - General Physics III/ Lab Credits: 3

Physics (BA)

Physics Department

Physicists study the world around us in order to discover the basic principles or laws which govern the natural world. As a physicist you can:

- Seek to understand the origin of the universe and the ultimate structure of matter;
- Study the principles underlying the structure of materials in order to design faster computer chips or improved liquid crystals used for electronic displays;
- Work in hands-on lab courses studying laser-based optics, learn electronic instrumentation for the physical sciences including the computer acquisition and analysis of data, and use modern lab equipment such as the electron spin resonance spectrometer which can detect the radiation from individual atoms;
- Acquire the theoretical and experimental background for work in areas such as acoustics, astrophysics, biophysics, chemical physics, computer science, education mathematical physics, and engineering.

Developments in science and technology move very fast and a degree in physics provides you with the fundamental tools, which you will need in order to attack the scientific and technological problems of this millennium.

An undergraduate degree in Physics gives students a broad, deep, rigorous understanding to solve many types of quantitative problems, a skill which is useful to many different careers in computers, engineering, finance, etc. With the rapid and unpredictable pace and direction of technological advance, training in physics gives the undergraduate their most important skill, namely the ability to think clearly and rigorously about a technical problem which may arise in the workplace.

Requirements for the Major - Credits: 39

A language is required of all BA majors.

Required Courses - Credits: 19

- PHYS 212 - General Physics II/ Lab Credits: 4
- PHYS 213 - General Physics III/ Lab Credits: 3
- PHYS 314 - Engineering Mechanics I: Statics Credits: 3
- PHYS 331 - Mathematical Methods of Physics Credits: 3
- PHYS 381 - Advanced Physics Laboratory Credits: 2
- PHYS 411 - Modern Physics Credits: 4

Elective Physics - Credits: Select 6

- PHYS 315 - Engineering Mechanics II: Dynamics Credits: 3
- PHYS 325 - Analog & Digital Electronics Credits: 3
- PHYS 410 - Electricity and Magnetism Credits: 3
- PHYS 480 - Quantum Credits: 3
- PHYS 301 - Physical Chemistry I Credits: 3

Related Field Work - Credits: 14

- CPSC 140 - Introduction to Programming Principles Credits: 3
- MATH 230 - Calculus II Credits: 4
- MATH 231 - Calculus III Credits: 4
- MATH 240 - Linear Algebra and Differential Equations Credits: 3

A Language is Required of all BA Majors

Specialization: Engineering

See the Pre-professional Programs section.

Physics (BS)

Physics Department

Physicists study the world around us in order to discover the basic principles or laws which govern the natural world.

As a physicist you can:

- Seek to understand the origin of the universe and the ultimate structure of matter;
- Study the principles underlying the structure of materials in order to design faster computer chips or improved liquid crystals used for electronic displays;
- Work in hands-on lab courses studying laser-based optics, learn electronic instrumentation for the physical sciences including the computer acquisition and analysis of data, and use modern lab equipment such as the electron spin resonance spectrometer which can detect the radiation from individual atoms;
- Acquire the theoretical and experimental background for work in areas such as acoustics, astrophysics, biophysics, chemical physics, computer science, education mathematical physics, and engineering.

Developments in science and technology move very fast and a degree in Physics provides you with the fundamental tools, which you will need in order to attack the scientific and technological problems of this millennium.

An undergraduate degree in Physics gives students a broad, deep, rigorous understanding to solve many types of quantitative problems, a skill which is useful to many different careers in computers, engineering, finance, etc. With the rapid and unpredictable pace and direction of technological advance, training in physics gives the undergraduate their most important skill, namely the ability to think clearly and rigorously about a technical problem which may arise in the workplace.

Requirements for the Major - Credits: 57

Required Courses - Credits: 30

- PHYS 212 - General Physics II/ Lab Credits: 4
- PHYS 213 - General Physics III/ Lab Credits: 3
- PHYS 314 - Engineering Mechanics I: Statics Credits: 3
- PHYS 331 - Mathematical Methods of Physics Credits: 3
- PHYS 371 - Physical Optics Credits: 3

- PHYS 381 - Advanced Physics Laboratory Credits: 2
- PHYS 382 - Optics Laboratory Credits: 2
- PHYS 410 - Electricity and Magnetism Credits: 3
- PHYS 411 - Modern Physics Credits: 4
- PHYS 480 - Quantum Credits: 3

Elective Physics - Credits: Select 6

- PHYS 315 - Engineering Mechanics II: Dynamics Credits: 3
- PHYS 325 - Analog & Digital Electronics Credits: 3
- PHYS 301 - Physical Chemistry I Credits: 3

Related Field Work - Credits: 21

- CHEM 108 - General Chemistry II Credits: 3
- CHEM 112 - General Chemistry II Lab Credits: 1
- CPSC 140 - Introduction to Programming Principles Credits: 3
- MATH 230 - Calculus II Credits: 4
- MATH 231 - Calculus III Credits: 4
- MATH 240 - Linear Algebra and Differential Equations Credits: 3
- MATH 301 - Differential Equations I Credits: 3

BS Physics - Computational Physics Track

Computational Physics combines physics, computer science and applied mathematics in order to provide scientific solutions to realistic and complex problems. Physicists have very precise mathematical theories describing how physical systems will behave. Unfortunately, very often the theory's equations are so complex that solving them analytically is not realistic. This is where the computational physicists come in. With the use of computers, they perform these complex calculations that cannot be done using the traditional techniques.

College-Wide Requirements - 12 Hours

- CHEM 107 - General Chemistry I Credits: 3
- CHEM 111 - General Chemistry I Lab Credits: 1
- MATH 225 - Calculus I Credits: 4
- PHYS 211 - General Physics I/ Lab Credits: 4

Required Major Courses - 27 Hours

- PHYS 212 - General Physics II/ Lab Credits: 4
- PHYS 213 - General Physics III/ Lab Credits: 3
- PHYS 315 - Engineering Mechanics II: Dynamics Credits: 3
- PHYS 331 - Mathematical Methods of Physics Credits: 3
- PHYS 381 - Advanced Physics Laboratory Credits: 2
- PHYS 385 - Computational Physics Credits: 3
- PHYS 411 - Modern Physics Credits: 4

- PHYS 480 - Quantum Credits: 3
- PHYS 490 - Independent Study Credits: 1 to 3

Elective Physics - 6 Hours

Select 6 Hours

- PHYS 314 - Engineering Mechanics I: Statics Credits: 3
- PHYS 325 - Analog & Digital Electronics Credits: 3
- PHYS 371 - Physical Optics Credits: 3
- PHYS 410 - Electricity and Magnetism Credits: 3
- PHYS 301 - Physical Chemistry I Credits: 3

Related Field Work - 26 Hours

- CPSC 140 - Introduction to Programming Principles Credits: 3
- CPSC 150 - Advanced Programming Principles Credits: 4
- CPSC 374 - Algorithms and Data Structures Credits: 3
- MATH 230 - Calculus II Credits: 4
- MATH 231 - Calculus III Credits: 4
- MATH 240 - Linear Algebra and Differential Equations Credits: 3
- MATH 301 - Differential Equations I Credits: 3
- MATH 315 - Numerical Mathematics Credits: 3

Pre-engineering

Physics Department

327 Vincent Science Hall
724-738-2074

In a cooperative program with the Pennsylvania State University (PSU) or Youngstown State University (YSU), the pre-engineering student undertakes a three-year curriculum in liberal studies and natural sciences (physics, mathematics, chemistry, geology) at SRU and a two-year engineering curriculum at PSU or YSU. A student recommended for transfer by SRU's Department of Physics will be able to enter any one of the following areas of study at PSU:

Agricultural and Biological Engineering
Computer Engineering
Electrical Engineering
Energy Engineering
Engineering Science
Geo-Environmental Engineering
Industrial Engineering
Material Science and Engineering
Mining Engineering
Nuclear Engineering
Petroleum and Natural Gas Engineering

and at YSU:

Chemical Engineering
Civil & Environmental Engineering
Electrical & Computer Engineering
Engineering Technology (Civil & Construction, Electrical, Mechanical)
Industrial & Systems Engineering
Mechanical Engineering

The cooperative program is an effort to fulfill the following objectives:

1. To cooperatively provide a general education in liberal arts and sciences, as well as engineering education for each student enrolled so that through five years of study a student may complete what otherwise could require six or more years.
2. To provide a student who has not yet decided between engineering and other disciplines, additional time to make that decision while the student studies both arts and sciences during the first three years at Slippery Rock University.
3. To enable qualified students to receive both a liberal and technical education at relatively low cost and, in doing so, provide the commonwealth and the nation with more broadly educated engineers.

Requirements for the Major - Credits: 61

Specialization: Pre-engineering

Required Courses:

(PHYS 315 is not required of chemical engineering, electrical engineering, material science and engineering, nuclear engineering, and petroleum and natural gas engineering students. All other students must choose an alternative course from the list of pre-engineering electives if PHYS 315 is not taken. Physics 411 is only required of students intending to enroll in aerospace, computer, electrical, or nuclear engineering. All other students must choose an alternate course from the list of pre-engineering electives if PHYS 411 is not taken.)

- PHYS 140 - Engineering Graphics I Credits: 2
- PHYS 141 - Engineering Graphics II Credits: 1
- PHYS 211 - General Physics I/ Lab Credits: 4
- PHYS 212 - General Physics II/ Lab Credits: 4
- PHYS 213 - General Physics III/ Lab Credits: 3
- PHYS 314 - Engineering Mechanics I: Statics Credits: 3
- PHYS 315 - Engineering Mechanics II: Dynamics Credits: 3
- PHYS 331 - Mathematical Methods of Physics Credits: 3

Related Field Work

- CHEM 107 - General Chemistry I Credits: 3
- CHEM 108 - General Chemistry II Credits: 3
- CHEM 111 - General Chemistry I Lab Credits: 1
- CHEM 112 - General Chemistry II Lab Credits: 1
- CHEM 201 - Organic Chemistry I Credits: 3
(Chemical Engineers Only)
- CHEM 202 - Organic Chemistry II Credits: 3

(Chemical Engineers Only)

- CPSC 140 - Introduction to Programming Principles Credits: 3
- MATH 225 - Calculus I Credits: 4
- MATH 230 - Calculus II Credits: 4
- MATH 231 - Calculus III Credits: 4
- MATH 240 - Linear Algebra and Differential Equations Credits: 3
- MATH 301 - Differential Equations I Credits: 3

Engineering Electives

(3 credit hours absolute minimum. Two additional courses must be taken if PHYS 315 and PHYS 411 are not taken.)

- Language Courses 101 and/or 102 (Language courses are optional, but may be taken in lieu of other engineering elective courses)
- CPSC (additional upper-division course)
- Independent Study (Restricted to topics in physics and computer science)
- EGEO 101 - Physical Geology Credits: 3
(Recommended for civil, mining, or petroleum engineers.)
- EGEO 111 - Physical Geology Lab Credits: 1
(Recommended for civil, mining, or petroleum engineers.)
- EGEO 201 - Earth Materials and Processes Credits: 3
(Recommended for civil, mining, or petroleum engineers.)
- EGEO 202 - Earth History Credits: 3
(Recommended for civil, mining, or petroleum engineers.)
- EGEO 212 - Earth History Lab Credits: 1
(Recommended for civil, mining, or petroleum engineers.)
- EGEO 327 - Structural Geology Credits: 3
(Recommended for civil, mining, or petroleum engineers.)
- EGEO 360 - Introduction to Hydrology Credits: 3
(Recommended for civil, mining, or petroleum engineers.)
- ENGL 205 - Introduction to Professional Writing Credits: 3
(Prerequisite: English 103)
- MATH 315 - Numerical Mathematics Credits: 3
- MATH 352 - Mathematical Statistics I Credits: 3
(Required for mechanical engineers)
- PHYS 325 - Analog & Digital Electronics Credits: 3
- PHYS 371 - Physical Optics Credits: 3
- PHYS 381 - Advanced Physics Laboratory Credits: 2
- PHYS 382 - Optics Laboratory Credits: 2
- PHYS 410 - Electricity and Magnetism Credits: 3
- PHYS 480 - Quantum Credits: 3
- PHYS 301 - Physical Chemistry I Credits: 3

Liberal Studies Requirements - Credits: 38

- Basic Requirements
- The Arts
- Global Community (An economics course is required at PSU and may be taken at SRU.)

- Human Institutions and Interpersonal Relations
- Challenges of the Modern Age (the requirements in this block were waived by the University Curriculum Committee.)

Intensive Writing Courses

Intensive Writing Courses (Two intensive writing courses are required, but they may also count in the liberal studies blocks or major)

Degree Completion in Five Years Physics (BA)

(SRU Portion of 3 + 2 Program)

Freshman Year - Total Hours: 34

- Liberal Studies - Credits: 7
- CPSC 140 - Introduction to Programming Principles Credits: 3
- ENGL 101 - College Writing I Credits: 3
- ENGL 103 - College Writing II Credits: 3
- MATH 225 - Calculus I Credits: 4
- MATH 230 - Calculus II Credits: 4
- PHYS 140 - Engineering Graphics I Credits: 2
- PHYS 141 - Engineering Graphics II Credits: 1
- PHYS 211 - General Physics I/ Lab Credits: 4
- PHYS 213 - General Physics III/ Lab Credits: 3

Sophomore Year - Total Hours: 32

- Liberal Studies - Credits: 7
- CHEM 107 - General Chemistry I Credits: 3
- CHEM 108 - General Chemistry II Credits: 3
- CHEM 111 - General Chemistry I Lab Credits: 1
- CHEM 112 - General Chemistry II Lab Credits: 1
- COMM 200 - Public Speaking Credits: 3
- ENGL 210 - Interpreting Literature Credits: 3
- MATH 231 - Calculus III Credits: 4
- MATH 240 - Linear Algebra and Differential Equations Credits: 3
- PHYS 212 - General Physics II/ Lab Credits: 4

Junior Year - Total Hours: 30

- Liberal Studies - Credits: 12
- PHYS Elective - Credits: 9
- MATH 301 - Differential Equations I Credits: 3
- PHYS 314 - Engineering Mechanics I: Statics Credits: 3

- PHYS 331 - Mathematical Methods of Physics Credits: 3

Senior Year - Credits from Penn State or YSU

Senior Year Credits from Penn State or YSU

Pre-metrology

047 East Gym
724-738-2074

Metrology is the science of measurement. Metrologists develop and evaluate calibration systems that measure characteristics of physical objects, substances, or phenomena. Quantities measured include mass, length, time, temperature, electric current, luminous intensity, and other derived units of physical or chemical measure. Metrologists also develop calibration methods and techniques based on the techniques of measurement science, technical analysis of measurement problems, and accuracy and precision requirements. Metrologists are typically employed in research laboratories, government agencies, the military, and private industry.

Slippery Rock University and Butler County Community College offer a joint cooperative program in Metrology and Physics. This cooperative program has the following major objectives.

1. To provide cooperatively a general education in a liberal arts institution, as well as technical education in a specialized school for each student enrolled so that through four years of study, a student may complete what otherwise could require five or more years.
2. To allow those qualified students to receive both a liberal and technical education at relatively low costs and, in so doing, provide the Commonwealth and the Nation with more broadly educated scientists.

Students can choose from two programs offered. Butler County Community College students enrolled in the metrology program can complete their AAS. degree and then transfer to Slippery Rock University in order to complete a BS or BA degree in physics. For the typical student, this transfer will comprise a 2-2 program, with two years spent at Butler County Community College and two years at Slippery Rock University. Students successfully completing this program will be awarded two degrees. Slippery Rock University students enrolled in the BA degree physics program can complete their undergraduate studies in the metrology program at Butler County Community College. For a typical student, this transfer will comprise a 3-1 program, with three years spent at Slippery Rock University and one year at Butler County Community College. Students successfully completing this program will be awarded two degrees: a BA in physics from Slippery Rock University and an AAS in metrology from Butler County Community College.

Specific plans of study and other metrology program details can be obtained by contacting the chair of the physics department in room 327 Vincent Science Hall.

Teacher Certification in Physics

Requirements for the Certification

Teacher certification is earned through the master of education degree at Slippery Rock. Students seeking secondary school teaching certification in physics must earn a bachelor of arts or a bachelor of science degree in physics 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.

Psychology

337 Patterson Hall
724-738-2077

Psychology

Psychology is the study of human and animal behavior. Psychology has three faces: It is a discipline, a major subject of study in colleges and universities. It is a science, a method of conducting research and of understanding behavioral data. Psychology is also a profession, a calling that requires one to apply special knowledge, abilities, and skills in order to solve human problems. Thus, the department's mission is threefold. First, we strive to provide our students with discipline specific knowledge that is accurate and reflects current approaches in the field of psychology. Second, we instruct them in the scientific method of acquiring knowledge and enhance their research skills and sense of inquiry. Third, we prepare students to enter the profession in which they can apply the knowledge and abilities acquired to understand and suggest solutions for real-world problems. The cornerstone of our mission and our curriculum is a commitment to provide our students with a strong experimental foundation, or understanding that psychology is a science, and as such uses the scientific method to conduct research and to understand behavior. This experimental foundation is necessary so that students are prepared to do research, or if that is not in their plans, to be critical consumers of the research literature in whatever area of psychology they choose.

Chair

Richard Port

Secretary

Linda Newton

Faculty

Catherine Massey, Chris L. Niebauer, Richard Port, Ann Romanczyk, Jennifer Sanftner, Linda Veronie

Psychology is the science of behavior. The discipline is experiencing unprecedented growth and change. This is an important and exciting science, which attempts to understand human behavior.

The Department of Psychology is oriented toward meeting three broad educational needs: preparation of students for occupations related to the field, preparation of exceptional students for entry into graduate programs at universities, and preparation for other fields, such as medicine, law, social work, and others. The department has established experimental laboratories for studying animal and human learning, cognition, physiological processes, and clinical eating disorders. In addition, the department has developed working relationships with a number of private and community agencies to provide research and training experiences for students.

Opportunities for professional involvement include the Psychology Club, which invites speakers to campus and organizes field trips as well as opportunity to gain research experience via participation in departmental research activities. A significant number of majors have achieved co-authorship on research presentations at national meetings and on articles published in professional journals. Internship experiences generally reflect the career interests of the student. Recent sites include agencies offering services involving troubled youth, drug and alcohol rehabilitation, geriatric agencies, children and youth services, crime victim advocates, and general psychiatric facilities.

Alumni have successfully pursued graduate training in a wide spectrum of professional areas including clinical, counseling and social psychology, medicine and neuroscience. Many have chosen academic careers while others are involved in professional services.

Majors

- Psychology (BA)
- Psychology (BS)

Minors

- Minor in Psychology

Minor in Psychology

Psychology Department

Students are required to maintain a minimum *Psychology QPA* of 2.5 in order to retain a declared major or minor in Psychology. Students are also required to earn a grade of C or higher in Introduction to Psychology (PSYC 105) in order to take most other required Psychology courses and to graduate with a major or minor in Psychology.

Requirements for a Minor in Psychology - Credits: 18

Required course:

- PSYC 105 - Introduction to Psychology Credits: 3

Choose 15 credits from the following (at least 9 credits must be at the 300/400 level):

- PSYC 205 - Environmental Psychology Credits: 3
- PSYC 208 - Personality Credits: 3
- PSYC 221 - Introduction to Behavioral Statistics Credits: 3
- PSYC 233 - Sensation & Perception Credits: 3
- PSYC 240 - Human Sexual Behavior Credits: 3
- PSYC 276 - Introduction to Abnormal Psychology Credits: 3
- PSYC 300 - Psychology of Gender Credits: 3
- PSYC 302 - Psychology of Criminal Behavior Credits: 3
- PSYC 303 - Learning Credits: 3
- PSYC 304 - Theories of Counseling Credits: 3
- PSYC 306 - Introduction to Psychological Testing Credits: 3
- PSYC 310 - Introduction to Industrial-Organizational Psychology Credits: 3
- PSYC 311 - Introduction to Behavioral Neuroscience Credits: 3
- PSYC 315 - Psychology of Lesbian and Gay Identities Credits: 3
- PSYC 318 - Clinical Child Psychology Credits: 3
- PSYC 320 - Introduction to Clinical Psychology Credits: 3
- PSYC 321 - Drugs and Behavior Credits: 3
- PSYC 325 - Introduction to Experimental Psychology Credits: 3
- PSYC 326 - Experimental Psychology Laboratory Credits: 1
- PSYC 334 - Health Psychology Credits: 3
- PSYC 338 - Cognitive Psychology Credits: 3
- PSYC 344 - Developmental Psychology Credits: 3
- PSYC 360 - History of Psychology Credits: 3

- PSYC 364 - Child and Adolescent Development Credits: 3
- PSYC 365 - Psychology of Aging Credits: 3
- PSYC 377 - Social Psychology Credits: 3
- PSYC 392 - Cross Cultural Psychology Credits: 3
- PSYC 421 - Advanced Behavioral Statistics Credits: 3
- PSYC 449 - Seminar in Psychology Credits: 3
- PSYC 475 - Behavior Modification Credits: 3
- PSYC 480 - Behavior Management Credits: 3

Psychology (BA)

Psychology Department

Students are required to maintain a minimum *Psychology QPA* of 2.5 in order to retain a declared major or minor in Psychology. Students are also required to earn a grade of C or higher for the Required Core Courses, listed below, in order to take most other required Psychology courses and to graduate with a major or minor in Psychology.

Requirements for the Major - Credits: 36

Required Core Courses - Credits: 10

- PSYC 105 - Introduction to Psychology Credits: 3
- PSYC 221 - Introduction to Behavioral Statistics Credits: 3
- PSYC 325 - Introduction to Experimental Psychology Credits: 3
- PSYC 326 - Experimental Psychology Laboratory Credits: 1

Core Electives

Other courses are selected in consultation with the advisor from the Department of Psychology.

A minimum of 5 courses from the following:

- PSYC 276 - Introduction to Abnormal Psychology Credits: 3
- PSYC 303 - Learning Credits: 3
- PSYC 306 - Introduction to Psychological Testing Credits: 3
- PSYC 311 - Introduction to Behavioral Neuroscience Credits: 3
- PSYC 338 - Cognitive Psychology Credits: 3
- PSYC 344 - Developmental Psychology Credits: 3
- PSYC 360 - History of Psychology Credits: 3
- PSYC 377 - Social Psychology Credits: 3

Free Electives

An additional 12 PSYC credits are required for completion of major.

Psychology (BS)

Psychology Department

Students are required to maintain a minimum *Psychology QPA* of 2.5 in order to retain a declared major or minor in Psychology. Students are also required to earn a grade of C or higher for the Required Core Courses, listed below, in order to take most other required Psychology courses and to graduate with a major or minor in Psychology.

Requirements for the Major - Credits: 42

Required Core Courses - Credits: 10

- PSYC 105 - Introduction to Psychology Credits: 3
- PSYC 221 - Introduction to Behavioral Statistics Credits: 3
- PSYC 325 - Introduction to Experimental Psychology Credits: 3
- PSYC 326 - Experimental Psychology Laboratory Credits: 1

Core Electives

Other courses are selected in consultation with the advisor from the Department of Psychology.

A minimum of 5 courses from the following:

- PSYC 276 - Introduction to Abnormal Psychology Credits: 3
- PSYC 303 - Learning Credits: 3
- PSYC 306 - Introduction to Psychological Testing Credits: 3
- PSYC 311 - Introduction to Behavioral Neuroscience Credits: 3
- PSYC 338 - Cognitive Psychology Credits: 3
- PSYC 344 - Developmental Psychology Credits: 3
- PSYC 360 - History of Psychology Credits: 3
- PSYC 377 - Social Psychology Credits: 3

Required Professional Competency

Must complete one of the following:

- PSYC 420 - Community Service Practicum in Psychology Credits: 3
- PSYC 430 - Research Practicum in Psychology Credits: 3
- PSYC 450 - Psychology Internship Credits: Up to 12

Free Electives

An additional 12-15 PSYC credits are required for major completion.

Public Health and Social Work

202 Strain Behavioral Science Building
724-738-2267

Public Health and Social Work

Welcome to the Department of Public Health and Social Work.

Chair

Michael Cleary

Secretary

Faculty

Thomas Bechard, Azadeh Block, Larry Breitenstein, Michael Cleary, Kimberly Forrest, Donald Gibala, Herman Jones, Marcy Leeds, Wendy Stuhldreher, Karen Woodcock

Majors

- Public Health
- Social Work

Minor

- Public Health

Minor in Public Health

Public Health and Social Work Department

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 volunteers such as the American Cancer Society, American Heart Association, etc.

Required Courses - Credits: 6

- HLTH 103 - Health and Behavior Change Credits: 3
- HLTH 210 - Introduction to Public Health Credits: 3

Choose 4 courses from the following:

- HLTH 301 - Introduction to Health Education Credits: 3

- HLTH 309 - Introduction to the Study of Disease Credits: 3
- HLTH 310 - Environmental Health Credits: 3
- HLTH 311 - International Health Credits: 3
- HLTH 312 - Data Management for Health Science Credits: 3
- HLTH 313 - Biostatistics Credits: 3
- HLTH 314 - Nutrition and Health Credits: 3
- HLTH 406 - Program Planning and Evaluation Credits: 3
- HLTH 410 - Epidemiology Credits: 3
- HLTH 440 - Public Health Seminar Credits: 3
- HLTH 450 - Internship Credits: Up to 12

Internships in the student's major department may qualify for 3 hours of HLTH450 credit provided 25% of the Internship or 3 credit hours have a health-related focus.

Public Health (BS)

Public Health Program

“After my graduation from Slippery Rock University, I had no problem gaining employment. Other health professionals seemed to be very impressed with the educational background I received as a community health major. Because I am working as a health data analyst, I found my data management, biostatistics, and epidemiology courses to be most helpful. My employers were also impressed that, while at SRU, I participated in an undergraduate research project. This provided me with the opportunity to further explore and practice data analysis.”

Amy Zychowski '99

Public Health is a discipline in which professionals deliver health information and programs within the community setting. Graduates of this program have a broad based background in the field of health that prepares them for entry level positions in health education, health promotion, health data management or for further graduate study in a health-related field.

Upon completion of this program our students are eligible to sit for the Certified Health Education Specialist examination, which is a national credentialing examination for people who wish to practice health education in a community (non-public school) setting. Today, the Certified Health Education Specialist credential is often preferred or even required for many community health education positions. Graduates who complete our Public Health program successfully pass the Certified Health Education Specialist examination at a rate well above the national average. Recent graduates have entered positions in state and local health departments, community based wellness programs, voluntary health organizations such as the American Heart Association or American Cancer Society, and federal government health programs, and health insurance companies. Graduates also enter graduate programs in physical or occupational therapy, physicians assistant, nutrition, and public health.

Students are encouraged to take additional coursework or minors in complementary areas of study such as gerontology, Spanish, psychology or business. 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 used sites. It is through this internship experience that students actually identify 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 the sites as employees following their internships.

Public Health faculty members have on-going research projects in which advanced level students can become involved. Students help professors analyze data and prepare professional conference presentations, which the student

actually presents under the mentorship of the faculty member. Other student activities include the Pennsylvania Public Health Association Collegiate Chapter and the peer health education program run by the SRU student health service.

Admission Criteria

Declaration of the Public Health major does not guarantee admission into the Public Health program.

To be officially admitted into the Public Health program, a student must attain a minimum cumulative QPA of 2.500 and a minimum QPA of 2.500 in the program courses by the end of the second semester of the sophomore year.

College Wide Requirements for Public Health

- MATH 152 - Elementary Statistics I Credits: 3
- BIOL 216 - Anatomy and Physiology Credits: 3
- BIOL 217 - Anatomy and Physiology Credits: 3
- CHEM 104 - Introduction Chemistry I Credits: 3
or CHEM107, General Chemistry I

Requirements for the Major

Major Requirements

- BIOL 210 - Medical Microbiology Credits: 3
- HLTH 103 - Health and Behavior Change Credits: 3
- HLTH 210 - Introduction to Public Health Credits: 3
- HLTH 301 - Introduction to Health Education Credits: 3
- HLTH 309 - Introduction to the Study of Disease Credits: 3
- HLTH 310 - Environmental Health Credits: 3
- HLTH 311 - International Health Credits: 3
- HLTH 312 - Data Management for Health Science Credits: 3
- HLTH 313 - Biostatistics Credits: 3
- HLTH 314 - Nutrition and Health Credits: 3
- HLTH 406 - Program Planning and Evaluation Credits: 3
- HLTH 410 - Epidemiology Credits: 3
- HLTH 440 - Public Health Seminar Credits: 3
- HLTH 450 - Internship Credits: Up to 12

Internship Required:

Cumulative QPA of 2.500 and program QPA of 2.500 required for internship assignments, which are during the summer.

Internship requirements are available from the Department of Public Health and Social Work.

Choose 3 Courses from the following:

- HLTH 211 - Women's Health Issues Credits: 3
- HLTH 316 - Human Sexuality Credits: 3
- HLTH 414 - Death and Dying Credits: 3
- ERS 431 - Health and Fitness in the Older Adult Credits: 3
- HSA 231 - The US Healthcare System Credits: 3
- HSA 335 - Current Topics in Health Care Credits: 3
- PSYC 276 - Introduction to Abnormal Psychology Credits: 3
- PSYC 321 - Drugs and Behavior Credits: 3
- PSYC 334 - Health Psychology Credits: 3
- PSYC 475 - Behavior Modification Credits: 3

Retention Criteria

Students must maintain both a 2.500 cumulative and 2.500 program QPA to be retained in the program. Students failing to meet a QPA of 2.500 cumulative and a 2.500 in the program (major) will be given one semester to meet these requirements. Students can either retake courses or take additional courses to improve their QPA. If the student is not successful in meeting the QPA requirements, the student will be removed from the program. At that point the student must select another major.

Social Work (BS)

Social Work

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.

Requirements for the Major

Required Courses for Admission to Social Work Program- Credits: 9

- POLS 101 - American National Government Credits: 3
- PROF 201 - Principles of Sociology Credits: 3
- PSYC 105 - Introduction to Psychology Credits: 3

Core Courses - Credits: 12

- SOWK 107 - Cultural Competency and Human Services Credits: 3
- SOWK 251 - Introduction to Social Work Credits: 3
- SOWK 328 - Human Behavior and the Social Environment I Credits: 3
- SOWK 329 - Human Behavior and the Social Environment II Credits: 3

Courses below cannot be taken until you have been accepted into the Social Work Program

- SOWK 340 - Social Welfare Institutions Credits: 3
- SOWK 355 - Social Work Methods I Credits: 3
- SOWK 356 - Social Work Methods II Credits: 3
- SOWK 357 - Social Work Methods III Credits: 3
- SOWK 407 - Social Policy Issues Credits: 3
- SOWK 450 - SOWK Internship Credits: Up to 12
- SOWK 460 - Social Work Integrative Seminar Credits: 3

Research Methodology - Credits: 6

- SOWK 317 - Statistical Methods Credits: 3
- SOWK 318 - Research Methods Credits: 3

School of Physical Therapy

Physical Therapy Building
724-738-2080

School of Physical Therapy

The GSPT at SRU will prepare physical therapists who demonstrate competent, ethical, evidenced-based practice and professional behaviors in a dynamic health care environment. The graduates will be lifelong learners who serve the health care needs of consumers and a global society while contributing to the advancement of the profession.

Chair

Carol Martin-Elkins

Secretary

Diane Carion

Faculty

Barbara Billek-Sawhney, Mary Ann Holbein-Jenny, Christopher Hughes, Susan Kushner, Kelly M. Lindenberg, Carol Martin-Elkins, Meg Michaels, Nancy Shipe, Timothy Smith

Majors

- Physical Therapy 3 + 3 - Biology (BS)
- Physical Therapy 3 + 3 - Exercise Science (BS)

- Physical Therapy 3 + 3 - Health Science (Public Health) (BS)
- Physical Therapy 3 + 3 - Safety Management (BS)
- Physical Therapy 3 + 3 - Therapeutic Recreation (BS)

Physical Therapy 3 + 3 - Biology (BS)

Department of Biology

The Biology Department offers a 3+3 option for students interested in a career in physical therapy. Undergraduate students work with their academic advisor to complete the courses needed to fulfill the requirements for both an undergraduate degree and the entrance requirements for the Doctor of Physical Therapy program.

The first year of the Doctor of Physical Therapy (DPT) program meets the requirements for the fourth year of the undergraduate degree. Approved undergraduate majors in Biology, Health and Safety, Therapeutic Recreation, and Exercise Science are also available for the 3+3 option. Other majors can be used to pursue the DPT, but students cannot apply until after completing their undergraduate degree and they, too, must meet all DPT admission criteria.

Only Slippery Rock University students are eligible for this 3+3 option.

Highlights of the DPT Program at Slippery Rock University:

- Program is eight semesters in length, three academic years plus two summers.
- Strong foundation in basic sciences, including two semesters of cadaver anatomy, neuroscience, and pathophysiology.
- Three semesters of evidence-based practice coursework
- Two semesters of clinical internships each one semester in length.
- Two shorter clinical education experiences.
- Success on state board examination exceeds state and national average.
- Opportunities for graduate assistantships.
- Dedicated PT building 45,000 square feet
- Accredited by the Commission on Accreditation of Physical Therapy Education (CAPTE)

The curriculum requires each student to choose a facet of the profession to explore including one of the following areas service-learning, specialty care, administration, research or teaching.

Slippery Rock 3+3 Students Entering the Doctoral in Physical Therapy program

Should 3+3 Physical Therapy students be unsuccessful in completing the 1st year (either Fall and/or Spring Semester) 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.

Degree Completion in Six Years Biology (BS)

Freshman Year - Total Hours: 35

- Liberal Studies/Elective Credits: 10
- BIOL 104 - Principles of Biology Credits: 4
- BIOL 201 - General Botany Credits: 4
- CHEM 107 - General Chemistry I Credits: 3
- CHEM 108 - General Chemistry II Credits: 3

- CHEM 111 - General Chemistry I Lab Credits: 1
- CHEM 112 - General Chemistry II Lab Credits: 1
- ENGL 101 - College Writing I Credits: 3
- ENGL 103 - College Writing II Credits: 3
- ENGL 210 - Interpreting Literature Credits: 3

Sophomore Year - Total Hours: 29

- Liberal Studies/Elective Credits: 6
- BIOL 212 - General Zoology Credits: 4
- BIOL 250 - Genetics Credits: 4
- CHEM 201 - Organic Chemistry I Credits: 3
- CHEM 202 - Organic Chemistry II Credits: 3
- CHEM 211 - Organic Chemistry Laboratory I Credits: 1
- CHEM 212 - Organic Chemistry Laboratory II Credits: 1
- COMM 200 - Public Speaking Credits: 3
- MATH 225 - Calculus I Credits: 4

Junior Year - Total Hours: 34

- Liberal Studies/Elective Credits: 12
- BIOL 325 - Biometry Credits: 3
- BIOL 330 - Microbiology Credits: 3
- BIOL 340 - Vertebrate Anatomy Credits: 3
- BIOL 410 - Animal Physiology Credits: 3
- CHEM 335 - Biochemistry I Credits: 3
- PHYS 211 - General Physics I/ Lab Credits: 4
- PHYS 213 - General Physics III/ Lab Credits: 3

Senior Year

DEFINED BY THE DPT PROGRAM

Physical Therapy 3 + 3 - Exercise Science (BS)

Exercise and Rehabilitative Sciences

The Exercise Science Program offers a 3+3 option for students interested in a career in physical therapy. Undergraduate students work with their academic advisor to complete the courses needed to fulfill the requirements for both an undergraduate degree and the entrance requirements for the Doctor of Physical Therapy program.

The first year of the Doctor of Physical Therapy (DPT) program meets the requirements for the fourth year of the undergraduate degree. Approved undergraduate majors in Biology, Health and Safety, and Therapeutic Recreation are also available for the 3+3 option. Other majors can be used to pursue the DPT, but students cannot apply until after completing their undergraduate degree and they, too, must meet all DPT admission criteria.

Requirements for the Physical Therapy 3+3 - Exercise Science (BS):

- Student must maintain a 3.0 or higher overall QPA.
- Student may not have more than one "W" in a required course in the 3+3 block.
- Student can only be in the 3+3 program for a maximum of three (3) years full-time continuous enrollment.
- Only Slippery Rock University students are eligible for this 3+3 option.

If any of these requirements are not met, the 3+3 designation will be removed from the student's record by the faculty advisor.

Highlights of the DPT Program at Slippery Rock University:

- Program is eight semesters in length, three academic years plus two summers.
- Strong foundation in basic sciences, including two semesters of cadaver anatomy, neuroscience, and pathophysiology.
- Three semesters of evidence-based practice coursework.
- Two semesters of clinical internships each one semester in length.
- Two shorter clinical education experiences.
- Success on state board examination exceeds state and national average.
- Opportunities for graduate assistantships.
- Dedicated PT building 45,000 square feet
- Accredited by the Commission on Accreditation of Physical Therapy Education (CAPTE)

The curriculum requires each student to choose a facet of the profession to explore including one of the following areas service-learning, specialty care, administration, research or teaching.

Slippery Rock 3+3 Students Entering the Doctoral in Physical Therapy program

Should 3+3 Physical Therapy students be unsuccessful in completing the 1st year (either Fall and/or Spring Semester) 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.

Degree Completion in Six Years Exercise Science (BS)

Students may have to take one semester of 19 credits, which will result in a fee.

Freshman Year - Total Hours: 36

- Liberal Studies Credits: 12
- CHEM 107 - General Chemistry I Credits: 3
- CHEM 108 - General Chemistry II Credits: 3
- CHEM 111 - General Chemistry I Lab Credits: 1
- CHEM 112 - General Chemistry II Lab Credits: 1
- ENGL 101 - College Writing I Credits: 3
- ENGL 103 - College Writing II Credits: 3
- ERS 100 - Introduction to Exercise Science: Careers and Content Credits: 3
- ERS 101 - Applied Anatomy Credits: 3
- INDS 101 - FYRST Seminar Credits: 1
- PSYC 105 - Introduction to Psychology Credits: 3

Sophomore Year - Total Hours: 38

- Liberal Studies Credits: 3
- BIOL 216 - Anatomy and Physiology Credits: 3
- BIOL 217 - Anatomy and Physiology Credits: 3
- CDEV 248 - Human Development and Education Credits: 3
- COMM 200 - Public Speaking Credits: 3
- ERS 200 - Measurement and Statistical Application in Exercise Science Credits: 3
- ERS 201 - Exercise Physiology Credits: 3
- HLTH 314 - Nutrition and Health Credits: 3
- MATH 152 - Elementary Statistics I Credits: 3
- PHYS 201 - Elements of Physics I/ Lab Credits: 4
- PHYS 202 - Elements of Physics II/ Lab Credits: 4

Junior Year - Total Hours: 36

- Liberal Studies Credits: 6
- ERS 202 - Biomechanics Credits: 3
- ERS 301 - Exercise Leadership: Group Fitness Credits: 3
- ERS 302 - Exercise Leadership: Resistance Training Credits: 3
- ERS 400 - Wellness Promotion and Programming Credits: 3
- ERS 401 - Fitness Assessment Credits: 3
- ERS 410 - Clinical Exercise Physiology Credits: 3
- ERS 402 - Exercise Prescription Credits: 3
- ERS 411 - Exercise Science: Special Populations and Conditions Credits: 3
- ERS 412 - Exercise Science: Senior Synthesis Credits: 3
- HLTH 424 - Nutrition and Exercise Credits: 3

Senior Year

DEFINED BY THE DPT PROGRAM

Physical Therapy 3 + 3 - Health Science (Public Health) (BS)

Health and Safety Department

The Health and Safety Department offers a 3+3 option for students interested in a career in physical therapy. Undergraduate students work with their academic advisor to complete the courses needed to fulfill the requirements for both an undergraduate degree and the entrance requirements for the Doctor of Physical Therapy program.

The first year of the Doctor of Physical Therapy (DPT) program meets the requirements for the fourth year of the undergraduate degree. Approved undergraduate majors in Biology, Health and Safety, Therapeutic Recreation, and Exercise Science are also available for the 3+3 option. Other majors can be used to pursue the DPT, but students cannot apply until after completing their undergraduate degree and they, too, must meet all DPT admission criteria.

Requirements for the Physical Therapy 3+3 - Health Science (Public Health) (BS):

- Student must maintain a 3.0 or higher overall QPA.
- Student may not have more than one "W" in a required course in the 3+3 block.
- Student can only be in the 3+3 program for a maximum of three (3) years full-time continuous enrollment.

- Only Slippery Rock University student's are eligible for this 3+3 option.

If any of these requirements are not met, the 3+3 designation will be removed from the student's record by the faculty advisor.

Highlights of the DPT Program at Slippery Rock University:

- Program is eight semesters in length, three academic years plus two summers.
- Strong foundation in basic sciences, including two semesters of cadaver anatomy, neuroscience, and pathophysiology.
- Three semesters of evidence-based practice coursework.
- Two semesters of clinical internships each one semester in length
- Two shorter clinical education experiences.
- Success on state board examination exceeds state and national average.
- Opportunities for graduate assistantships.
- Dedicated PT building 45,000 square feet
- Accredited by the Commission on Accreditation of Physical Therapy Education (CAPTE)

The curriculum requires each student to choose a facet of the profession to explore including one of the following areas: service-learning, specialty care, administration, research or teaching.

Slippery Rock 3+3 Students Entering the Doctoral in Physical Therapy program

Should 3+3 Physical Therapy students be unsuccessful in completing the 1st year (either Fall and/or Spring Semester) 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.

Degree Completion in Six Years Health Science (Public Health) (BS)

Freshman Year - Total Hours: 31

- Liberal Studies Credits: 6
- BIOL 216 - Anatomy and Physiology Credits: 3
- BIOL 217 - Anatomy and Physiology Credits: 3
- ENGL 101 - College Writing I Credits: 3
- ENGL 103 - College Writing II Credits: 3
- HLTH 103 - Health and Behavior Change Credits: 3
- HLTH 210 - Introduction to Public Health Credits: 3
- MATH 152 - Elementary Statistics I Credits: 3
- PSYC 105 - Introduction to Psychology Credits: 3

Sophomore Year - Total Hours: 29

- Liberal Studies Credits: 6
- CHEM 107 - General Chemistry I Credits: 3
- CHEM 108 - General Chemistry II Credits: 3
- CHEM 111 - General Chemistry I Lab Credits: 1
- CHEM 112 - General Chemistry II Lab Credits: 1
- COMM 200 - Public Speaking Credits: 3
- ENGL 210 - Interpreting Literature Credits: 3

- HLTH 314 - Nutrition and Health Credits: 3
- PSYC 240 - Human Sexual Behavior Credits: 3
or
- PSYC 300 - Psychology of Gender Credits: 3
or
- PSYC 338 - Cognitive Psychology Credits: 3
or
- PSYC 344 - Developmental Psychology Credits: 3
or
- PSYC 377 - Social Psychology Credits: 3

Junior Year - Total Hours: 30

- Liberal Studies/Electives Credits: 7
- HLTH 301 - Introduction to Health Education Credits: 3
- HLTH 309 - Introduction to the Study of Disease Credits: 3
- HLTH 312 - Data Management for Health Science Credits: 3
- HLTH 313 - Biostatistics Credits: 3
- HLTH 410 - Epidemiology Credits: 3
- PHYS 201 - Elements of Physics I/ Lab Credits: 4
- PHYS 202 - Elements of Physics II/ Lab Credits: 4

Senior Year

DEFINED BY THE DPT PROGRAM

Physical Therapy 3 + 3 - Safety Management (BS)

Safety Management Department

The Safety Management Department offers a 3+3 option for students interested in a career in physical therapy. Undergraduate students work with their academic advisor to complete the courses needed to fulfill the requirements for both an undergraduate degree and the entrance requirements for the Doctor of Physical Therapy program.

The first year of the Doctor of Physical Therapy (DPT) program meets the requirements for the fourth year of the undergraduate degree. Approved undergraduate majors in Biology, Safety Management, Therapeutic Recreation, and Exercise Science are also available for the 3+3 option. Other majors can be used to pursue the DPT, but students cannot apply until after completing their undergraduate degree and they, too, must meet all DPT admission criteria.

Requirements for the Physical Therapy 3+3 - Safety Management (BS):

- Student must maintain a 3.0 or higher overall QPA.
- Student may not have more than one "W" in a required course in the 3+3 block.
- Student can only be in the 3+3 program for a maximum of three (3) years full-time continuous enrollment.
- Only Slippery Rock University student's are eligible for this 3+3 option.

If any of these requirements are not met, the 3+3 designation will be removed from the student's record by the faculty advisor.

Only Slippery Rock University students are eligible for this 3+3 option.

Highlights of the DPT Program at Slippery Rock University:

- Program is eight semesters in length, three academic years plus two summers.
- Strong foundation in basic sciences, including two semesters of cadaver anatomy, neuroscience, and pathophysiology.
- Three semesters of evidence-based practice coursework.
- Two semesters of clinical internships each one semester in length.
- Two shorter clinical education experiences.
- Success on state board examination exceeds state and national average.
- Opportunities for graduate assistantships.
- Dedicated PT building 45,000 square feet
- Accredited by the Commission on Accreditation of Physical Therapy Education (CAPTE)

The curriculum requires each student to choose a facet of the profession to explore including one of the following areas: service-learning, specialty care, administration, research or teaching.

Slippery Rock 3+3 Students Entering the Doctoral in Physical Therapy program

Should 3+3 Physical Therapy students be unsuccessful in completing the 1st year (either Fall and/or Spring Semester) 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.

Contact the Department of Safety Management for the most current requirements.

Degree Completion in Six Years Safety Management (BS)

Freshman Year - Total Hours: 30

- Liberal Studies/Electives Credits: 9
- BIOL 216 - Anatomy and Physiology Credits: 3
- BIOL 217 - Anatomy and Physiology Credits: 3
- ENGL 101 - College Writing I Credits: 3
- ENGL 103 - College Writing II Credits: 3
- MATH 152 - Elementary Statistics I Credits: 3
- PSYC 105 - Introduction to Psychology Credits: 3
- SAFE 118 - Introduction to Safety Credits: 3

Sophomore Year - Total Hours: 29

- Liberal Studies Credits: 6
- CHEM 107 - General Chemistry I Credits: 3
- CHEM 108 - General Chemistry II Credits: 3
- CHEM 111 - General Chemistry I Lab Credits: 1
- CHEM 112 - General Chemistry II Lab Credits: 1
- COMM 200 - Public Speaking Credits: 3
- ENGL 210 - Interpreting Literature Credits: 3
- SAFE 218 - Hazard Analysis and Legislative Compliance Credits: 3
- SAFE 338 - Ergonomics and Human Factors Credits: 3

One of the Following Courses

- PSYC 240 - Human Sexual Behavior Credits: 3
- PSYC 300 - Psychology of Gender Credits: 3
- PSYC 338 - Cognitive Psychology Credits: 3
- PSYC 344 - Developmental Psychology Credits: 3
- PSYC 377 - Social Psychology Credits: 3

Junior Year - Total Hours: 31

- Liberal Studies/Electives Credits: 7
- MATH 125 - Precalculus Credits: 4
- PHYS 201 - Elements of Physics I/ Lab Credits: 4
- PHYS 202 - Elements of Physics II/ Lab Credits: 4
- SAFE 318 - Principles of Industrial Hygiene Credits: 3
- SAFE 328 - Comprehensive Emergency Management and Fire Services Credits: 3
- SAFE 368 - Injury and Damage Incidents Evaluation Credits: 3
- SAFE 448 - Management and Integration of Safety Credits: 3

Senior Year

DEFINED BY THE DPT PROGRAM

Physical Therapy 3 + 3 - Therapeutic Recreation (BS)

Parks & Recreation Environmental Education

The Therapeutic Recreation Program offers a 3+3 option for students interested in a career in physical therapy. Undergraduate students work with their academic advisor to complete the courses needed to fulfill the requirements for both an undergraduate degree and the entrance requirements for the Doctor of Physical Therapy program.

The first year of the Doctor of Physical Therapy (DPT) program meets the requirements for the fourth year of the undergraduate degree. Approved undergraduate majors in Biology, Health and Safety, Therapeutic Recreation, and Exercise Science are also available for the 3+3 option. Other majors can be used to pursue the DPT, but students cannot apply until after completing their undergraduate degree and they, too, must meet all DPT admission criteria.

Slippery Rock 3+3 Students Entering the Doctoral in Physical Therapy program

Should 3+3 Physical Therapy students be unsuccessful in completing the 1st year (either Fall and/or Spring Semester) 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.

The Therapeutic Recreation Program offers a 3+3 option for students interested in a career in physical therapy. Undergraduate students work with their academic advisor to complete the courses needed to fulfill the requirements for both an undergraduate degree and the entrance requirements for the Doctor of Physical Therapy program.

The first year of the Doctor of Physical Therapy (DPT) program meets the requirements for the fourth year of the undergraduate degree. Approved undergraduate majors in Biology, Health and Safety, Therapeutic Recreation, and

Exercise Science are also available for the 3+3 option. Other majors can be used to pursue the DPT, but students cannot apply until after completing their undergraduate degree and they, too, must meet all DPT admission criteria.

Requirements for the Physical Therapy 3+3 - Therapeutic Recreation(BS):

- Student must maintain a 3.0 or higher overall QPA.
- Student may not have more than one "W" in a required course in the 3+3 block.
- Student can only be in the 3+3 program for a maximum of three (3) years full-time continuous enrollment.
- Only Slippery Rock University students are eligible for this 3+3 option.

If any of these requirements are not met, the 3+3 designation will be removed from the student's record by your faculty advisor.

Highlights of the DPT Program at Slippery Rock University:

- Program is eight semesters in length, three academic years plus two summers.
- Strong foundation in basic sciences, including two semesters of cadaver anatomy, neuroscience, and pathophysiology.
- Three semesters of evidence-based practice coursework.
- Two semesters of clinical internships each one semester in length.
- Two shorter clinical education experiences.
- Success on state board examination exceeds state and national average.
- Opportunities for graduate assistantships.
- Dedicated PT building 45,000 square feet
- Accredited by the Commission on Accreditation of Physical Therapy Education (CAPTE)

The curriculum requires each student to choose a facet of the profession to explore including one of the following areas service-learning, specialty care, administration, research or teaching.

Core Courses

- PREE 110 - Foundations of Parks and Recreation Credits: 3
- PREE 120 - Inclusive Leisure Services Credits: 3
- PREE 318 - Park and Recreation Administration Credits: 3
- PREE 415 - Issues in Parks and Recreation Credits: 3
- PREE 450 - Internship Credits: 12

Required Therapeutic Recreation

- PREE 220 - Therapeutic Recreation Services Credits: 3
- PREE 232 - Therapeutic Recreation for People with Physical Disabilities Credits: 3
- PREE 233 - Therapeutic Recreation for People with Mental Health and Psychosocial Disorders Credits: 3
- PREE 314 - Clinical Aspects of Therapeutic Recreation Credits: 3
- PREE 319 - Client Assessment in Therapeutic Recreation Credits: 3
- PREE 320 - Therapeutic Recreation Program Design Credits: 3
- PREE 420 - Recreation and the Aging Process Credits: 3
- PREE 423 - Therapeutic Recreation Interventions Credits: 3

Other PT Required Courses

- CHEM 111 - General Chemistry I Lab Credits: 1
- CHEM 112 - General Chemistry II Lab Credits: 1

Professional Electives - Credits: 13

Substitute PT requirements BIOL 217, CHEM 108, and PHYS 202

- BIOL 217 - Anatomy and Physiology Credits: 3
- CHEM 108 - General Chemistry II Credits: 3
- PHYS 202 - Elements of Physics II/ Lab Credits: 4
- PSYC 276 - Introduction to Abnormal Psychology Credits: 3

Certification Requirements - Credits: 15

These courses must be completed by the student to be eligible to take NCTRC certification exam. ERS 264 and ERS 375 will be replaced by PT 630 and PT 548 during DPT Semester I.

- CDEV 248 - Human Development and Education Credits: 3
or PSYC 344 - Developmental Psychology
- ERS 101 - Applied Anatomy Credits: 3
- ERS 201 - Exercise Physiology Credits: 3
- PSYC 105 - Introduction to Psychology Credits: 3
- PSYC 276 - Introduction to Abnormal Psychology Credits: 3

Degree Completion in Four Years - 3+3 PT Therapeutic Recreation

Freshman Year - Total Hours: 32

- Liberal Studies - Credits: 6
- CDEV 248 - Human Development and Education Credits: 3
- CHEM 107 - General Chemistry I Credits: 3
- CHEM 108 - General Chemistry II Credits: 3
- CHEM 111 - General Chemistry I Lab Credits: 1
- CHEM 112 - General Chemistry II Lab Credits: 1
- ENGL 101 - College Writing I Credits: 3
- ENGL 103 - College Writing II Credits: 3
- PREE 110 - Foundations of Parks and Recreation Credits: 3
- PREE 120 - Inclusive Leisure Services Credits: 3
- PSYC 105 - Introduction to Psychology Credits: 3

Sophomore Year - Total Hours: 35

- Liberal Studies - Credits: 6
- COMM 200 - Public Speaking Credits: 3
- ENGL 210 - Interpreting Literature Credits: 3

- PHYS 201 - Elements of Physics I/ Lab Credits: 4
- PHYS 202 - Elements of Physics II/ Lab Credits: 4
- PREE 220 - Therapeutic Recreation Services Credits: 3
- PREE 232 - Therapeutic Recreation for People with Physical Disabilities Credits: 3
- PREE 233 - Therapeutic Recreation for People with Mental Health and Psychosocial Disorders Credits: 3
- PREE 314 - Clinical Aspects of Therapeutic Recreation Credits: 3
- PSYC 276 - Introduction to Abnormal Psychology Credits: 3

Junior Year - Total Hours: 33

- Liberal Studies - Credits: 3
- BIOL 216 - Anatomy and Physiology Credits: 3
- BIOL 217 - Anatomy and Physiology Credits: 3
- MATH 152 - Elementary Statistics I Credits: 3
- PHIL 325 - Medical/Health Care Ethics Credits: 3
- PREE 318 - Park and Recreation Administration Credits: 3
- PREE 319 - Client Assessment in Therapeutic Recreation Credits: 3
- PREE 320 - Therapeutic Recreation Program Design Credits: 3
- PREE 415 - Issues in Parks and Recreation Credits: 3
- PREE 420 - Recreation and the Aging Process Credits: 3
- PREE 423 - Therapeutic Recreation Interventions Credits: 3

Senior Year

Defined by Doctor of Physical Therapy Program

College of Humanities, Fine and Performing Arts

104 Strain Behavioral Science Building
724-738-4863

Dean

Eva Tsuquiashi-Daddesio

Assistant to the Dean

Jennifer Keller

Administrative Assistant

Karen Hogg

Secretary

Amy McCamey

Departments

Art
Dance
English
History
Modern Languages and Cultures
Music
Philosophy
Political Science
Theatre

Programs

Asian Studies
Honors
Women's Studies

Gallery

The Martha Gault Art Gallery is named in honor of the long time chairperson of the Slippery Rock University Art Department who oversaw the initial development of the department. The gallery features a series of exhibitions during the academic year and summer exhibition. The program includes all media and artists, ranging from those of special local interest to those of regional and national reputation, and a student show in April.

Programs and courses in the College of Humanities, Fine and Performing Arts acquaint students with those broad and representative fields of knowledge and intellectual skills vital for the function of a free society. All students complete liberal studies courses within the College. These courses provide the foundation for a rewarding private life and intelligent participation in society, while providing the framework for a variety of careers in an ever-changing economy.

The College of Humanities, Fine and Performing Arts offers formal programs of study leading to baccalaureate degrees. The College's degree programs give students the opportunity to encounter a broad range of questions and ideas focusing on human responses to moral, historical, aesthetic, creative and philosophical problems. Dedicated to learning in the liberal arts tradition, the humanities and fine arts provide an excellent basis for rewarding and productive careers. Disciplines include art, Asian studies, dance, English, history, modern languages and cultures, music, philosophy, theatre, and women's studies.

Honors

158 North Hall Welcome Center
724-738-4003

Director

April Longwell

Secretary

Laurel Patterson

Slippery Rock University's Honors Program is designed to enrich the university experience by fostering a student-centered learning environment and helping each student develop her or his individual potential as a life-long learner. Designed to encourage critical thinking and communication skills, honors courses emphasize reading, writing and research and encourage students to assume responsibility for their learning experiences, both on and off campus,

through discussion-based classes and by participating in service-learning opportunities. Students in the program are fine scholars, but they are also committed to taking full advantage of their years spent at Slippery Rock University by participating in the extra-curricular and travel opportunities which the program offers.

All honors courses fulfill liberal studies requirements, which means that participation in the program will not extend a student's stay at Slippery Rock University. To graduate with an honors designation, students must complete a minimum of seven honors courses (21 credits) while maintaining an overall QPA of 3.25 or higher or 3.4 or higher if the student has an Honors scholarship. Students may select from a variety of specially-designed courses in the following departments: communication, english, political science, history, mathematics, music, philosophy, biology, chemistry, geography, geology, environmental science, and professional studies.

Students also have the opportunity to take Great Books courses, which are geared toward extensive reading in a specialized area. Content in these seminars varies from semester to semester and have included, War and Peace (Russia), The Holocaust (Germany), Latin American History (Panama), Galileo (Florence), and Irish Playwrites (Ireland). Because a research is a component of this course, the Great Books course is especially valuable for students contemplating graduate education.

Honors students enjoy a number of benefits, both in and out of the classroom, including seminar-style classrooms where enrollment is typically capped at 20 or 25 students per class; early registration privileges, and learning experiences through national and international travel opportunities. Students present at regional and national honors conferences in Denver, San Antonio, Chicago, Los Angeles, Brooklyn and at regional conferences in Boston, Gettysburg, and the Adirondacks. In addition, courses are offered every spring and summer, which include opportunities for travel abroad. In the past, students have traveled to London, Germany, Turkey, South Africa, and Ecuador.

The program is open to all qualified students, regardless of their major field of interest. Interested students must enroll formally by completing an application and submitting a two-page, typed essay in which they discuss what they hope to gain from their university experience. If you are interested in participating, please call 724-738-4003, e-mail honorsprogram@sru.edu, or visit the Honors Program Web Site

Art

Art Building I
724-738-2020

Art

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.

Chair

Thomas Como

Secretary

Christine Byrd

Faculty

Thomas Como, June Edwards, Heather Hertel, Sean Macmillan, Katherine Mickle, Kurt Pitluga, Jon Shumway, Barbara Westman, Richard Wukich

“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.”

John Greco
BA '76
Professor of Art
Santa Monica College

“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 an overnight trip to visit galleries and museums in Boston, Philadelphia, Toronto, New York, Washington 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 Club organizes 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.

Certification Programs

- Art (BFA) - Teacher Certification in Conjunction with Carlow University Majors

- Art (BA)
- Art (BFA)

Minor for Non-Majors

- Minor in Art - Graphic Design Track for Communication Majors

Minors

- Minor in Art
- Minor in Art for Elementary Education Majors
- Minor in Art History

Art (BA)

Art Department

Requirements for the Major - Credits: 39

Required: 9 credits of a modern language or competency at the 103 level

Required Courses

Required Art History - Credits: 3

- ART 225 - Overview of Western Art Credits: 3

Art History Elective - 3 credits

Pre-requisite: ART 225

- ART 325 - North American Art History Credits: 3-6
- ART 335 - The Renaissance Tradition Credits: 3-6
- ART 345 - Foundations of Modern Art Credits: 3-6
- ART 355 - Early Modern Art Credits: 3-6
- ART 365 - Art Since 1945 Credits: 3-6

Studio Courses - Credits: 33

Required Course - 3 credits

- ART 105 - Basic Studio Drawing Credits: 3

3 Credits From:

- ART 100 - 2-D Design Credits: 3
- ART 101 - 3-D Design Credits: 3

3 Credits From:

- ART 106 - Basic Studio Painting Credits: 3
- ART 107 - Basic Studio Photography Credits: 3
- ART 108 - Basic Studio Printmaking Credits: 3
- ART 109 - Basic Studio Metalsmithing Credits: 3
- ART 110 - Basic Studio Sculpture Credits: 3
- ART 111 - Basic Studio Fibers Credits: 3
- ART 112 - Basic Studio Ceramics Credits: 3
- ART 114 - Basic Studio Digital Media Credits: 3

2D Elective - 3 credits

Pre-requisite: 3 credits from any 100 level studio course; can repeat any course twice

- ART 205 - Art Synthesis Drawing Credits: 3
- ART 206 - Art Synthesis Painting Credits: 3
- ART 207 - Art Synthesis Photography Credits: 3
- ART 208 - Art Synthesis Printmaking Credits: 3
- ART 213 - Art Synthesis Design Credits: 3
- ART 214 - Art Synthesis Digital Media Credits: 3

3D Elective - 3 credits

Pre-requisite: 3 credits from any 100 level studio; can repeat any course twice

- ART 209 - Art Synthesis Metalsmithing Credits: 3
- ART 210 - Art Synthesis Sculpture Credits: 3
- ART 211 - Art Synthesis Fibers Credits: 3
- ART 212 - Art Synthesis Ceramics Credits: 3

9 Credits Selected From:

Pre-requisite: 6 credits from any 200 level studio; can repeat any class twice.

- ART 305 - Advanced Studio Drawing Credits: 3
- ART 306 - Advanced Studio Painting Credits: 3
- ART 307 - Advanced Studio Photography Credits: 3
- ART 308 - Advanced Studio Printmaking Credits: 3
- ART 309 - Advanced Studio Metalsmithing Credits: 3

- ART 310 - Advanced Studio Sculpture Credits: 3
- ART 311 - Advanced Studio Fibers Credits: 3
- ART 312 - Advanced Studio Ceramics Credits: 3
- ART 313 - Advanced Studio Design Credits: 3
- ART 314 - Advanced Studio Digital Media Credits: 3

9 Credits Selected From:

Pre-requisite: 6 credits from any 300 level studio; can repeat any class twice

- ART 405 - Senior Studio Drawing Credits: 3
- ART 406 - Senior Studio Painting Credits: 3
- ART 407 - Senior Studio Photography Credits: 3
- ART 408 - Senior Studio Printmaking Credits: 3
- ART 409 - Senior Studio Metalsmithing Credits: 3
- ART 410 - Senior Studio Sculpture Credits: 3
- ART 411 - Senior Studio Fibers Credits: 3
- ART 412 - Senior Studio Ceramics Credits: 3
- ART 413 - Senior Studio Design Credits: 3
- ART 414 - Senior Studio Digital Media Credits: 3

Art (BFA)

Art Department

Requirements for the Major - Credits: 78

Required Art Courses - 18 credits

- ART 100 - 2-D Design Credits: 3
- ART 101 - 3-D Design Credits: 3
- ART 105 - Basic Studio Drawing Credits: 3
- ART 225 - Overview of Western Art Credits: 3
- ART 226 - Overview of World Art Credits: 3
- ART 300 - Art Seminar Credits: 3

Electives - 6 credits:

Choose two of the following:

- ART 325 - North American Art History Credits: 3-6
- ART 335 - The Renaissance Tradition Credits: 3-6
- ART 345 - Foundations of Modern Art Credits: 3-6
- ART 355 - Early Modern Art Credits: 3-6
- ART 365 - Art Since 1945 Credits: 3-6
- ART 420 - Art History Seminar Credits: 3-6

Electives - Credits: 9

Choose three from the following. No class may be repeated.

- ART 106 - Basic Studio Painting Credits: 3
- ART 107 - Basic Studio Photography Credits: 3
- ART 108 - Basic Studio Printmaking Credits: 3
- ART 109 - Basic Studio Metalsmithing Credits: 3
- ART 110 - Basic Studio Sculpture Credits: 3
- ART 111 - Basic Studio Fibers Credits: 3
- ART 112 - Basic Studio Ceramics Credits: 3
- ART 114 - Basic Studio Digital Media Credits: 3

Electives - Credits: 12

Choose twelve credits from the following. Pre-requisite is any 100 level studio. Can repeat any class twice.

- ART 205 - Art Synthesis Drawing Credits: 3
- ART 206 - Art Synthesis Painting Credits: 3
- ART 207 - Art Synthesis Photography Credits: 3
- ART 208 - Art Synthesis Printmaking Credits: 3
- ART 209 - Art Synthesis Metalsmithing Credits: 3
- ART 210 - Art Synthesis Sculpture Credits: 3
- ART 211 - Art Synthesis Fibers Credits: 3
- ART 212 - Art Synthesis Ceramics Credits: 3
- ART 213 - Art Synthesis Design Credits: 3
- ART 214 - Art Synthesis Digital Media Credits: 3

Electives - Credits: 12

Choose 12 credits from the following. Pre-requisite is from any 200 level studio. Can repeat any class three times.

- ART 305 - Advanced Studio Drawing Credits: 3
- ART 306 - Advanced Studio Painting Credits: 3
- ART 307 - Advanced Studio Photography Credits: 3
- ART 308 - Advanced Studio Printmaking Credits: 3
- ART 309 - Advanced Studio Metalsmithing Credits: 3
- ART 310 - Advanced Studio Sculpture Credits: 3
- ART 311 - Advanced Studio Fibers Credits: 3
- ART 312 - Advanced Studio Ceramics Credits: 3
- ART 313 - Advanced Studio Design Credits: 3
- ART 314 - Advanced Studio Digital Media Credits: 3

Electives - Credits: 9

Choose 9 credits from the following. Pre-requisite is 6 credits from any 300 level studio; can repeat any class twice.

- ART 405 - Senior Studio Drawing Credits: 3

- ART 406 - Senior Studio Painting Credits: 3
- ART 407 - Senior Studio Photography Credits: 3
- ART 408 - Senior Studio Printmaking Credits: 3
- ART 409 - Senior Studio Metalsmithing Credits: 3
- ART 410 - Senior Studio Sculpture Credits: 3
- ART 411 - Senior Studio Fibers Credits: 3
- ART 412 - Senior Studio Ceramics Credits: 3
- ART 413 - Senior Studio Design Credits: 3
- ART 414 - Senior Studio Digital Media Credits: 3

Senior Project - Credits: 3

Senior Project pre-requisite: any 400 level studio.; by permission of instructor.

Choose one of the following:

- ART 425 - Senior Project Drawing Credits: 3
- ART 426 - Senior Project Painting Credits: 3
- ART 427 - Senior Project Photography Credits: 3
- ART 428 - Senior Project Printmaking Credits: 3
- ART 429 - Senior Project Metalsmithing Credits: 3
- ART 430 - Senior Project Sculpture Credits: 3
- ART 431 - Senior Project Fibers Credits: 3
- ART 432 - Senior Project Ceramics Credits: 3
- ART 433 - Senior Project Design Credits: 3
- ART 434 - Senior Project Digital Media Credits: 3

Electives - Credits: 9

Choose 9 credits from any Art course selections at the 300/400 level

Art (BFA) - Teacher Certification in Conjunction with Carlow University

Art Department

Requirements for the Major - Credits: 78

Required Art Courses - 18 credits

- ART 100 - 2-D Design Credits: 3
- ART 101 - 3-D Design Credits: 3
- ART 105 - Basic Studio Drawing Credits: 3
- ART 225 - Overview of Western Art Credits: 3
- ART 226 - Overview of World Art Credits: 3
- ART 300 - Art Seminar Credits: 3

Elective - Credits: 6

Choose two of the following:

- ART 325 - North American Art History Credits: 3-6
- ART 335 - The Renaissance Tradition Credits: 3-6
- ART 345 - Foundations of Modern Art Credits: 3-6
- ART 355 - Early Modern Art Credits: 3-6
- ART 365 - Art Since 1945 Credits: 3-6
- ART 420 - Art History Seminar Credits: 3-6

Elective - Credits: 9

Choose three from the following. No class may be repeated.

- ART 106 - Basic Studio Painting Credits: 3
- ART 107 - Basic Studio Photography Credits: 3
- ART 108 - Basic Studio Printmaking Credits: 3
- ART 109 - Basic Studio Metalsmithing Credits: 3
- ART 110 - Basic Studio Sculpture Credits: 3
- ART 111 - Basic Studio Fibers Credits: 3
- ART 112 - Basic Studio Ceramics Credits: 3
- ART 114 - Basic Studio Digital Media Credits: 3

Elective - Credits: 12

Choose twelve credits from the following. Pre-requisite is any 100-level studio. Can repeat any class twice.

- ART 205 - Art Synthesis Drawing Credits: 3
- ART 206 - Art Synthesis Painting Credits: 3
- ART 207 - Art Synthesis Photography Credits: 3
- ART 208 - Art Synthesis Printmaking Credits: 3
- ART 209 - Art Synthesis Metalsmithing Credits: 3
- ART 210 - Art Synthesis Sculpture Credits: 3
- ART 211 - Art Synthesis Fibers Credits: 3
- ART 212 - Art Synthesis Ceramics Credits: 3
- ART 213 - Art Synthesis Design Credits: 3
- ART 214 - Art Synthesis Digital Media Credits: 3

Elective - Credits: 12

Choose 12 credits from the following. Pre-requisite (6 credits) from any 200 level studio. Can repeat any class three times.

- ART 305 - Advanced Studio Drawing Credits: 3
- ART 306 - Advanced Studio Painting Credits: 3
- ART 307 - Advanced Studio Photography Credits: 3
- ART 308 - Advanced Studio Printmaking Credits: 3
- ART 309 - Advanced Studio Metalsmithing Credits: 3

- ART 310 - Advanced Studio Sculpture Credits: 3
- ART 311 - Advanced Studio Fibers Credits: 3
- ART 312 - Advanced Studio Ceramics Credits: 3
- ART 313 - Advanced Studio Design Credits: 3
- ART 314 - Advanced Studio Digital Media Credits: 3

Elective - Credits: 9

Choose 9 credits from the following. Pre-requisite (6 credits) from any 300 level studio; can repeat any class twice.

- ART 405 - Senior Studio Drawing Credits: 3
- ART 406 - Senior Studio Painting Credits: 3
- ART 407 - Senior Studio Photography Credits: 3
- ART 408 - Senior Studio Printmaking Credits: 3
- ART 409 - Senior Studio Metalsmithing Credits: 3
- ART 410 - Senior Studio Sculpture Credits: 3
- ART 411 - Senior Studio Fibers Credits: 3
- ART 412 - Senior Studio Ceramics Credits: 3
- ART 413 - Senior Studio Design Credits: 3
- ART 414 - Senior Studio Digital Media Credits: 3

Senior Project - Credits: 3

Senior Project prerequisite: any 400 level studio; by permission of instructor.

Choose one of the following:

- ART 425 - Senior Project Drawing Credits: 3
- ART 426 - Senior Project Painting Credits: 3
- ART 427 - Senior Project Photography Credits: 3
- ART 428 - Senior Project Printmaking Credits: 3
- ART 429 - Senior Project Metalsmithing Credits: 3
- ART 430 - Senior Project Sculpture Credits: 3
- ART 431 - Senior Project Fibers Credits: 3
- ART 432 - Senior Project Ceramics Credits: 3
- ART 433 - Senior Project Design Credits: 3
- ART 434 - Senior Project Digital Media Credits: 3

Electives - Credits: 9

- Art Elective - Credits: 3 Choose from any 300/400 level art class
- AE 327 - Methods & Materials for Secondary Art - Credits: 4 (only offered at Carlow University in the spring or summer semesters)
- ART 317 - Advanced Topics in Elementary Art Credits: 3
Only offered in the fall semester

Education Courses - Credits: 9

Three additional courses are required before graduation

- CDEV 248 - Human Development and Education Credits: 3
- SEFE 200 - Introduction to Education Credits: 3
- SEFE 342 - Educational Psychology Credits: 3

Certification Through Carlow University

Total of one semester, 12 credits: tuition is at Carlow University prices.

- AE 409 - Elementary Art Student Teaching - Credits: 6
- AE 410 - Secondary Art Student Teaching - Credits: 6

Minor in Art

Art Department

General Art Track - 21 Credits

12 Credits are at the 300+ level (200 level courses with prerequisites qualify as upper level)

Choose One Basic Studio 2-D Emphasis

- ART 105 - Basic Studio Drawing Credits: 3
- ART 106 - Basic Studio Painting Credits: 3
- ART 107 - Basic Studio Photography Credits: 3
- ART 108 - Basic Studio Printmaking Credits: 3
- ART 114 - Basic Studio Digital Media Credits: 3

Choose One Basic Studio 3-D Emphasis

- ART 109 - Basic Studio Metalsmithing Credits: 3
- ART 110 - Basic Studio Sculpture Credits: 3
- ART 111 - Basic Studio Fibers Credits: 3
- ART 112 - Basic Studio Ceramics Credits: 3

Choose One Art History Course:

- ART 225 - Overview of Western Art Credits: 3
- ART 226 - Overview of World Art Credits: 3
- ART 325 - North American Art History Credits: 3-6
- ART 335 - The Renaissance Tradition Credits: 3-6
- ART 345 - Foundations of Modern Art Credits: 3-6
- ART 355 - Early Modern Art Credits: 3-6

- ART 365 - Art Since 1945 Credits: 3-6
- ART 420 - Art History Seminar Credits: 3-6

Two Semesters of Art Synthesis Courses - 6 credits

Prerequisite: 3 credits from any 100 level studio

- ART 205 - Art Synthesis Drawing Credits: 3
- ART 206 - Art Synthesis Painting Credits: 3
- ART 207 - Art Synthesis Photography Credits: 3
- ART 208 - Art Synthesis Printmaking Credits: 3
- ART 209 - Art Synthesis Metalsmithing Credits: 3
- ART 210 - Art Synthesis Sculpture Credits: 3
- ART 211 - Art Synthesis Fibers Credits: 3
- ART 212 - Art Synthesis Ceramics Credits: 3
- ART 213 - Art Synthesis Design Credits: 3
- ART 214 - Art Synthesis Digital Media Credits: 3

Two Semesters of Advanced Studio Courses - 6 credits

Prerequisite: 3 credits from any 200 level studio

- ART 305 - Advanced Studio Drawing Credits: 3
- ART 306 - Advanced Studio Painting Credits: 3
- ART 307 - Advanced Studio Photography Credits: 3
- ART 308 - Advanced Studio Printmaking Credits: 3
- ART 309 - Advanced Studio Metalsmithing Credits: 3
- ART 310 - Advanced Studio Sculpture Credits: 3
- ART 311 - Advanced Studio Fibers Credits: 3
- ART 312 - Advanced Studio Ceramics Credits: 3
- ART 313 - Advanced Studio Design Credits: 3
- ART 314 - Advanced Studio Digital Media Credits: 3

Graphic Design Track - 21 Credits

12 credits are at the 300+ level (200 level courses with prerequisites qualify as upper level)

Basic Studio Level Courses:

- ART 100 - 2-D Design Credits: 3
- ART 107 - Basic Studio Photography Credits: 3
- ART 114 - Basic Studio Digital Media Credits: 3

One Semester of Art Synthesis:

- ART 205 - Art Synthesis Drawing Credits: 3

Two Semesters of Advanced Studio Courses - 6 credits

- ART 313 - Advanced Studio Design Credits: 3
- ART 314 - Advanced Studio Digital Media Credits: 3

Choose One Senior Studio Course:

- ART 405 - Senior Studio Drawing Credits: 3
- ART 406 - Senior Studio Painting Credits: 3
- ART 407 - Senior Studio Photography Credits: 3
- ART 408 - Senior Studio Printmaking Credits: 3
- ART 413 - Senior Studio Design Credits: 3
- ART 414 - Senior Studio Digital Media Credits: 3

Other Recommended Courses:

- ART 208 - Art Synthesis Printmaking Credits: 3
(Enrichment Course)
- ART 225 - Overview of Western Art Credits: 3
(Goal Course)
- ART 226 - Overview of World Art Credits: 3
(Goal Course)

Minor in Art - Graphic Design Track for Communications Majors

Art Department

12 credits are at the 300+ level (200 level courses with prerequisites qualify as upper level)

Requirements for the Minor - Credits: 21

Three Semesters of Basic Studio

- ART 100 - 2-D Design Credits: 3
- ART 107 - Basic Studio Photography Credits: 3
- ART 114 - Basic Studio Digital Media Credits: 3

One Semester of Art Synthesis

- ART 205 - Art Synthesis Drawing Credits: 3

Two Semesters of Advanced Studio

- ART 313 - Advanced Studio Design Credits: 3

- ART 314 - Advanced Studio Digital Media Credits: 3

One Semester of Senior Studio

Choose one of the following:

- ART 405 - Senior Studio Drawing Credits: 3
- ART 406 - Senior Studio Painting Credits: 3
- ART 407 - Senior Studio Photography Credits: 3
- ART 408 - Senior Studio Printmaking Credits: 3
- ART 413 - Senior Studio Design Credits: 3
- ART 414 - Senior Studio Digital Media Credits: 3

Other Recommended Courses

Recommended to fill Liberal Studies requirements:

- ART 208 - Art Synthesis Printmaking Credits: 3
- ART 225 - Overview of Western Art Credits: 3
- ART 226 - Overview of World Art Credits: 3

Minor in Art for Elementary Education Majors

Art Department

Requirements for the Minor - Credits: 21

Required Courses

- ART 105 - Basic Studio Drawing Credits: 3
- ART 225 - Overview of Western Art Credits: 3
- ART 317 - Advanced Topics in Elementary Art Credits: 3

3 Credits Selected From:

- ART 106 - Basic Studio Painting Credits: 3
- ART 107 - Basic Studio Photography Credits: 3
- ART 108 - Basic Studio Printmaking Credits: 3
- ART 114 - Basic Studio Digital Media Credits: 3

3 Credits Selected From:

- ART 109 - Basic Studio Metalsmithing Credits: 3
- ART 110 - Basic Studio Sculpture Credits: 3
- ART 111 - Basic Studio Fibers Credits: 3
- ART 112 - Basic Studio Ceramics Credits: 3

3 Credits Selected From:

- ART 205 - Art Synthesis Drawing Credits: 3
- ART 206 - Art Synthesis Painting Credits: 3
- ART 207 - Art Synthesis Photography Credits: 3
- ART 208 - Art Synthesis Printmaking Credits: 3
- ART 209 - Art Synthesis Metalsmithing Credits: 3
- ART 210 - Art Synthesis Sculpture Credits: 3
- ART 211 - Art Synthesis Fibers Credits: 3
- ART 212 - Art Synthesis Ceramics Credits: 3
- ART 213 - Art Synthesis Design Credits: 3
- ART 214 - Art Synthesis Digital Media Credits: 3

3 Credits Selected From:

- ART 305 - Advanced Studio Drawing Credits: 3
- ART 306 - Advanced Studio Painting Credits: 3
- ART 307 - Advanced Studio Photography Credits: 3
- ART 308 - Advanced Studio Printmaking Credits: 3
- ART 309 - Advanced Studio Metalsmithing Credits: 3
- ART 310 - Advanced Studio Sculpture Credits: 3
- ART 311 - Advanced Studio Fibers Credits: 3
- ART 312 - Advanced Studio Ceramics Credits: 3
- ART 313 - Advanced Studio Design Credits: 3
- ART 314 - Advanced Studio Digital Media Credits: 3

Minor in Art History

Art Department

Requirements for the Minor - Credits: 18

Required Courses

- ART 225 - Overview of Western Art Credits: 3
- ART 226 - Overview of World Art Credits: 3

Elective Courses

12credits selected from:

- ART 325 - North American Art History Credits: 3-6
- ART 335 - The Renaissance Tradition Credits: 3-6
- ART 345 - Foundations of Modern Art Credits: 3-6
- ART 355 - Early Modern Art Credits: 3-6
- ART 365 - Art Since 1945 Credits: 3-6

- ART 420 - Art History Seminar Credits: 3-6

Asian Studies

Asian Studies

Coordinator

George Brown, SWC 112-C, (724) 738-2345, george.brown@sru.edu

Faculty

Kundan Bhatia, George Brown, Xianfeng Chen, Margaret Denning, Srinivasa Mani, Alison McNeal, J. Sunita Peacock, Armand Policicchio, Carolyn Prorok, Jialing Wang, Junko Yamamoto, and visiting professors from China, India, Japan, and Korea.

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, Japanese and Korean languages), History, Geography, Political Science, English, Philosophy and Anthropology (Professional Studies). 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. For more information go to Asian Studies Program.

Minor in Asian Studies

Dance

110 Morrow Field House

724-738-2036

Dance

The Department of Dance at Slippery Rock University promotes dance as an art form through the creative, technical, expressive and intellectual development of each student. The dance faculty members offer personalized attention to each individual. Superior educational experiences in performance, choreography, and teaching, with additional components of wellness for dancers and dance technology, will prepare students for their chosen profession and role in society.

Chair

Nora Ambrosio

Secretary

Lisa Smith

Staff Musician

Andrew Hasenpflug

Faculty

Nora Ambrosio, Thom Cobb, Jennifer Keller, Nola Nolen-Holland, Jaya Mani, Ursula Payne, Melissa Teodoro

“My dance experience and education at Slippery Rock University was a well rounded and exciting one. My education enabled me to become an artist-in-residence in the public schools and develop my own dance company and dance studio in my hometown. I was able to have not only a great dance education but also a great opportunity to perform, travel and learn how to become an individual that can stand out from the rest. I am proud to represent SRU as an accomplished alumnus and recommend their dance program to all of my students. The faculty was and is always encouraging and supportive of me. I look forward to visiting and seeing the program grow each year.”

Anna Pishner '94
Owner and operator of Anna's Expressions of Dance
in Clarksburg, WV, and
Artistic Director of Allegro Dance Company

Slippery Rock University Dance Theater and the Jazz Dance/Tap Ensemble are the dance companies in residence at SRU. These companies perform many concerts throughout the year, both on and off campus. The department is a member of the American College Dance Festival and travels to these regional festivals every year. The department participates in the PA State Association for Health, Physical Education, Recreation, and Dance Conference and the Eastern District Association Conference. The department touring company, The Rock Dance company, performs many lecture/demonstrations at area and regional elementary schools, senior centers and other locations. Dance majors have also traveled to Europe where they have performed in Lyon, France and London, England. The department also has a Dance in India program, where dance majors study and teach in India. The dance honor society, Sigma Rho Delta, is opened to dance majors who meet the membership criteria. Outstanding guest artists are brought to campus each semester to provide residency activities for students. The department also commissions new choreographic works from nationally and internationally known artists, as well as historic works biennially.

The department offers a 3 to 9-credit internship as an elective. Recent internships have included working in arts administration with a professional modern dance company, apprenticing with a professional ballet company as a costume design assistant, doing public relations for major dance venues in Washington D.C., and working at major dance centers in New York City.

The Department of Dance is an accredited member of the National Association of Schools of Dance and the only Dance Department in the State System of Higher Education.

Majors

- Dance (BA)

Minors

- Minor in Dance

Dance (BA)

Dance Department

Requirements for the Major

Core Courses - Credits: 40

- DANC 100 - Introduction to Dance Credits: 3

- DANC 101 - Wellness for Dancers Credits: 1
- DANC 199 - LMA/Performance Techniques Credits: 1
- DANC 200 - Dance Composition I Credits: 3
- DANC 216 - Principles of Dance Production Credits: 3
- DANC 223 - Creative Dance for Children Credits: 1
- DANC 224 - Improvisation Credits: 2
- DANC 300 - Dance Composition II Credits: 3
- DANC 318 - Dance History I: Through the Nineteenth Century Credits: 3
- DANC 323 - Teaching of Dance Credits: 3
- DANC 324 - Music for Dance Credits: 3
- DANC 326 - Dance Kinesiology Credits: 3
- DANC 350 - Field Experience Credits: 1
- DANC 419 - Dance History II: Twentieth and Twenty-first Centuries Credits: 3
- DANC 420 - Modern Dance IV Credits: 2
- DANC 425 - Senior Synthesis Credits: 3
- DANC 498 - Selected Topics: World Dance Credits: 2

Technique Courses - Credits: 22

All Dance majors are required to demonstrate Level IV proficiency in modern dance and Level III proficiency in ballet and jazz dance, choosing from the following:

- DANC 220 - Modern Dance II Credits: 2
- DANC 221 - Ballet II Credits: 2
- DANC 222 - Jazz Dance II Credits: 2
- DANC 320 - Modern Dance III Credits: 2
- DANC 321 - Ballet III Credits: 2
- DANC 322 - Jazz III Credits: 2
- DANC 420 - Modern Dance IV Credits: 2
- DANC 421 - Ballet IV Credits: 2
- DANC 422 - Jazz IV Credits: 2
- DANC 426 - Modern Dance V Credits: 2
- DANC 428 - Modern Dance VI Credits: 2
- DANC 498 - Selected Topics: World Dance Credits: 2

Electives - Credits: 5

- DANC 112 - Tap Dance I Credits: 1
- DANC 212 - Tap Dance II Credits: 3
- DANC 271 - Dance Technology Credits: 3
- DANC 399 - Repertory Credits: 1
- DANC 450 - Dance Internship Credits: Up to 12
- THEA 131 - Fundamentals of Acting Credits: 3
- THEA 132 - Stagecraft Credits: 3

Minor in Dance

Requirements for the Minor - Credits: 27

Required Courses

Level I technique classes in Modern Dance, Ballet and Jazz may be required of some Dance Minors and can be included in the SRU Liberal Studies requirement, enrichment block.

- DANC 100 - Introduction to Dance Credits: 3
- DANC 101 - Wellness for Dancers Credits: 1
- DANC 105 - Dance Fundamentals Credits: 1
- DANC 200 - Dance Composition I Credits: 3
- DANC 220 - Modern Dance II Credits: 2
(* see footnote)
- DANC 221 - Ballet II Credits: 2
(* see footnote)
- DANC 222 - Jazz Dance II Credits: 2
(* see footnote)
- DANC 223 - Creative Dance for Children Credits: 1
- DANC 224 - Improvisation Credits: 2
- DANC 305 - Society and Social Dance Credits: 3
- DANC 323 - Teaching of Dance Credits: 3
DANC 350 - Field Experience
- DANC 326 - Dance Kinesiology Credits: 3
- DANC 350 - Field Experience Credits: 1
DANC 323 - Teaching of Dance

Footnote

* All dance minors are required to demonstrate Level II proficiency in Modern Dance, Ballet and Jazz technique.

Electives

Recommended coursework to enhance the Dance Minor:

- DANC 112 - Tap Dance I Credits: 1
- DANC 199 - LMA/Performance Techniques Credits: 1
- DANC 212 - Tap Dance II Credits: 3
- DANC 216 - Principles of Dance Production Credits: 3
- DANC 318 - Dance History I: Through the Nineteenth Century Credits: 3
- DANC 324 - Music for Dance Credits: 3
- DANC 399 - Repertory Credits: 1
- THEA 131 - Fundamentals of Acting Credits: 3
and all dance technique courses.

English

314 Spotts World Culture Building
724-738-2043

English

Chair

Jace Condravy

Assistant Chair

Erica Scott

Secretarial Staff

Catherine Saylor

Robin Mowry

Faculty

Myra Balok, Nancy Barta-Smith, William Boggs, Vernice Cain, Jace Condravy, Cornelius Cosgrove, William Covey, Jr., Robert Crafton, Danette DiMarco, Christopher Kreiser, Cindy LaCom, Unhae Langis, Jane Lasarenko, Joseph McCarren, I.T. Mezli, Mark O'Connor, Sunita Peacock, Rachela Permenter, Derrick Pitard, Erica Scott, James Strickland, Kathleen Strickland, Jason Stuart, Frederick White, William Zeiger

Within the liberal arts tradition, English courses integrate the studies of literature, language, and writing, and include a range from ancient through contemporary authors. Courses in literature, film, and linguistics, and in creative, technical, and professional writing develop skills useful in law, public relations, government, business, publishing, teaching, and advertising. Students study textual analysis and interpretation, literary theory, ethics, linguistic development and multicultural literatures.

Majors

- English Literature (BA)
- English Writing (BS) - Creative Writing
- English Writing (BS) - Professional Writing

Minors

- Minor in English - Film and Media Studies
- Minor in Literature
- Minor in Writing

English Literature (BA)

English Department

Students will study the interactions between cultures and literary texts. Writing, linguistics, and oral interpretation of literature are also required. The professional writing major includes an internship. Students take a minimum of 39 credits in English, exclusive of freshman composition courses.

Requirements for the English Literature Major - Credits: 39

Required Courses

- ENGL 220 - Writing About Literature Credits: 3
- ENGL 317 - British Literature I Credits: 3
- ENGL 318 - British Literature II Credits: 3
- ENGL 319 - American Literature I Credits: 3
- ENGL 320 - American Literature II Credits: 3
- ENGL 402 - World Literature Credits: 3
- ENGL 403 - Literary Criticism Credits: 3
- ENGL 480 - Literature Seminar Credits: 3

Three Credits Chosen From:

- ENGL 312 - Shakespeare Credits: 3
- ENGL 389 - Stratford Shakespeare Tour Credits: 3

Three Credits Chosen From:

- ENGL 311 - Chaucer Credits: 3
- ENGL 331 - Historical Development of the English Language Credits: 3
- ENGL 332 - Traditional Grammar Credits: 3
- ENGL 333 - Concepts in Linguistics Credits: 3

Three Credits Chosen From:

- ENGL 242 - African-American Literature Credits: 3
- ENGL 243 - Literature of the Women's Movement Credits: 3
- ENGL 244 - Native American Literature Credits: 3
- ENGL 246 - Latino Literature of the U.S. Credits: 3
- ENGL 248 - Eastern Literature Credits: 3
- ENGL 314 - European Film Credits: 3
- ENGL 316 - Asian Film Credits: 3

Electives - Credits: 6

Proficiency of Modern Languages Through the 103 Level

Requirements for Internships

Internships with local and national organizations and industries enable students to acquire relevant experience in their areas of academic preparation. English majors with a QPA of 2.500 overall and 3.000 in their major courses are eligible.

English Writing (BS) - Creative Writing

English Department

Completion of 15 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 is required. The selection of outside courses must be approved by the student's English advisor and by the Chair of the English Department.

Requirements for the Creative Writing Major - Credits: 42

12 Hours Required From the Following:

- ENGL 225 - Introduction to Creative Writing Credits: 3
- ENGL 338 - Creative Writing: Creative Nonfiction Credits: 3
- ENGL 339 - Creative Writing: Fiction Credits: 3
- ENGL 340 - Creative Writing: Poetry Credits: 3

12 Hours Required From the Following:

- ENGL 204 - Composition and Rhetoric Credits: 3
- ENGL 205 - Introduction to Professional Writing Credits: 3
- ENGL 309 - Advanced Professional Writing Credits: 3
- ENGL 403 - Literary Criticism Credits: 3

3 Hours Required From the Following:

- ENGL 307 - Writing for Electronic Media and Film Credits: 3
- THEA 269 - Playwriting Credits: 3

Required Literature Courses

6 Hours Required From the Following:

- ENGL 242 - African-American Literature Credits: 3
- ENGL 243 - Literature of the Women's Movement Credits: 3
- ENGL 244 - Native American Literature Credits: 3
- ENGL 246 - Latino Literature of the U.S. Credits: 3
- ENGL 248 - Eastern Literature Credits: 3
- ENGL 311 - Chaucer Credits: 3
- ENGL 312 - Shakespeare Credits: 3
- ENGL 317 - British Literature I Credits: 3
- ENGL 318 - British Literature II Credits: 3
- ENGL 319 - American Literature I Credits: 3
- ENGL 320 - American Literature II Credits: 3

- ENGL 389 - Stratford Shakespeare Tour Credits: 3
- ENGL 402 - World Literature Credits: 3

Capstone Experiences

3 Hours Required from the Following:

One Additional Lit Course From Above (QPA Below 3.0) OR

- ENGL 491 - Senior Writing Project Credits: 1 to 3
(QPA above 3.0)

3 Hours Required from the Following

- ENGL 409 - Advanced Research Writing Credits: 3
Students must submit a creative writing portfolio to qualify for graduation.

Language Requirement

3 Hours Required from the Following:

- ENGL 331 - Historical Development of the English Language Credits: 3
- ENGL 333 - Concepts in Linguistics Credits: 3

Requirements for Internships

Internships with local and national organizations and industries enable students to acquire relevant experience in their areas of academic preparation.

English Writing (BS) - Professional Writing

English Department

Completion of 15 hours or more outside the English Department is also required in a sequence from one department, or certificate (including multi-disciplinary minors or certificates) a minor or major, in a subject other than English. The selection of courses, certificate, minor, or major must be approved by the student's English advisor and by the Chairperson of the English Department.

Requirements for the Professional Writing Major - Credits: 42

At least 24 credits from the following:

- ENGL 204 - Composition and Rhetoric Credits: 3
- ENGL 205 - Introduction to Professional Writing Credits: 3

- ENGL 225 - Introduction to Creative Writing Credits: 3
- ENGL 306 - Technical and Scientific Writing Credits: 3
- ENGL 308 - Advertising Copywriting Credits: 3
- ENGL 309 - Advanced Professional Writing Credits: 3
- ENGL 409 - Advanced Research Writing Credits: 3
- ENGL 450 - Internship Credits: Up to 12

Capstone Experience

Advanced Research Writing (ENG 409) is the program's capstone course, in which students will engage in a major research project as well as contribute to the editing and production of publications. In addition, students must submit a portfolio of work produced while in the program to qualify for graduation.

Required Literature Courses:

- ENGL 403 - Literary Criticism Credits: 3

6 Credits From:

- ENGL 242 - African-American Literature Credits: 3
- ENGL 243 - Literature of the Women's Movement Credits: 3
- ENGL 244 - Native American Literature Credits: 3
- ENGL 246 - Latino Literature of the U.S. Credits: 3
- ENGL 248 - Eastern Literature Credits: 3
- ENGL 311 - Chaucer Credits: 3
- ENGL 312 - Shakespeare Credits: 3
- ENGL 317 - British Literature I Credits: 3
- ENGL 318 - British Literature II Credits: 3
- ENGL 319 - American Literature I Credits: 3
- ENGL 320 - American Literature II Credits: 3
- ENGL 389 - Stratford Shakespeare Tour Credits: 3
- ENGL 402 - World Literature Credits: 3

Language Requirement Credits: 6

- ENGL 331 - Historical Development of the English Language Credits: 3
- ENGL 332 - Traditional Grammar Credits: 3
- ENGL 333 - Concepts in Linguistics Credits: 3

Requirements for the Major - Credits: 42 minimum

A minimum of 39 credits is required, exclusive of the freshman composition courses; ENGL 099, 101 and 103. Internships sequence courses outside of the Department of English, as described below, are in addition to the 39 credits in English. College Writing I is a prerequisite for all writing courses.

Requirements for Internships

Internships with local and national organizations and industries enable students to acquire relevant experience in their areas of academic preparation. All students in the English Writing- Professional Concentration must complete an internship of at least 6 credits.

Minor in Film and Media Studies

English Department

Requirement for the Film and Media Studies Minor

9 hours of the following required courses:

- ENGL 214 - Film Analysis Credits: 3
- ENGL 307 - Writing for Electronic Media and Film Credits: 3
- ENGL 315 - The Cinematic Review: Historical and Critical Writing Credits: 3

9 Hours of the Following Required

(at least one course must be a 300-level class or above):

- ART 214 - Art Synthesis Digital Media Credits: 3
- ART 300 - Art Seminar Credits: 3
- ART 314 - Advanced Studio Digital Media Credits: 3
- ART 315 - Master Studio Credits: 1
- ART 414 - Senior Studio Digital Media Credits: 3
- COMM 201 - Digital Imaging Credits: 3
- COMM 254 - Video Production Credits: 3
- COMM 258 - Interactive Multimedia I Credits: 3
- COMM 347 - New-Media Journalism Credits: 3
- COMM 350 - Editing for Video Credits: 3
- COMM 355 - TV Field Production Credits: 3
- COMM 359 - Interactive Multimedia II Credits: 3
- COMM 362 - Mass Media and Society Credits: 3
- COMM 458 - Media Criticism Credits: 3
- ENGL 314 - European Film Credits: 3
- ENGL 316 - Asian Film Credits: 3
- ENGL 498 - Selected Topics Credits: 1 to 3
- POLS 333 - The Political Film Credits: 3
- RUSS 305 - Russian Civilization via Film Credits: 3
- SPAN 307 - U.S. Latino Cultures Credits: 3

Pittsburgh Filmmakers Production or Analysis Course

(with English Department Chair approval.)

Minor in Literature

English Department

Requirements for the Literature Minor

21 credits are required for a minor in English, with a focus either on literature or on writing.

12 Credits From the Following Required Courses:

- ENGL 312 - Shakespeare Credits: 3
or ENGL 389 Stratford Shakespeare Tour
- ENGL 317 - British Literature I Credits: 3
or ENGL 318 British Literature II
- ENGL 319 - American Literature I Credits: 3
or ENGL 320 American Literature II
- ENGL 403 - Literary Criticism Credits: 3

3 Credits of the Following Required Courses:

- ENGL 242 - African-American Literature Credits: 3
- ENGL 243 - Literature of the Women's Movement Credits: 3
- ENGL 244 - Native American Literature Credits: 3
- ENGL 246 - Latino Literature of the U.S. Credits: 3
- ENGL 248 - Eastern Literature Credits: 3
- ENGL 314 - European Film Credits: 3
- ENGL 316 - Asian Film Credits: 3
- ENGL 402 - World Literature Credits: 3

6 Credits of English Electives

(excluding ENGL 099, 101, 103, 210)

Minor in Writing

English Department

Requirements for the Writing Minor

12 Hours From the Following Required Courses:

- ENGL 204 - Composition and Rhetoric Credits: 3
- ENGL 205 - Introduction to Professional Writing Credits: 3
- ENGL 225 - Introduction to Creative Writing Credits: 3
- ENGL 305 - Practicum: Teaching Writing Credits: 3

- ENGL 306 - Technical and Scientific Writing Credits: 3
- ENGL 308 - Advertising Copywriting Credits: 3
- ENGL 309 - Advanced Professional Writing Credits: 3
- ENGL 338 - Creative Writing: Creative Nonfiction Credits: 3
- ENGL 339 - Creative Writing: Fiction Credits: 3
- ENGL 340 - Creative Writing: Poetry Credits: 3
- ENGL 450 - Internship Credits: Up to 12

3 Credits of the Following Required Courses

- ENGL 331 - Historical Development of the English Language Credits: 3
- ENGL 332 - Traditional Grammar Credits: 3
- ENGL 333 - Concepts in Linguistics Credits: 3

6 Credits of English Electives

(excluding ENGL 009, 101, 103, 210)

History

212 Spotts World Culture Building
724-738-2053

History

The History Department of Slippery Rock University seeks to educate and mentor students to be future leaders in their endeavors and professions by disseminating a knowledge of the past through intensive instruction and research. The department is committed both to academic excellence and to the encouragement of creativity and innovation. We welcome and respect differences, because diversity is a key ingredient in quality education and general discourse. We seek to recruit students from all backgrounds and to foster a culture that instills a sense of responsibility for the broader community. We encourage open debate of ideas within an intellectual environment of mutual respect.

Interim Chair

Carlis White

Secretary

Lori Marttala

Faculty

Aaron Cowan, John Craig, Margaret Denning, Alan Levy, Michael Matambanadzo, Lia Paradis, Thomas Pearcy, Paula Rieder, Eric Tuten, Carlis White

"I can truly say that the preparation by the history department at Slippery Rock has served me quite well over the years, and for that, I am profoundly grateful."

Deborah K. Kennedy
Teacher and former Robert D. Duncan Memorial Awardee

History is a discipline that supports the liberal arts concentrations in the humanities and the social and behavioral sciences. Its aim is to place men and women and their achievements in the proper perspective of western heritage and the heritage of other cultures. The concentration in history is designed to develop a knowledge of the past with special emphasis on an understanding of contemporary problems. The key to historical scholarship consists of the exercise of critical analysis in order to evaluate and discover the comparative significance of human beings and events.

History majors or social science majors with a concentration in history enter careers in business, government agencies and education or pursue graduate work in history, law, and other professional schools. Students regularly complete internships at the Old Stone House, local historical societies, colonial forts in Western Pennsylvania, and other historical sites in the United States. History students frequently take courses in foreign countries offered by SRU history faculty.

Majors

- History (BA)

Minors

- Minor in American History
- Minor in European History
- Minor in General History
- Minor in Military History
- Minor in Non-Western History

History (BA)

History Department

Requirements for the Major - Credits: 36

Required Courses - Credits: 15

Historians Craft (205) required of students entering the program after July 1992.

Two of the Following:

- HIST 151 - Ancient and Medieval World Credits: 3
- HIST 152 - Rise of the Modern World Credits: 3
- HIST 153 - Twentieth Century World Credits: 3

Two of the Following:

- HIST 201 - Colonial America to 1825 Credits: 3
- HIST 202 - United States, 1825-1900 Credits: 3

- HIST 203 - U.S. History Since 1900 Credits: 3

Distributional Electives - Credits: 21

Nine credits in one area and six in each of two others from the following:

American History

- HIST 233 - African American History to 1876 Credits: 3
- HIST 234 - African American History Since 1876 Credits: 3
- HIST 304 - American Military History Credits: 3
- HIST 330 - Warfare in the Twentieth Century Credits: 3
- HIST 335 - Outstanding Americans Credits: 3
- HIST 337 - Indians of the United States Credits: 3
- HIST 340 - The Historical and Political Legacies of the Vietnam Era Credits: 3
- HIST 343 - Public History Credits: 3
- HIST 344 - The American City Credits: 3
- HIST 350 - The American Civil War Credits: 3
- HIST 351 - Latin America to 1830 Credits: 3
- HIST 352 - Latin America Since 1830 Credits: 3
- HIST 357 - Challenges of the American Experience I (to 1865) Credits: 3
- HIST 358 - Challenges of the American Experience II (1865 to the Present) Credits: 3
- HIST 435 - Pennsylvania Credits: 3
- HIST 437 - Westward Movement Credits: 3
- HIST 442 - Studies in U.S. Women's History Credits: 3
- HIST 445 - Environmental Thought in the United States Credits: 3
- HIST 451 - U.S. Foreign Relations to 1890 Credits: 3
- HIST 452 - U.S. Foreign Relations Since 1890 Credits: 3
- HIST 453 - American Constitutional History and Law Credits: 3
- HIST 455 - Economic U.S. History Credits: 3
- HIST 498 - Special Topics Credits: 3

Non-Western History

- HIST 362 - Africa North of the Zambezi Credits: 3
- HIST 363 - Southern Africa Credits: 3
- HIST 370 - History and the Bible Credits: 3
- HIST 371 - History of Jews Credits: 3
- HIST 376 - Modern Japan Credits: 3
- HIST 380 - Egyptology Credits: 3
- HIST 381 - East Asian Military Traditions Credits: 3
- HIST 382 - Modern Asian Pacific Rim Credits: 3
- HIST 386 - Modern China Credits: 3
- HIST 462 - The Contemporary Middle East Credits: 3

European History

- HIST 305 - Russia to 1855 Credits: 3
- HIST 306 - Russia Since 1855 Credits: 3
- HIST 318 - Gender and Sexuality in European Society Credits: 3
- HIST 319 - History of Women to 1750 Credits: 3
- HIST 320 - History of Women from 1750 to the Present Credits: 3
- HIST 322 - Germany in the Twentieth Century Credits: 3
- HIST 330 - Warfare in the Twentieth Century Credits: 3
- HIST 331 - England to 1689 Credits: 3
- HIST 332 - England Since 1689 Credits: 3
- HIST 333 - Medieval Church Credits: 3
- HIST 422 - Greece and Rome Credits: 3
- HIST 424 - The Middle Ages Credits: 3
- HIST 426 - French Revolution and Napoleon Credits: 3
- HIST 427 - Nineteenth Century Europe Credits: 3
- HIST 498 - Special Topics Credits: 3

Minor in American History

History Department

Requirements for the Minor - Credits: 18

American History:

6 Credits from the Following

- HIST 201 - Colonial America to 1825 Credits: 3
- HIST 202 - United States, 1825-1900 Credits: 3
- HIST 203 - U.S. History Since 1900 Credits: 3

9 Credits from the Following (6 credits must be 300 level or above)

- HIST 233 - African American History to 1876 Credits: 3
- or
- HIST 234 - African American History Since 1876 Credits: 3
- HIST 304 - American Military History Credits: 3
- HIST 330 - Warfare in the Twentieth Century Credits: 3
- HIST 335 - Outstanding Americans Credits: 3
- HIST 337 - Indians of the United States Credits: 3
- HIST 340 - The Historical and Political Legacies of the Vietnam Era Credits: 3
- HIST 343 - Public History Credits: 3
- HIST 344 - The American City Credits: 3
- HIST 350 - The American Civil War Credits: 3
- HIST 351 - Latin America to 1830 Credits: 3
- or
- HIST 352 - Latin America Since 1830 Credits: 3

- HIST 357 - Challenges of the American Experience I (to 1865) Credits: 3
- HIST 358 - Challenges of the American Experience II (1865 to the Present) Credits: 3
- HIST 435 - Pennsylvania Credits: 3
- HIST 437 - Westward Movement Credits: 3
- HIST 442 - Studies in U.S. Women's History Credits: 3
- HIST 445 - Environmental Thought in the United States Credits: 3
- HIST 451 - U.S. Foreign Relations to 1890 Credits: 3
- or
- HIST 452 - U.S. Foreign Relations Since 1890 Credits: 3
- HIST 453 - American Constitutional History and Law Credits: 3
- HIST 455 - Economic U.S. History Credits: 3
- HIST 498 - Special Topics Credits: 3

History Elective (3 credits)

Minor in European History

History Department

Requirements for the Minor - Credits: 18

6 Credits from the Following:

- HIST 151 - Ancient and Medieval World Credits: 3
- HIST 152 - Rise of the Modern World Credits: 3
- HIST 153 - Twentieth Century World Credits: 3

9 Credits from the Following:

- HIST 305 - Russia to 1855 Credits: 3
- HIST 306 - Russia Since 1855 Credits: 3
- HIST 318 - Gender and Sexuality in European Society Credits: 3
- HIST 319 - History of Women to 1750 Credits: 3
- HIST 320 - History of Women from 1750 to the Present Credits: 3
- HIST 322 - Germany in the Twentieth Century Credits: 3
- HIST 331 - England to 1689 Credits: 3
- HIST 332 - England Since 1689 Credits: 3
- HIST 333 - Medieval Church Credits: 3
- HIST 343 - Public History Credits: 3
- HIST 422 - Greece and Rome Credits: 3
- HIST 424 - The Middle Ages Credits: 3
- HIST 426 - French Revolution and Napoleon Credits: 3
- HIST 427 - Nineteenth Century Europe Credits: 3
- HIST 498 - Special Topics Credits: 3

History Elective (3 credits)

- HIST 304 - American Military History Credits: 3
 - HIST 343 - Public History Credits: 3
- Or any other course not used above

Minor in General History

History Department

Requirements for the Minor - Credits: 18

- 9 Credits from 100 and 200 level history courses
- 9 Credits of electives in history at the 300 level or above

Minor in Military History

History Department

Requirements for the Minor - Credits: 18

6 Credits from the Following

- HIST 151 - Ancient and Medieval World Credits: 3
- HIST 153 - Twentieth Century World Credits: 3

12 Credits from the Following

- HIST 304 - American Military History Credits: 3
- HIST 330 - Warfare in the Twentieth Century Credits: 3
- HIST 340 - The Historical and Political Legacies of the Vietnam Era Credits: 3
- HIST 350 - The American Civil War Credits: 3
- HIST 381 - East Asian Military Traditions Credits: 3
- HIST 426 - French Revolution and Napoleon Credits: 3

Minor in Non-Western History

History Department

Requirements for the Minor - Credits: 18

6 Credits from the Following

- HIST 151 - Ancient and Medieval World Credits: 3
- HIST 153 - Twentieth Century World Credits: 3

9 Credits from the Following

- HIST 362 - Africa North of the Zambezi Credits: 3
or
- HIST 363 - Southern Africa Credits: 3
- HIST 370 - History and the Bible Credits: 3
- HIST 371 - History of Jews Credits: 3
- HIST 376 - Modern Japan Credits: 3
- HIST 380 - Egyptology Credits: 3
- HIST 382 - Modern Asian Pacific Rim Credits: 3
- HIST 386 - Modern China Credits: 3
- HIST 462 - The Contemporary Middle East Credits: 3

History Elective (3 credits)

- HIST 304 - American Military History Credits: 3
 - HIST 318 - Gender and Sexuality in European Society Credits: 3
 - HIST 343 - Public History Credits: 3
- Or any other course not used above

Modern Languages and Cultures

104 Carruth-Rizza Hall
724-738-2062

Modern Languages and Cultures

The department's mission is to prepare students for the challenges of an increasingly interconnected world. Our main goal is to enable the acquisition of world languages other than English for SRU students. We aim to educate world citizens who will acquire linguistic skills through an intellectual process that takes into account the perspective of the target culture. Our mission thus supports the vision statement of Slippery Rock University which encourages us to excel as a caring community of lifelong learners connecting with the world.

Chair

Deb Cohen

Secretary

Christofer Ango

Faculty

Ana Maria Caula, Deb Cohen, Adelaida Cortijo, Thomas Daddesio, Charles Tichy, Melinda Ristvey

"I can honestly say that without such a caring and hardworking department, I would not be where I am today. Living and working in France having the time of my life. The department provided me with many experiences, both on campus and off, that I will never forget." Katie L. Snedecker, BA French 2004

"I feel very knowledgeable and competent as a future teacher thanks to the wonderful guidance and instruction that I received from my foreign language professors and the educational department. I am proud that I will be able to take my SRU education and use it to make a difference in the future." Regina Jeanette, BSED Spanish 2005

"Thanks to the amazing MLC staff, I learned how to speak two other languages and I'm now using both of them working and studying abroad!" Vincent Celender, BA French 2005

The study of modern languages will develop your linguistic skills, prepare you to better understand the culture or cultures associated with them and generally broaden your horizons. The greater intellectual curiosity that you will acquire and the ability to express yourself in another language will prepare you for the challenges of the global age we live in.

As a student of modern languages, you should look forward to a world of career options, some of which include business, government, journalism, education, interpreting or translating. You are strongly encouraged to discuss your career goals with your advisor or the department chairperson. Interested students are welcome to participate in the French Club, the German Club, the Arabic Club, the Japan Club, the Korean Club, the Russian Club, or the Spanish club.

Students of modern languages may look forward to careers in business, government, journalism, education, interpreting, or translating. Students are encouraged to discuss their career goals with the departmental chairperson, and/or advisor. Interested students are welcome to participate in the Russian Club, the Spanish Club, the French Club, or the German Club.

Students with previous language experience must take an appropriate modern language placement test to determine course eligibility. Students who wish to receive academic credit for previous experience must take the appropriate CLEP examination administered by the university. The CLEP examination must be taken before enrollment in foreign language courses and for freshmen within the first few weeks of the semester.

Arabic, Chinese, French, German, Japanese, Korean, Russian, and Spanish 101, 102, and 103 satisfy the liberal arts language requirement for the Bachelor of Arts degree in any discipline as well as the liberal arts goal and enrichment requirements in the global community area.

Majors

- French (BA)
- French: Business Administration Specialization with International Emphasis (BA)
- Spanish (BA)
- Spanish: Business Administration Specialization with International Emphasis(BA)

Minors

- Minor in Asian Studies
- Minor in French
- Minor in German
- Minor in Russian
- Minor in Spanish
- Minor in Spanish for Elementary Education

Certificate in Latin American Studies

Modern Languages & Cultures Department

For Spanish Majors

Required Courses

Exemption is possible from the core courses according to performance on the placement test. CLEP, AP and OPI credits are accepted.

- SPAN 101 - Spanish Language & Culture I Credits: 3
- SPAN 102 - Spanish Language & Culture II Credits: 3
- SPAN 103 - Spanish Language & Culture III Credits: 3
- SPAN 201 - Spanish Conversation I Credits: 3
- SPAN 220 - Reading in Spanish Credits: 3

Civilization Required Courses (6 credits)

Two of the following courses:

- SPAN 307 - U.S. Latino Cultures Credits: 3
- SPAN 326 - The Civilization of Spanish America: Precolumbian to 19th Century Credits: 3
- SPAN 328 - The Civilization of Spanish America: 19th Century to Present Credits: 3

Literature Required Courses (6 credits)

Two of the following courses:

- ENGL 246 - Latino Literature of the U.S. Credits: 3
- SPAN 332 - Spanish American Literature - 19th Century to Present Credits: 3
- SPAN 432 - Spanish-American Literature: Precolumbian to 19th Century Credits: 3

Electives (minimum 3 credits)

One or two of the following courses:

- DANC 122 - Jazz Dance I Credits: 1
- GES 201 - Latin America and the Caribbean Credits: 3
- HIST 351 - Latin America to 1830 Credits: 3
- HIST 352 - Latin America Since 1830 Credits: 3

French (BA)

Modern Languages & Cultures

The study of French language and culture is a passport to the past, the present, and the future. With it the student can go back in time to the dawn of French civilization and follow its development from before the Gallo-Roman period through the Middle Ages, with the flowering of the great cathedrals, into the Renaissance graced by its many chateaux, and on to the glories of imperial France under Louis XIV. Armed with knowledge of French, the student will better understand also the Enlightenment, whose numerous great French philosophers carved out the principle of both the American and the French revolutions. The developments which followed brought today's democracies into being. French is a principal language in 43 countries many of them in key regions in the world.

Majors obtain jobs in teaching, health and human services professions, international business and business-related professions, communication, and technology-related fields.

Students with previous French language experience must take the modern languages placement test to determine course eligibility. Students desiring to receive academic credit for previous experience must take the appropriate CLEP examination administered by the university. The CLEP examination must be taken before enrollment in foreign language courses for freshmen within the first few weeks of the semester.

French 101, 102, and 103 satisfy the liberal arts language requirement for the Bachelor of Arts degree in any discipline and the liberal arts goal and enrichment requirements in the global community area.

Requirements for the Major - Credits: 30-39

Major Prerequisite Courses or Equivalent

Exemption is possible from these courses according to performance on the placement test. CLEP, AP and OPI credits are accepted.

- FREN 101 - French Language and Culture I Credits: 3
- FREN 102 - French Language and Culture II Credits: 3

Basic Skills Courses

Note: Exemption is possible from these courses according to performance in the department placement exam, AP - Credits or CLEP - Credits. Native or Heritage speakers should consult the Department of Modern Languages and Cultures.

- FREN 103 - French Language and Culture III Credits: 3
- FREN 201 - French Conversation 1 Credits: 3
- FREN 220 - Reading in French Credits: 3

Required Courses

- FREN 300 - French Grammar and Composition 1 Credits: 3
- FREN 330 - French Literature from the 18th Century to the Present Credits: 3
- FREN 350 - French Linguistics and Phonetics Credits: 3
- FREN 400 - French Grammar and Composition 2 Credits: 3

One of the following literature courses:

- FREN 404 - Modern French Literature Credits: 3
- FREN 430 - French Literature 12th to 17th Century Credits: 3

One of the following civilization courses:

- FREN 305 - French Civilization Credits: 3
- FREN 306 - Modern France Credits: 3

One of the following conversation courses:

- FREN 301 - French Conversation 2 Credits: 3
- or
- FREN 401 - French Conversation 3 Credits: 3

Note:

6 - 9 Credits of any 300- or 400- level French course may be chosen as electives except any French course taught in English. Choose as many electives as necessary to reach 30 hours of courses in French.

Electives: Credits 0-9

Any 300 or 400 level French course may be chosen as an elective including the civilization course not chosen.

Specialization: Business Administration Specialization with International Emphasis

This program is designed for students who prefer the flexibility of a liberal arts program while studying the international market. Such a student may decide to enter an MBA program designed specifically for the liberal arts language major. Specific requirements for this program are available under the French Business Administration Specialization with International Emphasis program.

French: Business Administration Specialization with International Emphasis (BA)

Modern Languages & Cultures Department

Requirements for the Major - Credits: 54 - 63

Major Prerequisite Courses or Equivalent

Exemption is possible from this course according to performance on the placement test. CLEP, AP, and OPI credits are accepted.

- FREN 101 - French Language and Culture I Credits: 3

Basic Skills Courses

Exemption is possible from these courses according to performance on the placement test. CLEP, AP and OPI credits are accepted for some of the following courses.

- FREN 102 - French Language and Culture II Credits: 3
- FREN 103 - French Language and Culture III Credits: 3
- FREN 201 - French Conversation 1 Credits: 3
- FREN 220 - Reading in French Credits: 3

Required Courses

- FREN 300 - French Grammar and Composition 1 Credits: 3
- FREN 303 - Business French Credits: 3
- FREN 350 - French Linguistics and Phonetics Credits: 3
- FREN 400 - French Grammar and Composition 2 Credits: 3

One of the following civilization courses:

- FREN 305 - French Civilization Credits: 3
- FREN 306 - Modern France Credits: 3

One of the following conversation courses:

- FREN 301 - French Conversation 2 Credits: 3
- FREN 401 - French Conversation 3 Credits: 3

Electives: Credits 0-12

Choose electives to complete 30 credits for the major. Any 300 or 400 level French course may be chosen as an elective, including the conversation or civilization courses not chosen above.

Business Administration Specialization with International Business Focus: 18 credits

- ECON 201 - Principles of Macroeconomics Credits: 3
- ECON 202 - Principles of Microeconomics Credits: 3
- ACCT 209 - Financial Accounting Credits: 3
- MGMT 351 - Organizational Behavior Credits: 3
- MRKT 330 - Principles of Marketing Credits: 3
- FIN 303 - Issues in Global Business Credits: 3

Advanced International Business Courses: 6 credits from the following

- ECON 326 - International Economics Credits: 3
- FIN 427 - International Financial Management Credits: 3
- MGMT 457 - International Management Credits: 3
- MRKT 437 - International Marketing Credits: 3

Study Abroad Program (highly recommended)

Students should plan to spend a summer or semester in a country where French is spoken. Credits earned may be used to fill the above requirements.

Minor in Asian Studies

Asian Studies

Coordinator

George Brown, SWC 112-G, (724) 738-2435, george.brown@sru.edu

Advisor

Armand Policicchio, SWC 107-E, (724) 738-2689, armand.policicchio@sru.edu

Faculty

Kundan Bhatia, George Brown, Xianfeng Chen, Andrew Colvin, Margaret Denning, Srinivasa Mani, Alison McNeal, J. Sunita Peacock, Armand Policicchio, Li Pu, Jialing Wang, Junko Yamamoto, and visiting professors from China, India, Japan, and Korea.

The Asian Studies minor offers students the opportunity to gain a working knowledge of the countries East Asia, Southeast Asia, and South Asia. About forty percent of the people residing on the globe live in Asia, including China, and India, the two most populous countries in the world. Asia also contains the most rapidly industrializing and fastest growing economies in the world: by 2050 China will be the world's largest economy, Japan will be among the top five global economies, and India will also take its place as one of the greatest economic powers of the century. Asia is important as well because it is home to several of the world's core civilizations with distinctive cultures, well developed social institutions, highly developed religious and philosophical traditions, rich and complex languages and literatures, and artistic and architectural traditions that go back in continuously evolving lines for over thirty centuries. Asia is also important politically; it is a place of dynamic political change and unresolved political conflicts with enormous consequence for the United States (North and South Korea, China and Taiwan, India and Pakistan, China and Japan, etc.). The Asian Studies minor provides a valuable focus for majors in many fields. Business majors will find a minor in East Asian Studies particularly attractive to future employers who are already doing business in the region or who wish to begin trade there. Future teachers and social workers as well as health and fitness professionals will find the background useful in their work with the increasing Asian population in the United States (Asians and Pacific Islanders are the fastest growing minority in America). Students with majors in the humanities and social sciences will find the minor a valuable balance to the largely Western content and methodologies that characterize their fields of study. Future teachers and social workers as well as health and fitness professionals will find the background useful in their work with the increasing Asian population in the United States. (Asian and Pacific Islanders are the fastest growing minority in America.) The Asian Studies Minor offers language training and exchange opportunities that will enable students to live and work successfully in a global society.

Requirements for the Minor

Minor Requirement with Asian Language

Students are required to earn 21 credits from the courses below, including 9 credits from Asian Languages and 9 credits from AS Core Courses. All students are encouraged to take Introduction to Asian Civilizations (54 105) or equivalent course approved by the Asian Studies Advisor. At least 6 credits other than languages must be at the 300 level and above.

- MODL 105 - Introduction to Asian Civilizations Credits: 3

Asian Languages and Cultures - 9 Credits Required from the following:

- CHIN 101 - Chinese Language and Culture I Credits: 3
- CHIN 102 - Chinese Language and Culture II Credits: 3
- CHIN 103 - Chinese Language and Culture III Credits: 3
- CHIN 202 - Intermediate Chinese I Credits: 3

Or

- KORN 101 - Korean Language and Culture I Credits: 3
- KORN 102 - Korean Language and Culture II Credits: 3
- KORN 103 - Korean Language and Culture III Credits: 3
- KORN 202 - Intermediate Korean I Credits: 3

Or

- JAPN 101 - Japanese language Culture I Credits: 3
- JAPN 102 - Japanese language Culture II Credits: 3
- JAPN 103 - Japanese language Culture III Credits: 3
- JAPN 202 - Intermediate Japanese I Credits: 3

Core Courses in Asian Studies - 9 Credits Required from the following:

- ENGL 248 - Eastern Literature Credits: 3
- ENGL 316 - Asian Film Credits: 3
- GES 303 - Asia Credits: 3
- HIST 376 - Modern Japan Credits: 3
- HIST 381 - East Asian Military Traditions Credits: 3
- HIST 382 - Modern Asian Pacific Rim Credits: 3
- HIST 386 - Modern China Credits: 3
- PHIL 343 - Asian Philosophy Credits: 3
- POLS 331 - Seminar in Japanese Politics Credits: 3
- POLS 366 - Seminar in Chinese Politics Credits: 3
- POLS 371 - Politics in Asia Credits: 3
- PROF 310 - Cultural Area Studies Credits: 3
Asian Topics Only
- PROF 360 - Women in Asian Societies Credits: 3

Supplemental Asian Studies Courses

(Any two of these is equivalent to one full course credit for the minor).

- ENGL 210 - Interpreting Literature Credits: 3
by advisement
- ENGL 402 - World Literature Credits: 3
by advisement
- GES 109 - Environments and Peoples of the Developing World Credits: 3
by advisement
- PHIL 140 - World Religions Credits: 3
- POLS 369 - Politics of Developing Areas Credits: 3
by advisement
- PROF 202 - Introduction to Anthropology Credits: 3
by advisement

Minor in French

Modern Languages & Cultures Department

Requirements for the Minor - Credits: 18

Eighteen credits of French courses above the 101 level, including a minimum of two 300 or 400 level courses.

Minor in German

Modern Languages & Cultures Department

Required Courses

- GERM 102 - German Language and Culture II Credits: 3
- GERM 103 - German Language and Culture III Credits: 3
- GERM 201 - Communication in German Credits: 3
- GERM 220 - Reading in German Credits: 3

Two German courses at the 300 or 400 level

Minor in Russian

Modern Languages & Cultures Department

Requirements for the Minor - Credits: 18

- RUSS 101 - Russian Language and Culture I Credits: 3
- RUSS 102 - Russian Language and Culture II Credits: 3
- RUSS 103 - Russian Language and Culture III Credits: 3
- RUSS 202 - Intermediate Russian I Credits: 3
- RUSS 305 - Russian Civilization via Film Credits: 3

- RUSS 306 - The Challenge of Russian Legacy Credits: 3

Minor in Spanish

Modern Languages & Cultures Department

Requirements for the Minor - Credits: 18

18 credits of Spanish classes above the 101 level, including a minimum of two 300 or 400 level courses

Minor in Spanish for Elementary Education

Modern Languages & Cultures Department

Requirements for the Minor - Credits: 18 - 24

Any additional credits necessary to reach 18 hours if beginning courses were exempt.

Basic Courses

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.

- SPAN 102 - Spanish Language & Culture II Credits: 3
- SPAN 103 - Spanish Language & Culture III Credits: 3
- SPAN 200 - Spanish Grammar and Composition I Credits: 3
- SPAN 220 - Reading in Spanish Credits: 3

Choose 3 of the following courses:

- SPAN 302 - Communication in Spanish for the Elementary Classroom Credits: 3
- SPAN 309 - Hispanic Civilization for the K-12 Classroom Credits: 3
- SPAN 318 - Hispanic Children's Literature for the K-12 Classroom Credits: 3
- SEFE 323 - Teaching World Languages Credits: 3

Any elective at the 200, 300, or 400 level to reach the minimum 18 credits

Spanish (BA)

Modern Languages & Cultures Department

Why study Spanish? There are many substantive reasons, but an important one is that Hispanics are the fastest growing segment of the U.S. population. Therefore, the knowledge of Spanish is of value in all human services professions, as well as in many areas of business, especially since Latin America represents a large potential market. Because Spanish

can become an invaluable skill in an occupation, many students choose to combine Spanish with another area as a double major or as a minor.

Students with previous language experience must take the modern language Spanish placement test to determine course eligibility. Students desiring to receive academic credit for previous experience must take the appropriate CLEP examination administered by the university. The CLEP examination must be taken before enrollment in world language courses and for freshmen within the first few weeks of the semester.

Spanish 101, 102, and 103 satisfy the liberal arts language requirement for the Bachelor of Arts degree in any discipline.

Requirements for the Major - Credits: 30-39

Major Prerequisite Courses or Equivalents

Exemption is possible from these courses according to performance on the placement test. CLEP, AP and OPI credits are accepted.

- SPAN 101 - Spanish Language & Culture I Credits: 3
- SPAN 102 - Spanish Language & Culture II Credits: 3
- SPAN 103 - Spanish Language & Culture III Credits: 3

Basic Skills Courses

Exemption is possible from these courses according to performance in the department placement exam, AP - Credits or CLEP - Credits. Native or Heritage speakers should consult the Department of Modern Languages and Cultures.

- SPAN 200 - Spanish Grammar and Composition I Credits: 3
- SPAN 201 - Spanish Conversation I Credits: 3
- SPAN 220 - Reading in Spanish Credits: 3

Required Courses:

- SPAN 300 - Spanish Grammar and Composition II Credits: 3
- SPAN 301 - Spanish Conversation II Credits: 3
- SPAN 400 - Spanish Grammar and Composition III Credits: 3
- SPAN 401 - Spanish Conversation III Credits: 3

One of following civilization courses:

- SPAN 305 - Spanish Civilization Credits: 3
- SPAN 307 - U.S. Latino Cultures Credits: 3
- SPAN 326 - The Civilization of Spanish America: Precolumbian to 19th Century Credits: 3
- SPAN 328 - The Civilization of Spanish America: 19th Century to Present Credits: 3

One of the following literature survey courses:

- SPAN 330 - Spanish Literature 1800 to Present Credits: 3
- SPAN 332 - Spanish American Literature - 19th Century to Present Credits: 3

One of the following literature courses:

- SPAN 431 - Spanish Literature - Medieval to 18th Century Credits: 3
- SPAN 432 - Spanish-American Literature: Precolumbian to 19th Century Credits: 3

Electives: Credits 0-9

6 credits of any 300- or 400-level Spanish course may be chosen as electives except Spanish 302, 309 or any Spanish course taught in English. Choose as many electives as necessary to reach 30 hours of courses in Spanish.

Second Language

Students not pursuing a double major are strongly encouraged to complete the skills block in Chinese, French, German, Italian, Japanese, Korean, or Russian.

Second Language Minor

A minor in the second language may be earned by completing the courses indicated. For a French minor: 101, 102, 103, 201 and 220 and any two 300-level courses.

Study Abroad Program (highly recommended)

Students should plan to spend a summer or semester in a country where Spanish is spoken. Credits earned may be used to fill the above requirements.

Spanish: Business Administration Specialization with International Emphasis (BA)

Modern Languages & Cultures Department

This program is designed for students who prefer the flexibility of a liberal arts program while studying the international market. Such a student may decide to enter an MBA program designed specifically for the liberal arts language major. Specific requirements for this program are available under the BA Spanish Business Administration Specialization with International Emphasis program.

Requirements for the Major - Credits: 54 - 63

Major Prerequisite Courses or Equivalent

Exemption is possible from these courses according to performance on the placement test. CLEP, AP and OPI credits are accepted.

- SPAN 101 - Spanish Language & Culture I Credits: 3

- SPAN 102 - Spanish Language & Culture II Credits: 3
- SPAN 103 - Spanish Language & Culture III Credits: 3

Basic Skills Courses

Exemption is possible from these courses according to performance on the placement test. CLEP, AP and OPI credits are accepted for some of the following courses.

- SPAN 200 - Spanish Grammar and Composition I Credits: 3
- SPAN 201 - Spanish Conversation I Credits: 3
- SPAN 220 - Reading in Spanish Credits: 3

Required Spanish Courses

- SPAN 300 - Spanish Grammar and Composition II Credits: 3
- SPAN 301 - Spanish Conversation II Credits: 3
- SPAN 303 - Business Spanish Credits: 3
- SPAN 340 - Introduction to Translation I Credits: 3
- SPAN 400 - Spanish Grammar and Composition III Credits: 3
- SPAN 401 - Spanish Conversation III Credits: 3

One of the following civilization courses:

- SPAN 305 - Spanish Civilization Credits: 3
- SPAN 326 - The Civilization of Spanish America: Precolumbian to 19th Century Credits: 3
- SPAN 328 - The Civilization of Spanish America: 19th Century to Present Credits: 3

Electives

Any 300- or 400-level Spanish courses may be chosen as an elective except Spanish 302, 309, or 335.

Business Administration Specialization with International Business Focus: 18 credits

- ACCT 209 - Financial Accounting Credits: 3
- ECON 201 - Principles of Macroeconomics Credits: 3
- ECON 202 - Principles of Microeconomics Credits: 3
- MGMT 351 - Organizational Behavior Credits: 3
- MRKT 330 - Principles of Marketing Credits: 3
- FIN 303 - Issues in Global Business Credits: 3

Advanced International Business Courses: 6 credits from the following

- ECON 326 - International Economics Credits: 3
- FIN 427 - International Financial Management Credits: 3

- MGMT 457 - International Management Credits: 3
- MRKT 437 - International Marketing Credits: 3

Study Abroad Program (highly recommended)

Students should plan to spend a summer or semester in a country where Spanish is spoken. Credits earned may be used to fill the above requirements.

Music

225 Swope Music Hall
724-738-2063

Music

The Slippery Rock University Department of Music will provide creative learning experiences to meet the current and future needs of our diverse population. The department will provide numerous musical opportunities for our students and foster connections with the community-at-large which promote a lifelong learning environment.

Chair

David Glover

Secretary

Barbara Frankenburg

Faculty

James Berry, Warren Davidson, David Glover, Colleen Gray, Susan Hadley, Stephen Hawk, Maribeth Knaub, Nanette Solomon, Stacey Steele, Glenn Utsch

“The contract for my first job was signed and approved a month before I graduated because Slippery Rock University prepared me to teach, to learn, and to live as a competent, productive citizen. Five years later, I am happily and successfully teaching music and directing high school bands in the same school district.”

Tonia Asel '95

Music Education/Performance Major

The Department of Music offers students the opportunity to focus their studies on education, therapy, performance, or a combination of these majors. Courses include study in applied music performance, music literature, music theory and composition, music education, music therapy and a variety of instrumental and vocal performing ensembles. Students electing courses in music will develop performance skills and interests and a greater perception of their musical heritage and environment. The music major may look forward to careers in private teaching, performance, music education, or music therapy.

Mu Phi Epsilon is an international, professional music fraternity that seeks to advance music in America and throughout the world, the promotion of musicianship and scholarship, loyalty to the Alma mater, and the development of true bonds of friendship. Election to Mu Phi Epsilon is based upon scholarship, musicianship, character and personality. Membership is offered to music majors and minors who are in their second semester and have attained specific standards in the above areas. The Delta Mu chapter at SRU, founded in 1994, sponsors concerts and provides many services within the music department.

Majors

- Music (BA)
- Music Education (BM)
- Music Performance (BM)
- Music Therapy (BM)

Minors

- Minor in Music

Minor in Music

Music Department

Students may pursue a minor in music after passing an audition before the music faculty. The curriculum, determined through advisement, consists of 25 credits of music courses.

Requirements for the Minor in Music - Credits: 25

Music Theory - Credits: 6

- MUSI 151 - Music Theory and Analysis I Credits: 2
- MUSI 154 - Musicianship Skills I Credits: 1
- MUSI 253 - Music Theory and Analysis II Credits: 2
- MUSI 256 - Musicianship Skills II Credits: 1

Music History - Credits: 3

- MUSI 273 - History of Music I Credits: 3
OR
- MUSI 373 - History of Music II Credits: 3

Applied Lessons - Credits: 4

One half-hour each week. Any of the applied lessons approved during the student's audition.

Ensemble - Credits: 3

Three semesters; one credit each. An ensemble is selected according to a student's major applied area.

Electives - Credits: 6

Any music course numbered 300 or above. Prerequisites may be waived with permission from department chairperson.

- MUSI 300 - Marching Band Field Charting Credits: 1
- MUSI 301 - Women and Music Credits: 3
- MUSI 332 - Vocal Conducting Credits: 1
- MUSI 333 - Instrumental Conducting Credits: 1
- MUSI 350 - Computer Technology in Music Credits: 2
- MUSI 360 - Keyboard Improvisation Credits: 1
- MUSI 361 - Instrumental Improvisation Credits: 1
- MUSI 473 - History of Music III Credits: 3

Free Elective - Credits: 3

Any music course in the music major series.

Music (BA)

Music Department

Total Degree Credits: 120

Requirements for the Major - Credits: 40

All prospective music majors must audition with a faculty committee from the Department of Music.

Required Music Courses - Credits: 39

- Applied Major - Semesters: 7
(* see footnote)
- Ensemble - Semesters: 7
(* see footnote)
- MUSI 151 - Music Theory and Analysis I Credits: 2
- MUSI 154 - Musicianship Skills I Credits: 1
- MUSI 253 - Music Theory and Analysis II Credits: 2
- MUSI 254 - Music Theory and Analysis III Credits: 2
- MUSI 255 - Music Theory and Analysis IV Credits: 2
- MUSI 256 - Musicianship Skills II Credits: 1
- MUSI 257 - Musicianship Skills III Credits: 1
- MUSI 258 - Musicianship Skills IV Credits: 1
- MUSI 273 - History of Music I Credits: 3
- MUSI 332 - Vocal Conducting Credits: 1
OR
- MUSI 333 - Instrumental Conducting Credits: 1
- MUSI 350 - Computer Technology in Music Credits: 2
- MUSI 351 - Arranging & Orchestration Credits: 2

- MUSI 373 - History of Music II Credits: 3
- MUSI 473 - History of Music III Credits: 3

Footnote

* See chairperson of Department of Music for an explanation of this requirement.

Modern Language Requirement

All candidates for the bachelor of arts degree must demonstrate competency in a modern language at the 103 level through either coursework or placement tests.

Music Education (BM)

Music Department

The Department of Music offers an undergraduate program in music education which meets requirements for the National Association Schools of Music (NASM) and state certification in music, grades K-12. Prospective music teachers are required to take coursework that is balanced to offer a broad education, including courses in music, music performance, professional education, and liberal studies. Students are required to complete 40 contact hours in elementary and secondary music education settings during the freshman and sophomore years. The junior and senior years allow the students the opportunity to apply the philosophies, methodologies, and techniques that they have observed and discussed in classes. For four weeks during field experience and sixteen weeks of student teaching, students will observe, assist and teach in a public school setting.

Music Education students are encouraged to join the Pennsylvania Collegiate Music Educators Association (PCMEA). The PCMEA meets monthly, offers workshops and conferences and promotes pre-professional experiences for the music education major.

Requirements for acceptance to the Teacher Certification Programs during the sophomore or junior year may include but also exceed the following: completion of 48 credit hours; minimum QPA requirements for Basic Competency courses, music education program, and cumulative QPA; passing scores on Praxis exams; completion of 40 hours of observations in educational settings; evidence of professional conduct; criminal and child abuse background checks; and a TB test.

The guidelines on admission, professional conduct, and student teaching for this department include and may go beyond those required for the College of Education as a whole. Details are available in the Department of Music or from the student's advisor. See also the Programs for Certification of Professional School Personnel and the Teacher Education Policy Manual, available in 105 McKay Education Building.

The double majors, BM in Performance/BM in Music Education, the BM in Performance/BM in Music Therapy, the BM in Music Education/BM in Music Therapy are available for students who wish to pursue combined degrees. Please see Chairperson for the semester by semester schedule.

Requirements for the Major - Credits: 61

All prospective music education majors must audition with a faculty committee of the Department of Music.

Required Music Courses

- Applied Major (7 credits)
* see footnote
- Applied Minor (4 credits)
* see footnote
- Ensemble (7 credits)
* see footnote
- MUSI 133 - Class Voice I Credits: 1
instrumental majors only
- MUSI 134 - Class Voice II Credits: 1
- MUSI 135 - Class Strings Credits: 1
- MUSI 151 - Music Theory and Analysis I Credits: 2
- MUSI 154 - Musicianship Skills I Credits: 1
- MUSI 245 - Class Brass Credits: 1
- MUSI 246 - Class Woodwinds Credits: 1
- MUSI 247 - Class Percussion Credits: 1
- MUSI 253 - Music Theory and Analysis II Credits: 2
- MUSI 254 - Music Theory and Analysis III Credits: 2
- MUSI 255 - Music Theory and Analysis IV Credits: 2
- MUSI 256 - Musicianship Skills II Credits: 1
- MUSI 257 - Musicianship Skills III Credits: 1
- MUSI 258 - Musicianship Skills IV Credits: 1
- MUSI 273 - History of Music I Credits: 3
- MUSI 288 - Music Education for Diverse Learners Credits: 3
- MUSI 299 - Diction for Singers Credits: 1
voice majors only
- MUSI 300 - Marching Band Field Charting Credits: 1
- MUSI 332 - Vocal Conducting Credits: 1
- MUSI 333 - Instrumental Conducting Credits: 1
- MUSI 334 - Secondary School Music Credits: 2
- MUSI 335 - Elementary Music Methods Credits: 2
- MUSI 336 - Instrumental Methods Credits: 2
- MUSI 337 - Instrumental Rehearsal Techniques Credits: 1
- MUSI 338 - Guitar Methods for Music Education Credits: 1
- MUSI 350 - Computer Technology in Music Credits: 2
- MUSI 351 - Arranging & Orchestration Credits: 2
- MUSI 360 - Keyboard Improvisation Credits: 1
or
- MUSI 361 - Instrumental Improvisation Credits: 1

Other Courses Required

- CDEV 248 - Human Development and Education Credits: 3
- MUSI 455 - Student Teaching - Music Credits: 12
- SEFE 200 - Introduction to Education Credits: 3
- SEFE 326 - ELL Strategies and Practice Credits: 3
- SEFE 342 - Educational Psychology Credits: 3

or SEFE 380 - History and Philosophy of Education

Footnote

* See chairperson of Department of Music for an explanation of this requirement.

Music Performance (BM)

Music Department

Total Degree Credits: 120

Specialization: Performance

Requirements for Music (BM) - Credits: 78

Required Courses - Credits: 29

- MUSI 151 - Music Theory and Analysis I Credits: 2
- MUSI 154 - Musicianship Skills I Credits: 1
- MUSI 253 - Music Theory and Analysis II Credits: 2
- MUSI 254 - Music Theory and Analysis III Credits: 2
- MUSI 255 - Music Theory and Analysis IV Credits: 2
- MUSI 256 - Musicianship Skills II Credits: 1
- MUSI 257 - Musicianship Skills III Credits: 1
- MUSI 258 - Musicianship Skills IV Credits: 1
- MUSI 273 - History of Music I Credits: 3
- MUSI 299 - Diction for Singers Credits: 1
(voice majors only)
- MUSI 332 - Vocal Conducting Credits: 1
- MUSI 333 - Instrumental Conducting Credits: 1
- MUSI 350 - Computer Technology in Music Credits: 2
- MUSI 351 - Arranging & Orchestration Credits: 2
- MUSI 360 - Keyboard Improvisation Credits: 1
or
- MUSI 361 - Instrumental Improvisation Credits: 1
- MUSI 373 - History of Music II Credits: 3
- MUSI 431 - Pedagogy Credits: 1
- MUSI 473 - History of Music III Credits: 3

Electives - Credits: 12

Selected from the following:

- MUSI 128 - Applied Alexander Technique Credits: 1
- MUSI 134 - Class Voice II Credits: 1
- MUSI 135 - Class Strings Credits: 1
- MUSI 137 - Functional Guitar for Music Therapy I Credits: 1
- MUSI 138 - Functional Guitar for Music Therapy II Credits: 1
- MUSI 233 - Chamber Music Performance Credits: 1
- MUSI 245 - Class Brass Credits: 1
- MUSI 246 - Class Woodwinds Credits: 1
- MUSI 247 - Class Percussion Credits: 1
- MUSI 360 - Keyboard Improvisation Credits: 1
- MUSI 361 - Instrumental Improvisation Credits: 1
- MUSI 389 - Applied Composition Credits: 1
- MUSI 499 - Applied Recital Credits: 1

* **Applied Major - Credits: 24**

* see footnote

* **Applied Minor - Credits: 4**

* see footnote

* **Applied Recital - Credits: 1**

* see footnote

* **Ensemble - Semesters: 8**

* see footnote

Footnote

* See chairperson of Department of Music for an explanation of these requirements.

Music Therapy (BM)

Music Department

Music therapy is a field that uses music along with the personality of the therapist as a treatment for rehabilitating, maintaining, and improving the lives of persons with physical, intellectual, and emotional disabilities. As a member of the therapeutic team, the music therapist participates in assessing problems, setting treatment goals, and planning and carrying out music experiences to meet these goals.

Career opportunities are available for music therapists in rehabilitation centers, hospitals, community mental health clinics, nursing homes, day care centers, and correctional facilities. Some music therapists establish their own private

studios, usually working with clients referred by local health professionals. In addition, some public school systems are beginning to include music therapists in their special education programs.

Music therapy students can be involved in the campus Music Therapy Club, which promotes the profession, offers workshops for members and other interested students, and organizes service projects. Club members also participate in both the regional and national professional student organizations of the American Music Therapy Association. Through this involvement they have opportunities for leadership, scholarships, and participation at professional conferences.

Music therapy students have the opportunity to take field trips and observe music therapy clinical work in their freshman year. Six semesters of further clinical experience in a variety of community settings provide practical application of music therapy course work. A senior practicum course provides an opportunity to mentor and supervise beginning music therapy students in the clinical experience. A required six-month music therapy internship culminates the educational program with placement opportunities in approximately 150 clinical settings throughout the United States. Professional music therapists supervise the internship programs, which meet the training requirements of the American Music Therapy Association. Students may select an internship in settings such as hospitals, clinics, day care facilities, schools, community mental health centers, substance abuse facilities, nursing homes, hospice, rehabilitation centers, and correctional facilities. Several Slippery Rock University alumni have found employment at their internship facility.

The double majors, BM in Performance/BM in Music Education, the BM in Performance/BM in Music Therapy, the BM in Music Education/BM in Music Therapy are available for students who wish to pursue combined degrees. Please see Chairperson for the semester by semester schedule.

Requirements for the Major - Credits: 74

All prospective music therapy majors must audition with a faculty committee of the Department of Music.

Required Music Courses - Credits: 52

- Applied Major (7 credits)
(* see footnote)
- Applied Minor (6 credits)
(* see footnote)
- Ensemble (7 credits)
(* see footnote)
- MUSI 137 - Functional Guitar for Music Therapy I Credits: 1
- MUSI 138 - Functional Guitar for Music Therapy II Credits: 1
- MUSI 151 - Music Theory and Analysis I Credits: 2
- MUSI 154 - Musicianship Skills I Credits: 1
- MUSI 247 - Class Percussion Credits: 1
- MUSI 253 - Music Theory and Analysis II Credits: 2
- MUSI 254 - Music Theory and Analysis III Credits: 2
- MUSI 255 - Music Theory and Analysis IV Credits: 2
- MUSI 256 - Musicianship Skills II Credits: 1
- MUSI 257 - Musicianship Skills III Credits: 1
- MUSI 258 - Musicianship Skills IV Credits: 1
- MUSI 273 - History of Music I Credits: 3
- MUSI 332 - Vocal Conducting Credits: 1
- MUSI 333 - Instrumental Conducting Credits: 1

- MUSI 350 - Computer Technology in Music Credits: 2
- MUSI 351 - Arranging & Orchestration Credits: 2
- MUSI 360 - Keyboard Improvisation Credits: 1
- MUSI 361 - Instrumental Improvisation Credits: 1
- MUSI 373 - History of Music II Credits: 3
- MUSI 473 - History of Music III Credits: 3

Required Music Therapy Courses - Credits: 22

- MUSI 127 - Orientation to Music Therapy Credits: 1
- MUSI 199 - Fundamental Skills in Music Therapy Credits: 1
- MUSI 228 - Therapeutic Musical Strategies Credits: 1
- MUSI 236 - Music Therapy Assessment, Measurement and Evaluation Credits: 2
- MUSI 312 - Music Therapy for Children Credits: 3
- MUSI 327 - Psychology of Music Credits: 3
- MUSI 330 - Clinical Integration Credits: 0/1
- MUSI 428 - Music Therapy Advanced Topics: Supervision, Ethics, and Issues of Diversity Credits: 3
- MUSI 433 - Clinical Integration Credits: 1
six semesters of clinical experience are required
- MUSI 440 - Music Therapy for Adult Clients Credits: 3
- MUSI 450 - Music Therapy Internship Credits: Up to 12

Other Courses Required to Acquire Professional Competencies the American Music Therapy Association

3 credits from SASW, PSYC 100 or 105, 276, and 3 additional credits of psychology.

- BIOL 216 - Anatomy and Physiology Credits: 3
or
- BIOL 217 - Anatomy and Physiology Credits: 3
- SPED 100 - Overview of Special Education Credits: 3

Footnote

* See chairperson of Department of Music for an explanation of these requirements.

Philosophy

003 Spotts World Culture Building
724-738-2071

Philosophy

Chair
Bradley Wilson

Secretary

Herman Boler

Faculty

Richard Findler, Andrew Colvin, Katherine Cooklin, Bradley Wilson

"Much of the success I've had as a first-year law student is attributable to the analytic and argumentative skills I've developed as a student in the Slippery Rock University Philosophy Department."

Bernard Kwitowski
Class of '01

"I wanted more than just a degree and a job; I wanted to understand the world and my place in it in a more meaningful way. Members of the department have continued to advise me and be gracious to me and my family over the years."

Dr. James Highland
Class of '92
Philosophy Professor
University of Hartford

"A great place to study philosophy. Every SRU instructor was committed to student goals, including putting in overtime..." "numerous examples of kindness and generosity on a daily basis."

Diane Bowser '95
Philosophy Instructor
Clarion University (Venango Campus), PA

Philosophy teaches students to inquire in a systematic way into fundamental questions connected with one's relationships to oneself, others, society, and the world. It helps students pull their studies together into a unified project and to think about broader perspectives and implications, which are often lost sight of in specialized study. In particular, philosophy helps students to develop the following critical thinking essential to academic pursuits and intelligent living.

- Analytical thinking: logical skills involving the ability to break down complex ideas and problems into their elements and to perform reasoning tasks efficiently and correctly.
- Evaluative thinking: skills of making intelligent ethical, social, esthetic, and religious value judgments related to fundamental issues in contemporary society and their implications for students' personal and professional lives.
- Synthetic thinking: skills of pulling together a variety of views and perspectives and resolving intellectual and practical conflicts related to the many alternative ideas and voluminous information in both the theoretical and applied spheres.

Philosophy prepares students for advanced studies in its own and in related fields and for many careers which require a high level of logical and linguistic refinement, ethical awareness and the capacity to form interpretive judgments within complex and dynamic social and intellectual environments on a global scale. Because of the strong emphasis on logical reasoning, philosophy majors are coping particularly well with rapid technological change. New roles have opened in health care, government, education, business, environmental fields, technology and scientific research for those with professional training in ethics. Traditionally, philosophical education has been valuable for further study in:

- the humanities, especially in fields which involve language, literature and the arts;
- the sciences, especially in relation to their theoretical foundations and their social impact;
- comparative cultures;
- law and policy studies; and
- business and the helping professions.

Many students combine philosophy with another field. Slippery Rock University's liberal studies program relies extensively on courses in philosophy to afford an important foundation for an undergraduate education.

Students have the opportunity to participate in frequent trips to conferences, join the Philosophy Club and achieve membership in the Philosophy Honorary.

Majors

- Philosophy (BA)

Minors

- Minor in Ethics
- Minor in Philosophy

Minor in Ethics

Philosophy Department

This program requires eighteen credits in philosophy with at least nine credits at the 300 level. Courses should be chosen in consultation with a member of the Philosophy Department.

Required Courses

- PHIL 113 - Introduction to Logic Credits: 3
- PHIL 123 - Ethics Credits: 3

Select 2 of the following courses:

- PHIL 324 - Environmental Ethics Credits: 3
- PHIL 325 - Medical/Health Care Ethics Credits: 3
- PHIL 326 - Business Ethics Credits: 3

Select one course from the following:

- PHIL 163 - Philosophy in Literature Credits: 3
- PHIL 170 - American Philosophy Credits: 3
- PHIL 171 - Philosophy of Human Existence Credits: 3

Select one course from the following (may not be used above):

- PHIL 324 - Environmental Ethics Credits: 3
- PHIL 325 - Medical/Health Care Ethics Credits: 3
- PHIL 326 - Business Ethics Credits: 3
- PHIL 331 - Social and Political Philosophy Credits: 3
- PHIL 335 - Philosophy of Law and Justice Credits: 3

- PHIL 343 - Asian Philosophy Credits: 3

Minor in Philosophy

Philosophy Department

The Minor in Philosophy requires fifteen semester hours in philosophy with at least nine credits at the 300 level or higher. Courses should be chosen in consultation with a member of the Philosophy Department.

Philosophy (BA)

Philosophy Department

Requirements for the Major - Credits: 30-39

To meet differing needs of students, there are three tracks which students may pursue toward a degree in philosophy.

Select One of the Following:

Specialization: Professional Major

A 39-credit major offers an intensive concentration in philosophy. Primarily for students seeking a career in philosophy with the intention of continuing their studies in graduate school.

Required Courses:

- 7 courses which are 300 level or above. (PHIL 101 may be counted only if taken as one of the first three courses in philosophy.)
- PHIL 113 - Introduction to Logic Credits: 3
- PHIL 123 - Ethics Credits: 3
- PHIL 313 - Symbolic Logic Credits: 3
- PHIL 331 - Social and Political Philosophy Credits: 3
or PHIL335, Philosophy of Law and Justice
- PHIL 351 - Philosophy of Natural Science Credits: 3
- PHIL 371 - History of Western Philosophy I Credits: 3
- PHIL 372 - History of Western Philosophy II Credits: 3

Specialization: Liberal Arts Major

A 30-credit major which encourages students to focus on philosophy tailored to another academic interest in 1) humanities and fine arts 2) social and behavioral sciences 3) natural sciences and mathematics.

A minimum of 3 courses must be taken in each track. (PHIL 101 may be counted only if taken as one of the first three courses in philosophy.)

Required Courses:

- PHIL 113 - Introduction to Logic Credits: 3
or PHIL 313- Symbolic Logic
- PHIL 123 - Ethics Credits: 3
- PHIL 371 - History of Western Philosophy I Credits: 3
- PHIL 372 - History of Western Philosophy II Credits: 3

Specialization: Career-Related Major

A 24-credit major which allows students to design a program of philosophy courses to complement the student's preparations for a specific career. This is a second major.

The choice of tracks and courses within them should be done in consultation with a member of the philosophy department. Each career track has two further required courses.

Required courses:

Five courses at the 300 level

- PHIL 113 - Introduction to Logic Credits: 3
or PHIL 313
- PHIL 123 - Ethics Credits: 3

Political Science

209 Spotts World Culture Building
724-738-2075

Political Science

Chair

Mark Daniels

Secretary

LuAnn Znosko

Faculty

George Brown, Mark Daniels, Heather Frederick, Donald Kerchis, Richard Martin, Daniel McIntosh, Sharon Sykora

“Unlike the faculty at a lot of colleges and universities these days, the faculty at SRU was always incredibly accessible and helpful, always willing to discuss intellectual and social issues, and giving of their time on a personal level, as well. I’ve found that the opportunities I had to work one-on-one with professors like Rich Martin, Carol Prorok, and Bernie Freyberg served as a solid foundation for the student-faculty interaction I experienced at Yale Law School. My professors at SRU never allowed me to become complacent, and always challenged me to discover something new. For those who have the initiative to forge independent relationships with faculty at SRU, the rewards are terrific.”

M. Lorrane Ford '94
Truman Scholar (Pa.) '93
Yale Law School '98
Attorney, Morrison & Foerster LLP (New York, NY)

Majors

- Political Science (BA)

Minors

- Minor in American Politics
- Minor in Comparative Politics/International Relations
- Minor in International Affairs
- Minor in Political Science

Minor in American Politics

Political Science Department

Requirements for the Minor - Credits: 18

At least 9 of the required 18 hours must be at the 300 level or above.

A minimum of 18 credits from the following:

- POLS 101 - American National Government Credits: 3
- POLS 200 - State and Local Government Credits: 3
- POLS 224 - Civil Liberties Credits: 3
- POLS 321 - The Presidency Credits: 3
- POLS 323 - The Courts Credits: 3
- POLS 325 - The Congress Credits: 3
- POLS 327 - Public Opinion and Political Attitudes Credits: 3
- POLS 354 - Seminar in Religion and Politics Credits: 3
- POLS 360 - Parties and Elections Credits: 3
- POLS 375 - Women and Politics Credits: 3
- POLS 403 - Constitutional Law Credits: 3

Minor in Comparative Politics/International Relations

Political Science Department

The minor requires the completion of a minimum of 18 credit hours.

- At least 9 credits must be taken at the 300 level or above.
- 9 credits from the Comparative Politics block and 9 credits from the International Relations block.

Requirements for the Minor - Credits: 18

Three courses from Comparative Politics:

- POLS 263 - Introduction to Comparative Politics Credits: 3
- POLS 331 - Seminar in Japanese Politics Credits: 3

- POLS 366 - Seminar in Chinese Politics Credits: 3
- POLS 369 - Politics of Developing Areas Credits: 3
- POLS 371 - Politics in Asia Credits: 3

Three courses from International Relations and Politics:

- POLS 103 - International Relations Credits: 3
- POLS 220 - Foreign Policy Credits: 3
- POLS 322 - The United Nations and International Law Credits: 3
- POLS 365 - International Political Economy Credits: 3
- POLS 367 - National and International Security: Problems and Issues Credits: 3

Minor in International Affairs

Political Science Department

Requirements for the Minor - Credits: 18

A total of 18 credit hours is required, plus demonstration of language skills at or above the 103 level.

The student is required to have at least one international educational experience, as approved by that student's academic advisor and the director of the minor in global studies. This requirement may be met by coursework abroad, or through an international service project. The requirement may be waived in cases where a student can demonstrate financial hardship or a comparable international experience.

100-Level Courses - Credits: 6

Select from the following:

- GES 105 - World Regional Geography Credits: 3
- HIST 153 - Twentieth Century World Credits: 3
- POLS 103 - International Relations Credits: 3
- PROF 105 - Economics of Social Issues Credits: 3

Global Electives - Credits: 9

At least 6 hours must be at the 300 level or above. Select from the following:

- COMM 217 - Intercultural Communication Credits: 3
- ECON 326 - International Economics Credits: 3
- ECON 415 - Trade Flow Analysis Credits: 3
- ENGL 402 - World Literature Credits: 3
- ENVS 440 - Science, Technology and the Environment Credits: 3
- FIN 427 - International Financial Management Credits: 3
- FIN 430 - International Banking Credits: 3
- GES 242 - Geography of Religion Credits: 3
- GES 302 - Cultural Geography Credits: 3
- GES 315 - Cartography I Credits: 3
- GES 331 - Economic Geography Credits: 3

- GES 415 - Cartography II Credits: 3
- HIST 330 - Warfare in the Twentieth Century Credits: 3
- HIST 451 - U.S. Foreign Relations to 1890 Credits: 3
- HIST 452 - U.S. Foreign Relations Since 1890 Credits: 3
- HLTH 311 - International Health Credits: 3
- POLS 220 - Foreign Policy Credits: 3
- POLS 263 - Introduction to Comparative Politics Credits: 3
- POLS 322 - The United Nations and International Law Credits: 3
- POLS 365 - International Political Economy Credits: 3
- POLS 367 - National and International Security: Problems and Issues Credits: 3

Demonstration of Language Competence

Demonstration of language skill may be by exam, by successful completion of coursework, or by credit for a language class above the 103 level. Non-native speakers in English may substitute demonstrated competence in English. Select from: Chinese, French, German, Italian, Japanese, Korean, Russian, and Spanish.

Foreign Cultural, Historical, or Political Studies - Credits: 3

Choose from the following:

- CHIN 306 - Survey of Chinese Civilization and Culture Credits: 3
- ENGL 316 - Asian Film Credits: 3
- FREN 306 - Modern France Credits: 3
- GES 303 - Asia Credits: 3
- GES 308 - Europe Credits: 3
- GES 309 - Africa Credits: 3
- GERM 305 - German Civilization Credits: 3
- GERM 306 - Modern German Civilization Credits: 3
- HIST 306 - Russia Since 1855 Credits: 3
- HIST 332 - England Since 1689 Credits: 3
- HIST 352 - Latin America Since 1830 Credits: 3
- HIST 362 - Africa North of the Zambezi Credits: 3
- HIST 363 - Southern Africa Credits: 3
- HIST 381 - East Asian Military Traditions Credits: 3
- HIST 382 - Modern Asian Pacific Rim Credits: 3
- HIST 386 - Modern China Credits: 3
- HIST 427 - Nineteenth Century Europe Credits: 3
- HIST 462 - The Contemporary Middle East Credits: 3
- KORN 306 - Modern Korean Civilization Credits: 3
- POLS 331 - Seminar in Japanese Politics Credits: 3
- POLS 348 - The Holocaust: Genocide and Political Violence Credits: 3
- POLS 366 - Seminar in Chinese Politics Credits: 3
- POLS 371 - Politics in Asia Credits: 3
- RUSS 306 - The Challenge of Russian Legacy Credits: 3
- SPAN 305 - Spanish Civilization Credits: 3
- SPAN 335 - Women in Hispanic Literature Credits: 3
- SPAN 431 - Spanish Literature - Medieval to 18th Century Credits: 3

- SPAN 432 - Spanish-American Literature: Precolumbian to 19th Century Credits: 3

Minor in Political Science

Political Science Department

Required Courses - Credits: 18

At least 9 of the 18 required credits must be at the 300 level or above. No more than 9 of the 18 required credits may be in any one of the area elective blocks.

Comparative Politics - no more than 9 credits

- POLS 263 - Introduction to Comparative Politics Credits: 3
- POLS 331 - Seminar in Japanese Politics Credits: 3
- POLS 366 - Seminar in Chinese Politics Credits: 3
- POLS 369 - Politics of Developing Areas Credits: 3
- POLS 371 - Politics in Asia Credits: 3

International Relations & Politics - no more than 9 credits

- POLS 103 - International Relations Credits: 3
- POLS 220 - Foreign Policy Credits: 3
- POLS 322 - The United Nations and International Law Credits: 3
- POLS 365 - International Political Economy Credits: 3
- POLS 367 - National and International Security: Problems and Issues Credits: 3

American Political Institutions - no more than 9 credits

- POLS 101 - American National Government Credits: 3
- POLS 200 - State and Local Government Credits: 3
- POLS 321 - The Presidency Credits: 3
- POLS 323 - The Courts Credits: 3
- POLS 325 - The Congress Credits: 3
- POLS 354 - Seminar in Religion and Politics Credits: 3

Political Theory and Thought - no more than 9 credits

- POLS 105 - Introduction to Political Theory Credits: 3
- POLS 341 - Classical Political Thought Credits: 3
- POLS 343 - Modern Political Thought Credits: 3
- POLS 345 - Contemporary Political Thought Credits: 3
- POLS 349 - Utopian Experiments: Issues of Gender and Power Credits: 3

Public Policy and Law - no more than 9 credits

- POLS 202 - Politics of Law Enforcement Credits: 3
- POLS 224 - Civil Liberties Credits: 3
- POLS 255 - Introduction to Public Policy Credits: 3
- POLS 340 - The Historical and Political Legacies of the Vietnam Era Credits: 3
- POLS 348 - The Holocaust: Genocide and Political Violence Credits: 3
- POLS 403 - Constitutional Law Credits: 3

Political Behavior - no more than 9 credits

- POLS 310 - Research Methods Credits: 3
- POLS 327 - Public Opinion and Political Attitudes Credits: 3
- POLS 329 - Political Learning Credits: 3
- POLS 333 - The Political Film Credits: 3
- POLS 354 - Seminar in Religion and Politics Credits: 3
- POLS 360 - Parties and Elections Credits: 3
- POLS 375 - Women and Politics Credits: 3
- POLS 444 - Capstone: Political Analysis Credits: 3

Political Science (BA)

Political Science Department

Are you interested in American politics, international affairs, or critical issues such as health, the environment, and civil rights? Do you want to understand theories concerning the ideal government and how power and resources are allocated in society? Do you want to study these subjects and pursue a career based on your interest? If so, you should consider studying political science.

Political science majors enjoy a versatility of skills and a marvelous range of exciting careers in federal, state and local governments; law; business; international organizations; nonprofit associations and organizations; campaign management and polling; journalism; pre-collegiate education; electoral politics; research and university and college teaching.

Members of the department assist students in developing a philosophy of life, acquiring meaningful civic roles, and learning the skills that are basic to political, social, and economic success. The preparation of students for responsible citizenship in the academic community is encouraged through participation in department and university affairs. Students are encouraged to participate in the Model United Nations program and the Model North Atlantic Treaty Organization program. Other organizations include Amnesty International, Americans for Informed Democracy, and the university's annual Holocaust Remembrance program. Students also have the opportunity to participate in Law Career Day conferences and travel and study abroad. Practical experience in politics is provided through class activities and the internship program that involves students in the work-a-day worlds of local communities, as well as state and national governments and businesses in Harrisburg and Washington, D.C.

Requirements for the Major - Credits: 36

Candidates for the Bachelor of Arts in Political Science Degree are Required:

1. to complete 39 credit hours of course work
2. to complete two courses in four of six area listed below.
3. to complete POLS 101, POLS 310, POLS 444.
4. to complete 21 hours in political science at the 300 or 400 level.
5. to complete 40% of the total number of hours counted towards graduation at the 300 or 400 level. (In order to accomplish this, students are strongly urged to use 300 or 400 level courses to complete their liberal studies enrichment courses.)

In Addition, Students:

1. may complete an internship, POLS 450, of up to twelve hours, but not more than six of those hours may count toward the minimum requirement of thirty-six hours for completion of the major. Alternatively a student might complete the Harrisburg Internship Program, Pols 451, 452, and 454; but, again not more than six of those hours may count toward the minimum requirement of thirty-six hours for the completion of the major.
2. may elect to take as many elective courses beyond the required minimums as they choose, but not more than fifteen hours in any one block may count toward the minimum requirement of thirty-six hours for completion of the major.
3. earning a bachelor of arts degree must demonstrate a competency at the equivalent of the 103 level in a foreign language.

American Political Institutions:

- POLS 200 - State and Local Government Credits: 3
- POLS 321 - The Presidency Credits: 3
- POLS 323 - The Courts Credits: 3
- POLS 325 - The Congress Credits: 3

Political Behavior:

- POLS 327 - Public Opinion and Political Attitudes Credits: 3
- POLS 329 - Political Learning Credits: 3
- POLS 333 - The Political Film Credits: 3
- POLS 354 - Seminar in Religion and Politics Credits: 3
- POLS 360 - Parties and Elections Credits: 3
- POLS 375 - Women and Politics Credits: 3

Political Theory & Thought:

- POLS 105 - Introduction to Political Theory Credits: 3
- POLS 341 - Classical Political Thought Credits: 3
- POLS 343 - Modern Political Thought Credits: 3
- POLS 345 - Contemporary Political Thought Credits: 3
- POLS 349 - Utopian Experiments: Issues of Gender and Power Credits: 3

International Relations & Politics:

- POLS 103 - International Relations Credits: 3

- POLS 220 - Foreign Policy Credits: 3
- POLS 322 - The United Nations and International Law Credits: 3
- POLS 365 - International Political Economy Credits: 3
- POLS 367 - National and International Security: Problems and Issues Credits: 3

Comparative Politics:

- POLS 263 - Introduction to Comparative Politics Credits: 3
- POLS 331 - Seminar in Japanese Politics Credits: 3
- POLS 366 - Seminar in Chinese Politics Credits: 3
- POLS 369 - Politics of Developing Areas Credits: 3
- POLS 371 - Politics in Asia Credits: 3

Public Policy & Law:

- POLS 202 - Politics of Law Enforcement Credits: 3
- POLS 224 - Civil Liberties Credits: 3
- POLS 255 - Introduction to Public Policy Credits: 3
- POLS 340 - The Historical and Political Legacies of the Vietnam Era Credits: 3
- POLS 348 - The Holocaust: Genocide and Political Violence Credits: 3
- POLS 359 - Policy Analysis and Evaluation Credits: 3
- POLS 403 - Constitutional Law Credits: 3

Theatre

300-C Miller Auditorium
724-738-2090

Theatre

Chair

Gordon Phetteplace

Secretary

Becky Lindey

Technical Director

Michael Boone

Faculty

Rebecca Morrice, Gordon Phetteplace, Colleen Reilly, David Skeele, Laura Smiley

Studies and experiences in the theatre tap some of the deepest veins of human self-expression and confirm the abiding hold this unique art form has on thoughtful and imaginative people everywhere. Courses in theatre history examine the origins of the art and explore the ways in which theatre has responded to and developed from its times. Courses in acting or in the crafts of theatre enhance the skills of students, whether they seek eventual performance careers or simply wish to be more knowledgeable audience members. The performance of great dramatic literature enables

students to touch intimately some of the enduring ideas of civilization: love, death, hope, ambition, loyalty. People who succeed in the theatre have learned how to cooperate, how to work within deadlines and constraints, how to liberate and control expressiveness, and how to deal constructively with the tensions of performance.

The Department of Theatre sponsors an active co-curricular production program in a well-equipped theatre on campus. Plays of wide-ranging interest and appeal are produced each academic year. Recent productions include Cabaret, Hedda Gabler, As You Like It, Inspecting Carol, An Evening with Sam Shepard, The Tempest, Stop Kiss, Loot, Tallgrass Gothic, This is Our Youth, Little Shop of Horrors, and Macbeth.

Majors

- Theatre (BA)

Minors

- Minor in Theatre

Minor in Theatre

Theatre Department

Requirements for a Minor in Theatre - Credits: 24

Required Courses - 11 credits

- THEA 131 - Fundamentals of Acting Credits: 3
- THEA 132 - Stagecraft Credits: 3
- THEA 151 - Rehearsal and Production Credits: 1
2 credits required
- THEA 281 - Survey of Dramatic Literature I Credits: 3
or THEA283 - Survey of Dramatic Literature II

Electives - 13 credits

Choose 13 credits (Seven credits must be at the 300 level or above)

- THEA 141 - Introduction to the Theatre Credits: 3
- THEA 151 - Rehearsal and Production Credits: 1
- THEA 159 - Introduction to Arts Administration Credits: 3
- THEA 215 - Drawing/Drafting/CAD Credits: 3
- THEA 222 - Acting II Credits: 3
- THEA 235 - Costume Technology Credits: 3
- THEA 259 - Studies in Audience Development Credits: 3
- THEA 269 - Playwriting Credits: 3
- THEA 281 - Survey of Dramatic Literature I Credits: 3
- THEA 283 - Survey of Dramatic Literature II Credits: 3
- THEA 322 - Acting Technique Credits: 3
- THEA 324 - Stage Makeup Credits: 3
- THEA 328 - Acting Shakespeare Credits: 3

- THEA 329 - Shakespeare Tour Credits: 3
- THEA 330 - Voice and Movement for the Actor Credits: 3
- THEA 332 - Advanced Stagecraft Credits: 3
- THEA 333 - Scene Design Credits: 3
- THEA 334 - Stage Lighting Credits: 3
- THEA 335 - Costume Design and History Credits: 3
- THEA 337 - Directing Credits: 3
- THEA 345 - Stage Management and Safety Credits: 3
- THEA 355 - Projects in Theatre Credits: 1 to 2
- THEA 369 - Advanced Playwriting Credits: 3
- THEA 370 - Playwriting Genres and Styles Credits: 3
- THEA 372 - Senior Seminar in Playwriting Credits: 3
- THEA 393 - History of Theatre Design and Architecture Credits: 3
- THEA 394 - Theories of Acting and Directing Credits: 3
- THEA 425 - Professional Theatre Practice Credits: 3
- THEA 450 - Internship Credits: Up to 12
- THEA 490 - Independent Study Credits: 1 to 3
- THEA 498 - Selected Topics Credits: 1 to 3

Theatre (BA)

Theatre Department

Requirements for the Theatre Bachelor of Arts - Credits: 40

Required Core Courses for all Specializations - Credits: 22

- THEA 131 - Fundamentals of Acting Credits: 3
- THEA 132 - Stagecraft Credits: 3
- THEA 151 - Rehearsal and Production Credits: 1
(Four credits required)
- THEA 281 - Survey of Dramatic Literature I Credits: 3
- THEA 283 - Survey of Dramatic Literature II Credits: 3
- THEA 337 - Directing Credits: 3
- THEA 425 - Professional Theatre Practice Credits: 3

Select One of the Following:

Specialization: Acting - Credits: 18

Required Courses - Credits: 18

- THEA 222 - Acting II Credits: 3
- THEA 322 - Acting Technique Credits: 3
- THEA 324 - Stage Makeup Credits: 3

- THEA 328 - Acting Shakespeare Credits: 3
- THEA 330 - Voice and Movement for the Actor Credits: 3
- THEA 394 - Theories of Acting and Directing Credits: 3

Electives - Credits: 0

- THEA 141 - Introduction to the Theatre Credits: 3
- THEA 159 - Introduction to Arts Administration Credits: 3
- THEA 215 - Drawing/Drafting/CAD Credits: 3
- THEA 235 - Costume Technology Credits: 3
- THEA 259 - Studies in Audience Development Credits: 3
- THEA 269 - Playwriting Credits: 3
- THEA 322 - Acting Technique Credits: 3
- THEA 329 - Shakespeare Tour Credits: 3
- THEA 332 - Advanced Stagecraft Credits: 3
- THEA 333 - Scene Design Credits: 3
- THEA 334 - Stage Lighting Credits: 3
- THEA 335 - Costume Design and History Credits: 3
- THEA 339 - New Play Development Credits: 3
- THEA 340 - International Theatre Experience Credits: 3
- THEA 345 - Stage Management and Safety Credits: 3
- THEA 355 - Projects in Theatre Credits: 1 to 2
- THEA 369 - Advanced Playwriting Credits: 3
- THEA 370 - Playwriting Genres and Styles Credits: 3
- THEA 372 - Senior Seminar in Playwriting Credits: 3
- THEA 393 - History of Theatre Design and Architecture Credits: 3
- THEA 450 - Internship Credits: Up to 12
- THEA 490 - Independent Study Credits: 1 to 3
- THEA 498 - Selected Topics Credits: 1 to 3

Specialization: Arts Administration -Credits 18

Required Courses - Credits: 18

- PROF 220 - Introduction to Nonprofit Leadership Credits: 3
- PROF 325 - Social and Ethical Issues in Philanthropy and Fundraising Credits: 3
- THEA 159 - Introduction to Arts Administration Credits: 3
- THEA 259 - Studies in Audience Development Credits: 3
- THEA 393 - History of Theatre Design and Architecture Credits: 3
or THEA394, Theories of Acting and Directing
- THEA 450 - Internship Credits: Up to 12

Electives - credits 0

- THEA 141 - Introduction to the Theatre Credits: 3
- THEA 215 - Drawing/Drafting/CAD Credits: 3
- THEA 222 - Acting II Credits: 3

- THEA 235 - Costume Technology Credits: 3
- THEA 269 - Playwriting Credits: 3
- THEA 322 - Acting Technique Credits: 3
- THEA 324 - Stage Makeup Credits: 3
- THEA 328 - Acting Shakespeare Credits: 3
- THEA 329 - Shakespeare Tour Credits: 3
- THEA 330 - Voice and Movement for the Actor Credits: 3
- THEA 332 - Advanced Stagecraft Credits: 3
- THEA 333 - Scene Design Credits: 3
- THEA 334 - Stage Lighting Credits: 3
- THEA 335 - Costume Design and History Credits: 3
- THEA 339 - New Play Development Credits: 3
- THEA 340 - International Theatre Experience Credits: 3
- THEA 345 - Stage Management and Safety Credits: 3
- THEA 355 - Projects in Theatre Credits: 1 to 2
- THEA 369 - Advanced Playwriting Credits: 3
- THEA 370 - Playwriting Genres and Styles Credits: 3
- THEA 372 - Senior Seminar in Playwriting Credits: 3
- THEA 394 - Theories of Acting and Directing Credits: 3
- THEA 450 - Internship Credits: Up to 12
- THEA 490 - Independent Study Credits: 1 to 3
- THEA 498 - Selected Topics Credits: 1 to 3

Specialization: Design/Technology - Credits: 27

Required Courses - Credits: 15

- THEA 215 - Drawing/Drafting/CAD Credits: 3
- THEA 235 - Costume Technology Credits: 3
- THEA 333 - Scene Design Credits: 3
- THEA 334 - Stage Lighting Credits: 3
- or
- THEA 335 - Costume Design and History Credits: 3
- THEA 393 - History of Theatre Design and Architecture Credits: 3

Electives - Credits: 3

(All must be 300 level or above)

- THEA 322 - Acting Technique Credits: 3
 - THEA 324 - Stage Makeup Credits: 3
 - THEA 328 - Acting Shakespeare Credits: 3
 - THEA 329 - Shakespeare Tour Credits: 3
 - THEA 330 - Voice and Movement for the Actor Credits: 3
 - THEA 332 - Advanced Stagecraft Credits: 3
 - THEA 334 - Stage Lighting Credits: 3
- * see footnote

- THEA 335 - Costume Design and History Credits: 3
* see footnote
- THEA 339 - New Play Development Credits: 3
- THEA 340 - International Theatre Experience Credits: 3
- THEA 345 - Stage Management and Safety Credits: 3
- THEA 355 - Projects in Theatre Credits: 1 to 2
- THEA 369 - Advanced Playwriting Credits: 3
- THEA 370 - Playwriting Genres and Styles Credits: 3
- THEA 372 - Senior Seminar in Playwriting Credits: 3
- THEA 394 - Theories of Acting and Directing Credits: 3
- THEA 450 - Internship Credits: Up to 12
- THEA 490 - Independent Study Credits: 1 to 3
- THEA 498 - Selected Topics Credits: 1 to 3

Footnote

*Courses may not be used to fulfill more than one requirement.

Specialization: Playwriting - Credits: 19

Required Courses - Credits: 12

- THEA 269 - Playwriting Credits: 3
- THEA 369 - Advanced Playwriting Credits: 3
- THEA 370 - Playwriting Genres and Styles Credits: 3
- THEA 372 - Senior Seminar in Playwriting Credits: 3

Major Electives - Credits: 6

Choose 6 credits. All must be 300-level or above.

- THEA 322 - Acting Technique Credits: 3
- THEA 324 - Stage Makeup Credits: 3
- THEA 328 - Acting Shakespeare Credits: 3
- THEA 329 - Shakespeare Tour Credits: 3
- THEA 330 - Voice and Movement for the Actor Credits: 3
- THEA 332 - Advanced Stagecraft Credits: 3
- THEA 333 - Scene Design Credits: 3
- THEA 334 - Stage Lighting Credits: 3
- THEA 335 - Costume Design and History Credits: 3
- THEA 339 - New Play Development Credits: 3
- THEA 340 - International Theatre Experience Credits: 3
- THEA 345 - Stage Management and Safety Credits: 3
- THEA 355 - Projects in Theatre Credits: 1 to 2
- THEA 393 - History of Theatre Design and Architecture Credits: 3
- THEA 394 - Theories of Acting and Directing Credits: 3
- THEA 450 - Internship Credits: Up to 12

- THEA 490 - Independent Study Credits: 1 to 3
- THEA 498 - Selected Topics Credits: 1 to 3

Women's Studies

007E Strain Behavioral Science Building
724-738-2992

Women's Studies

The Women's Studies Program, a multi-disciplinary approach to learning, seeks to correct the focus of an academic establishment that has traditionally ignored, minimized, or excluded the work of women in most branches of knowledge and areas of experience, both within and outside of the classroom.

Director

Jace Condravy (Acting Director)

The Women's Studies program is a multidisciplinary approach to teaching and learning. Its intent is to correct the focus of the academic establishment that has traditionally ignored, minimized, or excluded the work of women in most branches of knowledge and areas of experience. Its positive approach is a reassessment of learning and culture, and its goal is the assimilation of the best efforts of women into an integrated and equitable society. The program is not intended to replace one's major but rather to strengthen one's undergraduate preparation through a concentration of various aspects of Women's Studies. A concentration in Women's Studies prepares students for graduate study not only in that area but also any academic area that requires a fully balanced, gender-sensitive understanding of society and culture. Also, Women's Studies prepares students to interact in a professional world that reflects the marked changes occurring in traditional gender roles.

Minors

- Minor in Women's Studies

Minor in Women's Studies

Women's Studies

The Women's Studies program is a multidisciplinary approach to teaching and learning. Its intent is to correct the focus of the academic establishment that has traditionally ignored, minimized, or excluded the work of women in most branches of knowledge and areas of experience. Its positive approach is a reassessment of learning and culture, and its goal is the assimilation of the best efforts of women into an integrated and equitable society. The program is not intended to replace one's major but rather to strengthen one's undergraduate preparation through a concentration of various aspects of Women's Studies. A concentration in Women's Studies prepares students for graduate study not only in that area, but also any area that requires a fully balanced, gender-sensitive understanding of society and culture. Also, Women's Studies prepares students to interact in a professional world that reflects the marked changes occurring in traditional gender roles.

Program Requirements - Credits: 15

Currently, student may earn a minor in Women's Studies by taking fifteen credits, which must include WMST 115 and six credits numbered at the 300 level or above from the following courses, and achieving a QPA of 2.000 or better.

In addition, students may earn a Document of Academic Achievement in Women's Studies by earning twelve credits from the following courses with a minimum QPA of 2.000.

- EGEO 368 - Women in Science Credits: 3
- ENGL 210 - Interpreting Literature Credits: 3
(designated sections)
- ENGL 243 - Literature of the Women's Movement Credits: 3
- GERO 425 - Women and Aging Credits: 3
- HIST 318 - Gender and Sexuality in European Society Credits: 3
- HIST 319 - History of Women to 1750 Credits: 3
- HIST 320 - History of Women from 1750 to the Present Credits: 3
- HIST 442 - Studies in U.S. Women's History Credits: 3
- HLTH 211 - Women's Health Issues Credits: 3
- HONR 386 - The Great Books Credits: 3
- HONR 387 - The Great Books Credits: 3
- MUSI 301 - Women and Music Credits: 3
- POLS 349 - Utopian Experiments: Issues of Gender and Power Credits: 3
- POLS 375 - Women and Politics Credits: 3
- PROF 339 - Gender Roles and Society Credits: 3
- PROF 360 - Women in Asian Societies Credits: 3
- PSYC 300 - Psychology of Gender Credits: 3
- PSYC 315 - Psychology of Lesbian and Gay Identities Credits: 3
- WMST 115 - Introduction to Women's Studies Credits: 3
- WMST 415 - Feminist Perspectives in the Disciplines Credits: 3
- WMST 450 - Internship Credits: Up to 12
- WMST 490 - Independent Study Credits:

Enrollment Services

116 North Hall Welcome Center
724-738-4868

Associate Provost

Amanda Yale

Assistant to the Associate Provost for Enrollment Services; Director of FYRST Academic Progress Decisions and Resources; Developer of Degree Audit Functionality

Connie Laughner

Administrative Assistant

Carolyn Colosimo

Management Technician

Nancy Ejzak

Technology Applications Coordinator for Enrollment Services

Michael White

Departments

Academic Services
Academic Advisement
Academic Records and Summer School
Career Services
Financial Aid
Graduate Admissions
Orientation
Retention Services
Services for Students with Disabilities
Undergraduate Admissions

Programs

First Year Studies

Rock Solid Support

First Year Studies exists to support the teaching and learning process. The FYRST Program is designed to ease the transition into college life by providing a coordinated effort of offering academically based support services to students. The area has primarily one goal—to facilitate the student transition from high school or work to the university. Structurally, FYRST is the home of all new freshmen, organized within the Division of Enrollment Services. FYRST is comprised of The Department of Academic Services, Office of Retention, and Office for Students with Disabilities.

The majority of the university's academic support services are coordinated and delivered to new students by FYRST. Specifically, FYRST includes spring and summer orientation programming initiatives, first and second year academic advising, advising for exploratory students, learning community clusters, freshman seminar, tutoring, supplemental instruction, developmental math coursework, early-alert retention-based initiatives, services for students with disabilities, academic support services designed especially for first-year academically-challenged students, and support services for students who fall into academic difficulty during their college experience.

FYRST is about creating successful learning experiences for students in and outside the classroom. Progression through FYRST is to be assisted by the faculty advisor, 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 must attain the minimum number of credits, the specific courses and the minimum QPA required by the major department. Through setting high goals and commitment to meeting those goals, new freshmen are to be able to support their efforts through FYRST and make a successful transition.

Career Services

124 Bailey Library
724-738-2028

Associate Directors

Anthony Linnan
John Snyder

Assistant Director

Renee Coyne

Secretaries

Michelle Stenander
Lisa Theodorson

Career Services offers services to assist students in planning and pursuing a satisfying career. The services include appointments for selecting a major and career counseling, career interest inventory assessment, on-campus professional interviews, on-campus and off-campus job fairs, job vacancy listings, video mock interviews, administration of several standardized tests including Praxis, MAT, and the GRE Subject tests, and resource information about summer and professional employers, graduate schools, and job search preparation and strategies. Career Services provides a technology-based career resource center that is equipped with Dell computers, HP laser printers and supporting software. DISCOVER, a web based vocational guidance program is available to assist students to engage in career assessment and exploration. Students are able to respond to internship and employment opportunities advertised on the internet to access employer information, and to develop quality resumes and cover letters in printed form or for electronic transmission.

Undergraduate students are encouraged to contact the office for information about summer and/or part-time off-campus employment opportunities. The office web page provides more details about services and staff www.sru.edu/career.

International Services

114 Carruth Rizza Hall
724-738-2057

Director

Pamela Frigot

Secretaries

Janice Druchel, Brenda McKissick

Office of International Services

The mission of the international Services Office is to provide international experiences for Slippery Rock University students and staff to pursue academic and cultural exploration and growth.

International Student Services

In recognition of the unique needs of students who are not US citizens/permanent residents, the Office of International Services 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.

Study Abroad Opportunities

International study programs are available to all Slippery Rock University students varying in length from one week to a year. These offer students the opportunity to explore different educational systems, cultures, and ways of life, as well as to foster personal growth, cultural enrichment and enhanced employment opportunities.

The following are available for semester and academic year study:

Australia (Melbourne) – 12-18 credits per semester at Victoria University in liberal studies and most SRU majors.

China (Nanjing) – 12-15 credits per semester at Nanjing University in Chinese language, history, and culture. A minimum of one semester of previous Chinese language study is required.

Costa Rica (San Jose) – 12-15 credits per semester at University of Costa Rica in liberal studies and a variety of SRU majors. Spanish language fluency is required.

England (Bradford): 12-18 credits per semester at Bradford University in liberal studies and most SRU majors.

England (London): 12-18 credits per semester at Kingston University or Rehampton University in liberal studies and most SRU majors.

England (Middlesbrough): 12-18 credits per semester at University of Teesside in liberal studies and most SRU majors.

France (Cannes): 12-15 credits per semester at College International de Cannes in French language and culture.

Germany (Bamberg): 12-15 credits per semester at Otto Friedrich University Bamberg in liberal studies and a variety of SRU majors. German language proficiency is required.

Hungary (Budapest): 12-15 credits per semester at Semmelweis University for physical education, exercise science and sport management majors.

India (Rajasthan): 12-15 credits per semester at Rajasthan Vidapeeth University in liberal studies and a variety of SRU majors.

Ireland (Dublin): Fall semester student teaching available as a second placement site in the Irish public school system.

Ireland (Limerick): 12-15 credits per semester at University of Limerick in liberal studies and a variety of SRU majors.

Japan (Osaka): 12-15 credits per semester at Kansai Gaidai University in Japanese language, business, social sciences, culture/humanities. A minimum of one semester of previous Japanese language study required.

Mexico (Mexico City): Spring semester student teaching is available as a second placement at the American School Foundation.

Poland (Poznan): 12-18 credits per semester at Academy of Fine Arts for Art majors/minors.

Scotland (Edinburgh): 12-15 credits per semester at Queen Margaret University in liberal studies and a variety of SRU majors.

Slovakia (Bratislava): 12-18 credits per semester at Comenius University in liberal studies and a variety of SRU majors.

Slovakia (Bratislava): 12-18 credits per semester at Academy of Fine Arts and Design for Art majors/minors.

South Korea (Kangwon): 12-15 credits per semester at Kangwon National University in Korean language and culture. A minimum of one semester of previous Korean language study required.

Spain (Madrid): 12-15 credits per semester at university of Alcalá de Henares in Spanish language and culture.

Wales (Aberystwyth): 12-18 credits per semester at Aberystwyth University in liberal studies and most SRU majors.

Summer programs are offered by Slippery Rock University professors in international locations that vary each year. Ranging from one to three weeks in length where three to six credits can be earned, recent classes have met in Canada, Costa Rica, England, France, India, Scotland and Spain.

January and spring break seminars offer a 7-10 day international trip in conjunction with coursework during the regular spring semester. Locations and faculty leaders vary per year. Recent sites include England, Ireland, Costa Rica, Italy, Czech Republic, Peru, Netherlands, Belgium, and Bahamas.

Additional opportunities for summer or semester study may also be available via third party program providers.

Financial aid may be applied to most study abroad; further details available from the SRU Financial Aid Office. Travel stipends are also available to SRU students to subsidize travel costs.

Additional services through the office include passport applications, International Student I.D. cards, travel arrangements, etc.

Office for Students with Disabilities

122 Bailey Library
724-738-4877

Director, Office for Students with Disabilities

Linda Quidone

Secretary

Karen Baker

The Office for Students with Disabilities 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 so a personal interview can be scheduled.

Office of Retention Services

108 North Hall Welcome Center
724-738-2011

Director

Carla Hradisky-Coffelt

Retention Strategist

George McDowell

Secretary

Melissa Barber

Service to our students is paramount at Slippery Rock University. We are not only interested in recruiting students to The Rock, but are equally as interested in seeing them through to graduation. Through the Office of Retention Services,

Slippery Rock begins early in the first semester to retain its students by addressing the issues that a first semester student will experience. Assistance is offered to FYRST students through several computerized assessment programs.

Within the first 15 days of the semester, students are asked through a survey called MAP-Works to let us know how they are doing. They tell us their strengths and weaknesses. Once that information has been compiled, our staff goes to work to address their needs individually. We address academic issues as well as those issues involving homesickness and joining sport teams.

The Office of Retention Services also serves as a clearinghouse for any questions, problems or concerns a FYRST student may experience. Knowledgeable staff can direct the FYRST student appropriately to avoid the "Rock Run Around".

Academic Services

009 and 106 Bailey Library
724-738-2012
724-738-2009

Chair

Mark Campbell

Secretaries

Brenda Beatty, Marsha McKnight

Faculty

Cathy Brinjak, Mark Campbell, Jessamine Montero, Susan Parsons, Annette Salsovic, Christophas Walker

Other Programs

- First Year Studies
- Student Support Services Program

First Year Studies

First Year Studies begins with a Rock Solid Orientation

FYRST begins with an orientation program during which students are introduced to the campus, to a FYRST faculty advisor, and to many institutional resources and services. New student orientation is designed to help students achieve a successful transition to university life. Slippery Rock employs new and innovative ways to greet new students in their first few days on campus

and assist them continually throughout their first year. New students who are admitted early have the opportunity to attend an early orientation program in the spring of their senior year. These students receive a head start on their college experience by scheduling for classes, receiving financial aid information, making and securing living arrangements, and meeting new friends, faculty, and college staff. The orientation program, which is conducted in June, is comprised of an overnight experience and more time to explore the campus and its resources. In August, new students are invited back to campus prior to the beginning of the fall semester for a welcome orientation session.

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.

First Year Studies (FYRST) Advisement

All academic advisement of new freshmen is coordinated and directed by FYRST. The mission of FYRST advising is to personalize the first year 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. FYRST advising provides assistance that will help students to acquire the knowledge and skills necessary to select an academic program or major which best suits their individual abilities, interests and career goals. During the student's enrollment in FYRST, 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 who have not decided upon a major. Progression through FYRST will be assisted by the faculty advisor, 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 quality point average required by the major department.

Upper-class Student/Transfer Student Advisement

As a student progresses from FYRST to the degree-granting college, some departments may reassign their students to different academic advisors during the upper-division years, while other departments may permit the student to retain the FYRST advisor throughout his/her years of study at the university. Upon entrance into the university, new transfer students are assigned academic advisors from their major program.

Exploratory (Undeclared) Program

Students entering the university who are exploring majors participate in the Exploratory Program. These students are advised by FYRST advisors who volunteer their time to advise students as part of the Exploratory Program. The faculty identified as FYRST Exploratory advisors have an interest in and a commitment to assisting new students in their transition to college life.

Advisement Development

The Academic Advisement Center is responsible for developing advisor and student advising resources, conducting advisor training and first year student advising informational workshops, and maintaining its involvement in retention-related and first-year research activities.

Learning Community Clusters

The university recently 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, student-faculty 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.

Freshman Seminar (FYRST Seminar)

The freshman seminar course is designed especially to enhance the academic, social, and personal integration of the student by focusing on transition topics related to the college environment (e.g., time management, active learning strategies, note-taking skills, test preparation, goal setting, use of campus technology, academic advising, major and career exploration, professional development in the technology fields, diversity, relationship issues, and issues of wellness).

Academic and Learning Assistance Resources

Available online from the Academic Services Center are a series of academic and learning assistance resources for students. This resource center offers free materials on first-year and adult academic transition tools; learning assistance resources on time management, effective reading, test preparation, test taking and note taking; and academic advising resources on scheduling tips, quality point average calculations, and information on major and career selection.

Tutorial Center

Slippery Rock University's Tutorial Center assists undergraduate students in meeting their academic goals with peer individual and group tutoring services, study skills workshops, and Supplemental Instruction (SI). Emphasis upon basic skills and upon the Liberal Studies areas, study skills instruction and support, communication with faculty, and extensive training and supervision of tutors meets students' immediate academic and content based needs and provides them with effective and transferable study skills. 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 model and teach study skills strategies. 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.

College Skills Workshops

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, increasing test-taking skills.

Student Support Services Program

The federally funded Student Support Services Program serves first-generation, income-eligible students who may experience academic challenges at Slippery Rock. (Students affiliated with the Office for Students with Disabilities are eligible to participate as well). Students who are on academic probation or who are on an academic readmission contract also participate in the program to develop successful college skills. Students experience individual and group academic advisement activities and learning strategies course work which teaches them how to apply and develop effective learning and study habits.

Academic Policies

Academic procedures and policies are subject to change at any time. Changes may involve course content, credit hours, program requirements, and program admission requirements among others. It is the students' responsibility to review their Degree Audit Report (DARS) and confer with their academic advisors, the appropriate academic department, and the Office of Academic Records regarding current academic procedures and policies.

Click on a link to be taken to the entry below.

- Procedures and Policies
 - Absence Policy
 - Academic Advisors
 - Academic Complaints
 - Academic Dismissal
 - Academic Integrity
 - Academic Probation
 - Academic Renewal
 - Academic Suspension
 - Attendance Policy
 - Auditing Courses
 - Change of Major
 - Classification of Students
 - Continuous Registration
 - Course Levels
 - Credit by Examination
 - Credit for Military Service
- Degree Requirements
 - Application for Graduation
 - Completion of Degree/Certificate Requirements
 - Computer Competency
 - Exit Examinations
 - Graduation Requirements
 - Earning 2 Degrees or 2 Majors
 - Minimum Credit Hour and Quality Point Requirements
 - Modern Language Requirement for BA Degree
 - Residency
 - Second Baccalaureate Degree
- Drop, Add, Withdrawal
- Final Examinations
- Grade Information
 - Procedure for Filing Grade Appeal
 - Composition of Grade Appeal Board
 - Grade Appeal Board Procedures
 - Grade Change
 - Grade Release Policy
 - Grading System and Policies
 - Incomplete Grades
 - Pass-No Credit Grades
 - Quality Point Average
 - X Symbol
- Name Change
- Notice of Consumer Information Web Site and Annual Security Report
- Notice Designating Directory Information
- Prerequisites and Co-requisites
- Readmission
- Records Privacy Policy
- Repeat of Courses
- Semester Credit Load
- Senior Citizens
- Summer Sessions
- Testing for Advanced Placement
- Transcripts
- Transient Student Status
- Upper Division Course Work
- Visiting Students
- Withdrawal from the University

- Freshman Cohort and Student Athlete Graduation Rate

Procedures and Policies

Absence Policy

The Student Health Center will provide written verification when it confines students to their residences or the Health Center for 24 hours or longer. Written verification will be provided when a student is hospitalized if the Health Center is aware of the situation. The Health Center does not routinely issue statements verifying a brief student visit to the Health Center. Phone verification of Health Center visits may be provided to an instructor at the student's request. No confidential information about the student's health status can be released without the student's permission. The Provost and Vice President for Academic Affairs will be notified by the Health Center when a student is expected to be out of classes for an extended period of time. Faculty members will be notified through their deans' offices.

Academic Advisors

Academic advisors are assigned in the freshman year by the students' major department or the Academic Advisement Center. Some departments may reassign their students to different academic advisors during the students' sophomore year. Secondary education students are assigned academic advisors by the department of secondary education/foundations of education in consultation with the content area department. Exploratory program students are assigned academic advisors by the Academic Advisement Center.

It is the academic advisors' responsibility to aid their advisees with their academic and educational plans. The advisors are not responsible for making certain that their advisees graduation requirements have been met. This is the sole responsibility of the students.

Academic Complaints

Students who want to file an appeal concerning any academic matter should first contact their instructor. Barring resolution there, students should contact the appropriate departmental chairperson, then the appropriate dean. Further appeal is to be directed to the Provost and Vice President for Academic Affairs. Please refer to the university's Grade Appeal Policy.

TOP

Academic Dismissal

Academic dismissal results with the third academic suspension. Students who have been academically dismissed may appeal to the Academic Dismissal Review Board after sitting out for a minimum of one calendar year.

Academic Integrity

The value of a Slippery Rock University education is determined by the quality and character of Slippery Rock University students and graduates. Therefore, students and student organizations are expected to uphold academic integrity.

- All academic work, including, but not limited to, papers, computer programs, assignments, and tests, must consist of the students' own work.
- Students are expected to learn and practice proper techniques for accurately citing resource material.
- Students are expected to be honest in all academic work, refraining from all forms of cheating.
- Students are expected to function as students, including, but not limited to, attending class regularly and completing all assignments and examinations.

Students charged with academic dishonesty will deal with either the coordinator of Judicial Programs or the course instructor or both. If the instructor handles the matter, the instructor is to inform the departmental chairperson of the problem and its resolution. The department chairperson is to forward the information to the appropriate dean who will then inform the Provost and Vice President for Academic Affairs. If the instructor decides to refer the matter to the Office of Judicial Programs, the coordinator of Judicial Programs will begin institutional action through an investigation into the matter. If there is sufficient cause, students will be notified of the charges brought against them under the Code of Conduct. The student may then face judicial action, in addition to the instructor's action, which may include a university hearing board that could lead to suspension or dismissal from the university.

Academic dishonesty may take many forms. Examples of academic dishonesty include, but are not limited to, the following:

- buying, selling, or trading papers, projects, or other assignments;
- using or attempting to use any unauthorized book, notes, or assistance from any person during a quiz or examination;
- plagiarizing and/or submitting the work of another as your own;
- fabricating information or citations;
- facilitating dishonest acts of others pertaining to academic work
- possessing unauthorized examinations;
- submitting, without instructor permission, work previously used;
- tampering with the academic work of another person;
- ghosting-taking a quiz or exam in place of a student or having any person take a quiz or exam in your place;
- any attempt to falsify an assigned grade or an examination, quiz, report, or program or in a grade book, document, or other record;
- any attempt, or actual, computer program theft; illegal use of software; inappropriate use of the Internet, such as, but not limited to, illegal or unauthorized transmissions; or improper access to any computer system or account;
- any attempt, or actual, collusion willfully giving or receiving unauthorized or unacknowledged assistance on any assignment (both parties to the collusion are considered responsible.)
- forging a faculty member's or administrator's signature on any card, form or document.

Academic Probation

[^ TOP](#)

Academic probation results when the quality point average (QPA) for all courses attempted at Slippery Rock University is less than a 2.000 (C). Students will also be placed on academic probation whenever they earn less than a 1.000 semester QPA and have a cumulative QPA of 2.000 or higher. Students on academic probation may continue at the university under conditions developed by the appropriate academic dean or the Director of Retention Services and agreed to by the student.

Academic Renewal

Students occasionally perform at an academic level that makes them ineligible to continue their studies, and they withdraw or are suspended from school. Subsequently, some want to resume their college work but find their previous academic record an obstacle.

Academic Renewal provides an opportunity for persons in this situation to apply for a fresh undergraduate start at Slippery Rock University on the basis that their entire prior undergraduate record be disregarded and they begin their college study again with no credits attempted or earned and no quality points earned. No transfer credits taken at any time will be used towards the completion of an SRU degree. Academic Renewal may be awarded to a student only once and is applicable only to students enrolled at Slippery Rock University.

Prior to applying for admission on this basis, at least five years must have elapsed since the end of the semester in which the applicant was last in attendance for credit at any college or university. The applicant must present evidence that the conditions which caused the poor academic record have changed so there is now a reasonable expectation that the applicant will perform satisfactorily if admitted.

Upon approval of the petition by the Director of Retention Services or dean of the college in which the student was enrolled prior to their withdrawal or suspension, the student will be admitted as a beginning freshman. Students showing competency in any area may be allowed advanced standing (without credit) or a waiver of requirements the same as any entry-level student.

It should be noted that the prior record remains a part of the student's overall academic record, but none of it carries forward as part of a degree program. The date of the Academic Renewal will be entered on the student's transcript along with a statement prohibiting the use of previously earned credits and quality points in meeting degree requirements, computing grade point average, graduation status, or academic dismissal. Students are cautioned that graduate and professional schools often compute a grade point average over all hours attempted when considering applicants for admission.

Application forms are available in the Office of Retention Services or the dean's office of each college within the university. The deadline for applying for academic renewal is at the end of the third week of the semester following the student's return to SRU.

TOP

Academic Suspension

Academic suspension will occur as a result of any of the following conditions:

1. Earning a QPA of less than 1.000 for any semester after the first semester and having a cumulative QPA of less than 2.000.
2. Earning 90 or more semester credits (senior standing) and having a cumulative QPA less than 2.000.
3. If the student is on academic probation for three consecutive semesters.
4. The following table outlines other conditions under which a student will be subject to academic suspension:

Number of semesters the student has below a 2.0 cumulative QPA or has been on probation.	If quality point deficiency is as below, then suspension results
1	24 or more
2	12 or more
3	6 or more

4

3 or more

5, 6, 7, 8

1 or more

Ordinarily, a first suspension is for a period of one semester; a second suspension is for a period of two semesters. Students under suspension are not permitted to register for summer classes, and may not use the summer sessions as their suspension semester. If a student is suspended at the conclusion of the spring semester, then the suspension semester will begin with the following fall semester.

Suspension may result whenever any student incurs grade deficiencies as stipulated above at the conclusion of any semester or summer session. Students who desire to take courses at another institution while on academic suspension should see *Transient Student Status* in this section.

TOP

Attendance Policy

Slippery Rock University does not have a university-wide class attendance policy. Traditionally, attendance policies for individual classes have been determined by the instructor and communicated to the class at the first meeting and through the syllabus. The university believes, however, that class attendance, preparation, and participation are integral components of student success. It is unusual for a student to be successful in a class without attending, preparing, and participating regularly. Therefore, the faculty and administration strongly encourage students to attend every class session, to spend at least two hours in review and preparation for each hour in class, and to participate fully in all aspects of the class.

Attendance may be required for class meetings or field trips outside the regular schedule if such activities are listed as required in a course description in the catalog or in course syllabi. Instructors are asked to consider making allowances for absences occasioned by illness and by authorized activities for the benefit of the university. Arrangements to make up work because of class absences are the students' responsibility.

Auditing Courses

^ TOP

Students desiring to audit courses (no credit awarded) must receive approval of their advisor. Normal registration procedures must be completed. The cost of auditing courses and taking courses for credit are the same. Students may not change from an audit status to a graded status (A-F and P/NC) or vice versa after the second week of the semester.

Change of Major

Forms for changing majors may be obtained in the offices of the deans, Academic Records and Summer School, academic departments or the Academic Advisement Center. Students are reminded that they must meet the major academic requirements that are in effect at the time they declare a new major.

Classification of Students

Undergraduate students are classified according to the number of semester credits completed.

90-120 semester credits or more senior

60-89 semester credits junior

30-59 semester credits sophomore

0-29 semester credits or less freshman

Classification questions are to be directed to the Office of Academic Records and Summer School.

TOP

Continuous Registration

The following Basic Requirement courses within the liberal studies program are subject to the university's continuous registration policy:

- Connecting Reading and Writing
- College Writing I
- College Writing II
- Public Speaking
- Developmental Mathematics
- Beginning Algebra

These courses will be graded as A, B, C, or NC (no credit) the first time taken. If an "NC" is earned, students must repeat the course during their next semester of enrollment if seats are available and must continue taking the course until it is passed with a grade of "C" or better. When these basic requirement courses are repeated, they will be graded as A, B, C, or F.

Once classes begin, students are not permitted to drop or withdraw from one of the basic requirement courses listed above.

Course Levels

The following course numbering system is used: 100-199 are freshman level courses; 200-299 are sophomore level courses; 300-399 are junior level courses; 400-499 are senior level courses. Graduate courses are numbered 500-800. With approval of the dean, juniors and seniors having a 2.500 cumulative quality point average may enroll in 500 numbered courses for undergraduate credit. Only seniors with their dean's permission are permitted to register for graduate credit in courses numbered 500 and above. Post-baccalaureate students may take 500 level courses for undergraduate credit, and, with the permission of the dean of their college, 500 or 600 level courses for graduate credit. 600 - 800 level courses may not be taken for undergraduate credit.

TOP

Credit by Examination

Under certain conditions it is possible for students to take credit courses by examination in a subject field. A grade of "P" or "NC" must be awarded but only passing grades will be recorded on students' records for coursework taken through Credit by Examination. Students may take Credit by Examination only once per course. Further information is available in the offices of the deans and in the Office of Academic Records and Summer School. See *Testing for Advanced Placement* in this catalog.

Credit for Military Service

Slippery Rock University awards credit for military service and military schooling. Credit is not awarded solely for the completion of basic training or for Military Occupational Specialties (MOS).

To receive credit for military service, a student must submit a DD214 or other official military record documenting a minimum of one year of continuous active duty. Students meeting this requirement will be awarded three credits of basic military science.

Students may receive credit for military schooling, regardless of the length of active or inactive duty, by submitting a DD214, Army/ACE Registry Transcript (AARTS), Sailor/Marine/ACE Registry Transcript (SMART) or other official military record documenting completion of military coursework.

All evaluations are based upon the recommendations found in the American Council on Education's "Guidebook to the Evaluation of Educational Experiences in the Armed Services."

Students should submit their DD214 and all applicable military educational records to the Executive Director of Academic Records, Summer School, and Graduate Studies - Room 107, Old Main.

Degree Requirements

Application for Graduation

Students must make formal application to the Office of Academic Records and Summer School by October 1 (Fall), March 1 (Spring), or June 15 (Summer). A diploma fee is payable at that time. Students who are eligible for a Pennsylvania teaching certificate should apply to the College of Education at the time they apply for graduation. A certification fee is payable at the time of application. (Students who expect to teach in Pennsylvania must take a physical examination and a chest X-ray or a tuberculin skin test during their senior year. Arrangements must be made with the university health center at the beginning of the last semester of the senior year.) Students who apply for Pennsylvania certification must also submit a criminal record and FBI clearance form. The application fee for graduation is nontransferable and cannot be updated to another semester if the student fails to graduate, but the certification fee may be refunded.

Students who meet all graduation requirements in a given term but fail to apply for graduation and/or pay their graduation fee until after the semester ends will be graduated at the end of the semester in which their application is received in the Office of Academic Records and Summer School, not the term they completed their coursework.

Completion of Degree/Certificate Requirements

It is the students' responsibility to complete all degree/certificate requirements and to know the university's requirements for graduation. This is not the responsibility of the students' advisors.

Students must meet all graduation requirements by the official end of the semester in which they have applied to graduate. Failure to do so (Incomplete grades in any course or "X" grades in required courses, no application, etc.) will result in the updating of the students' graduation date to the end of the term/year the work is eventually completed.

Effective with undergraduate students entering January 2010 and thereafter, at least 50% of their MAJOR credits must be earned at SRU. Students originally admitted before January 2010, even if they leave the university and are readmitted after January 2010, will not be affected by this new policy.

Collaborative programs will be identified such that residency can be met consistent with the collaborative agreement.

Computer Competency Requirement

The goal of the computer competency requirement is to ensure that students can effectively use computers and technology to succeed in an information based society. The purpose of the competency test is to determine if new SRU students have already acquired the faculty-designated minimum level of computer competence. The topics on which students will be tested are computer hardware, system software, application software, social impact, technology and the web, networks and security and privacy. We believe that students need to have a minimum level of competence to achieve the greatest success during their academic career. Students can demonstrate computer competency by either passing the computer competency exam or passing a one credit CPSC100, Introduction to Computing for Liberal Arts or any of the following three-credit courses: CPSC110 (Computer Concepts), CPSC130 (Introduction to Information Systems) or CPSC210 (Productivity Software). Upon the successful completion of the exam or one of the courses, Slippery Rock University will certify graduates as having achieved a minimum level of computer competency. Some departments may require students to take additional courses to achieve computer competency for a specific academic major.

Exit Examinations

Some students are required to take specific standardized examinations in liberal studies and/or their major area of study before their degrees will be conferred.

Graduation Requirements

1. All undergraduate degree programs require a minimum of 120 credits.
2. Students must complete their last 30 credits in residence at SRU. In addition, individual departments may establish residency requirements for their majors and minors. Students should check with their academic advisor to determine the requirements for their academic program
3. Students must complete a minimum of 48 credits of Liberal Studies coursework.
4. Students must complete 48 credits of upper-division 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.
5. Students must complete at least half their major (15 credit minimum) in 300 or higher level courses. Students must also complete at least 50% of their major at SRU.
6. Bachelor of Arts degrees require language proficiency at the 103 class level. Exemption by placement or examination is possible. Language courses used to satisfy the BA requirement may not be used in the Goal or Enrichment section of the Global Community block of the liberal studies program.
7. Students must complete at least 60 credits at SRU to be considered for Latin Honors at the time of graduation.

Minimum Credit Hour and Quality Point Requirements

All degree programs require a minimum of 120 credits. At least 30 credits must be completed to earn a major and at least 18 credits must be completed to earn a minor. The majority of programs require minimum cumulative and major quality point averages of 2.000; some programs require a higher average. This information is available from the department advisor or chairperson. To be eligible for teacher certification, students entering fall 2003 or thereafter, must have a 3.000 cumulative average in all university coursework.

Modern Language Requirement for BA Degree

Proficiency at the 103 class level of a modern language, or the equivalent, is required for all Bachelor of Arts degree candidates. Exemption by placement or examination is possible. The modern language courses used to satisfy the BA requirement may not be used in the goal or enrichment section of the global community block of the liberal studies program.

Residency

To qualify for graduation, all students must complete their last 30 credits in residence at Slippery Rock University. In addition, at least 24 credits of upper division course work, 12 credits within the student's major and 6 credits within a minor must be earned in residence at Slippery Rock University. Students should check with their academic advisor to determine the residency requirement for their specific academic program.

Effective with undergraduate students entering January 2010 and thereafter, at least 50% of all major credits must be earned at SRU. Students originally admitted before January 2010, even if they leave the university and are readmitted after January 2010, will not be affected by this new policy.

Collaborative programs will be identified such that residency can be met consistent with the collaborative agreement.

TOP

Earning 2 Degrees or 2 Majors

Effective May, 2009, the Board of Governors of the PA State System of Higher Education set minimum standards for students wishing to earn 2 different undergraduate degrees at a single commencement ceremony. Prior to May, 2009, Slippery Rock University permitted students to earn only two majors, not two degrees.

To earn two different Baccalaureate degrees at the same commencement ceremony students must complete a minimum of 150 credits and all the academic requirements of both degrees.

Additional Clarification

- Students may not earn two of the same degree (BS and BS) regardless the number of credits earned.
- Students wishing to earn a Bachelor of Arts degree, whether it is associated with their first or second major, must complete the university's modern language proficiency requirement at or above the 103 level.
- Students earning two different degrees (BA and BS) will be awarded two diplomas. Students earning two degrees will only have to pay one graduation and diploma fee.
- Students may still earn two majors and one degree. To earn two majors, students must complete at least 120 credits and all the academic requirements of both majors. This means students selecting a second major that is offered in association with a Bachelor of Arts degree will not have to complete the university's modern language requirement. See "Second Baccalaureate Degree" section of the undergraduate catalog.
- Students wishing to earn a second Baccalaureate degree after graduating should also refer to the "Second Baccalaureate Degree" section of the undergraduate catalog.

Second Baccalaureate Degree

If students desire to earn a second baccalaureate degree at Slippery Rock University, they may do so by:

- enrolling as a post-baccalaureate student and,
- taking a minimum of 30 new credits at SRU after the first baccalaureate degree,
- meeting departmental requirements for the degree in respect to the required credits and courses for a major in that department, and
- meeting degree requirements in respect to courses required for the requested degree.

Latin Honors at graduation will not be awarded to second-degree candidates, nor are post-baccalaureate students eligible for the dean's list.

TOP

Drop, Add, Withdrawal

Full semester courses may be added during the first two weeks of the semester, but permission by the professor is required after the first week of classes. Students desiring to add closed sections of courses for which they have the required pre/co-requisite must always receive the professor's approval. Courses dropped during the first week of the semester will not be recorded on the students' permanent records unless students withdraw from all their classes, in which case grades of "W" will be awarded. Students may withdraw from full semester classes with a grade of "W" between the second and tenth weeks of the semester. Students will not be permitted to withdraw from classes after the tenth week and will be held accountable and awarded a final grade for all coursework, exams and other work assigned during the final five weeks of the semester. For courses meeting fewer than 15 weeks, the withdrawal deadline is two thirds of the way through the course's beginning and ending dates. Students may not drop or withdraw from Basic Requirement courses, with the exception of Interpreting Literature, once the semester has started.

Yellow drop/add cards may be used to add classes until the end of the second week of the semester, and until the end of the first week of the term to drop classes. After the first week of the semester, student may no longer drop classes, but may withdraw from classes with a grade of "W" by using a blue withdrawal card.

Students who for exceptional reasons are permitted to drop, add, or withdraw from classes after the university's stated deadlines must receive their respective dean's/Director of Retention Services' approval and will be charged \$15 for each late transaction.

Final Examinations

At the end of each semester, all final examinations are to be administered during the time stipulated in the examination schedule, which is printed in the master schedule of course offerings. The decision to give a final examination is the prerogative of faculty members; but if a final examination is given, it is to be administered according to the time as indicated in the examination schedule. The appropriate dean must approve any exceptions to this policy. Classes will meet during the scheduled examination time if no examinations are given.

Freshman Cohort and Student Athlete Graduation Rate

In accordance with the Students Right to Know and Campus Security Act (PL 101-542) as amended by the Higher Education Technical Amendments of 1991 (PL 102-26), Slippery Rock University will publish the graduation rate of its first time, full-time degree seeking undergraduates in each of its Master Class schedules. This information is also available in a more detailed format from the Office of Academic Records and Summer School and at the university's Student Consumer website.

Grade Information

Procedure for Filing Grade Appeal

Academic Due Process Procedures

The purpose of the following procedure is to provide students with a system by which to grieve complaints of alleged academic injustice(s) relating to a final grade and/or professional responsibilities. Students should have protection through orderly procedures against unsubstantiated academic evaluation. Students who believe that their final course grade reflects unsubstantiated academic evaluation may initiate and pursue a grade change appeal in accordance with provisions of this document. At the same time, all academic rights and privileges of faculty members are to be honored in this process, which includes careful review of the course syllabus. Changes in final course grades will occur only when, as a result of this grade appeal process, there is clear evidence of unsubstantiated academic evaluation.

Since the grade process involves the instructor's judgment of the academic performance of a student the only issue under consideration in the grade appeal process is whether or not the student can present clear evidence that the assignment of the grade was based on factors other than the academic judgment of the instructor.

Some examples of the basis for a legitimate disagreement could include, but not be limited to prejudiced, capricious, or unsubstantiated academic evaluation by the instructor:

1. The instructor did not inform the student of the basis for calculation of grades.
2. The instructor did not calculate the student's grade in accordance with the instructor's stated policy for calculating grades. Significant and unwarranted deviation from grading procedures and course outlines set at the beginning of the course (ordinarily during the first week of the course) or a grade assigned arbitrarily and capriciously on the basis of whim, impulse or caprice.
3. There is an error in the computation of the grade that was not corrected.
4. The student, through no fault of his or her own, was not provided with the same opportunity to complete the requirements for the course in terms, for example, of time, access to materials, or access to the instructor as the other students.

A student may not claim arbitrariness and capriciousness if he/she disagrees with the subjective professional evaluation of the instructor.

The following steps must be followed in the appeals procedure:

Informal Procedure:

1. The student must discuss the final course grade, grading practices and assignments with the instructor who gave the final grade. This discussion may eliminate any misunderstandings over the assignment of the grade as relates to the course syllabus. This discussion must occur no later than **10 days** after the beginning of the semester (not summer) following the issuance of the final grade.
2. If the faculty member finds in the student's favor, a grade change card is submitted with signatures and the appeal process is resolved.

If a student and instructor fail to resolve the grade dispute through informal means the student may request a formal grade appeal process by completing a **Final Grade Appeal Form** that may be obtained in the Office of Academic Records and Summer School.

Formal Procedure:

Step One - Instructor

The student must complete and submit the "**student**" portion of the **Final Grade Appeal Form** to the course instructor no later than **21 days** after the beginning of the semester following the issuance of the final grade. The summer term does not constitute a semester.

- The student must retain a copy of the Final Grade Appeal Form for his/her records and send a copy to the department chairperson (or substitute). The chairperson of the department evaluation committee shall substitute for the department chairperson IF the department chairperson was the instructor of the course in which the grade is being appealed.
- The department chairperson (or substitute) is to confirm that the instructor is aware of the grade appeal and is to inquire as to the instructor's planned response.
- If the instructor decides that the final grade is correct, he/she must complete the "**instructor**" portion of the Final Grade Appeal Form, and return it to the student and send a copy to the chairperson (or substitute) **within 14 days of receipt of the student's appeal.**
- If an instructor fails to respond within the allotted time, the appeal shall move to step 2 below.

If a faculty member whose grade(s) are being appealed is no longer employed by the university or is unavailable due to a sabbatical, sick leave, or other reasons during the time period allotted for the appeal process, the appeal should be directed to the chair of the department's evaluation committee for review.

Step Two - Department Chairperson (of the course instructor)

If the student wishes to appeal further, he/she must submit the original Final Grade Appeal Form (or copy if the instructor fails to respond as described in step 1 above) to the department chairperson (or substitute). This appeal must be submitted within **14 days** of the dated instructor's response, or if the instructor does not respond, within **28 days** after the appeal was originally filed with the instructor. A copy of the Final Grade Appeal Form must be forwarded to the college dean of the instructor)

- The department chairperson (or substitute) will review the appeal **within 7 days.**
- Before the department chairperson (or substitute) determines if the student's complaint provides evidence that the instructor's assignment of the grade was based on factors other than the academic judgment of the instructor he/she will review the appeal with the instructor.
- The chairperson (or substitute) may also conduct whatever informal investigation seems necessary and should attempt to achieve a negotiated settlement.
- If the department chairperson (or substitute) determines the student's evidence **does not** meet the criteria for a grade appeal, the chairperson (or substitute) will forward his/her decision on the grade appeal to the college dean.
- A copy of the Final Grade Appeal Form must be forwarded to the student and the instructor.
- If the department chairperson (or substitute) determines the student's evidence **does meet** the criteria for a grade appeal, he/she will recommend in writing to the instructor a course of action to amend the grade.
- The instructor must indicate on the Final Grade Appeal Form whether he/she agrees or disagrees with the chairperson's recommendation, signs and returns the Final Grade Appeal Form to the chairperson within **7 days.**
- If the instructor amends the grade, a signed grade change card is submitted and the grade appeal is ended.
- If the instructor does not agree to amend the grade or fails to respond in the allotted time, the chairperson (or substitute) submits the Final Grade Appeal Form to the college dean with his/her recommendation within **7 days.** A copy of the recommendation must be forwarded to the student and the instructor.

Step Three - Dean (of the course instructor)

- If the dean, upon review of the chairperson's recommendation, also determines the student's evidence **does not meet** the criteria for a grade appeal, the dean will complete and return the Grade Appeal Form to the student with a copy to the instructor and chairperson (or substitute) within **7 days. The grade appeal process ends.**
- If the dean, upon review of the chairperson's recommendation, determines that the student's evidence **does meet** the criteria for a grade appeal, the dean **shall initiate a meeting with the faculty member.** The dean shall review the appeal, can hear evidence by each side, and may collect further evidence as desirable.
- If **agreement** cannot be reached, the dean will forward the Final Grade Appeal Form to the Provost and Vice President for Academic Affairs within **7 days,** with his/her recommendation that the grade appeal be referred

to a Grade Appeal Board. A copy of the Final Grade Appeal Form must be forwarded to the student, instructor, and chairperson.

In each of the above statements, the chairperson of the department evaluation committee shall substitute for the department chairperson IF the department chairperson was the instructor of the course in which the grade is being appealed. Should the chair of the evaluation committee not be available, APSCUF will be consulted in the process in choosing the substitute.

TOP

Composition of Grade Appeal Board

- Three faculty recommended by APSCUF. One from the academic department in which the course is taught. Not the instructor.
- Two managers selected by the provost. One to be the dean of the college in which the course was taught.
- One student recommended by Student Government Association. A senior major in the department in which the course is taught.
- Normally, each Grade Appeal Board will be appointed to hear one appeal.
- Those responsible for recommending board members should be sensitive to race and gender composition.
- The provost will appoint each board and chairperson within the parameters above.

Grade Appeal Board Procedures

Each Grade Appeal Board is to determine its procedures for hearing the grade appeal. Normally, both the student and the instructor will be given an opportunity to state his/her case before the board.

Students who appeal a grade to a Grade Appeal Board are responsible for maintaining ALL written materials relevant to the appeal, such as papers, examinations, and completed assignments. Further, the appeals board must have access to appropriate documentation and academic records pertaining to the course grade in question.

Each appeals board will make its recommendation to the university president, who may accept or reject the recommendation.

Since the university president has the power and duty to direct the activities of the institution, nothing in this policy should be construed as to diminish that authority in any way.

After the appeals process is complete, the only record to be maintained will be the student's final grade.

Grade Change

Once a grade has been posted, it can only be changed by the professor who originally awarded the grade. If the professor is no longer employed by the university or is not available for some other reason, the request for a grade change should be discussed with the department chairperson. Grade changes must be processed on a grade change card and must be approved by the professor and the chairperson of the department in which the course was offered.

A memorandum of explanation from both instructor and departmental chairperson must accompany any grade change submitted after more than a year has passed since the student received the original grade. This information is submitted to the Office of Academic Records and Summer School. Students who attended a full semester class beyond the 10th week may not have their grades changed to a withdrawal "W" without their dean's approval.

Grade Release Policy

[^ TOP](#)

Students' midterm grades and final grades are available on the university's ROCK TALK web-based system.

In accordance with the Family Educational Rights and Privacy Act (FERPA) grades will not be released to a third party (including parents) without the written permission of the students.

Grading Symbols and Quality Point Conversion System

A - Excellent	4 quality points
B - Good	3 quality points
C - Satisfactory	2 quality points
D - Poor	1 quality point
F - Failure	0 quality points
I - Incomplete	0 quality points
P - Pass	0 quality points
NC - No Credit	0 quality points
AU - Audit	0 quality points
W - Withdrawal	0 quality points
X - No grade given	0 quality points

Grading System and Policies

Instructors are to inform their students in writing during the first week of classes of their grading procedures and policies, especially explaining how final grades are calculated.

Incomplete Grades

The assignment of an incomplete grade is the prerogative of the faculty and is granted only when extenuating circumstances prevent students from completing the course requirements within the regular time period. Faculty also reserve the right to set any deadline for the completion of the incomplete work; however, students not receiving an earlier deadline will have a maximum of 12 months after receiving the incomplete to finish all coursework and receive a change of grade. If a faculty member does not submit a grade change card within 12 months, regardless of whether or not the student attends the university, the grade will automatically convert to an "F". Requests for extensions of incomplete grades, beyond 12 months, must be submitted by the faculty member and approved by the dean of the college in which the course was offered. Students will not be permitted to graduate with an incomplete grade on their record.

TOP

Pass-No Credit Grades

Students may schedule a maximum of 12 credits of pass-no credit grading in the sophomore, junior and senior years combined. Students must select these courses at registration and cannot change the pass-no credit designations after the second week of the semester. For these 12 credits, only free elective courses may be taken on a pass-no credit basis. Pass-no credit courses may not be used to satisfy major, minor, the BA modern language, and the university's liberal studies program requirements. Some selected courses are not included in the 12-credit limitation. Students may not take more than one pass-no credit course during a semester.

Courses taken under the pass-no credit system are not used in computing the student's QPA. Credit for such courses is recorded toward meeting the total credit requirements if the course is passed. A grade of NC (no credit) will be recorded if the course is failed.

Pass-no credit is not synonymous with audit. In pass-no credit, all course requirements must be met.

Quality Point Average

Quality points for a single course are calculated by multiplying the points assigned the letter grade (A = 4, B = 3, C = 2, D = 1, F = 0) by the number of credits of the course. Total quality points are calculated by adding the quality points earned in each course. The quality point average (QPA) is computed by dividing the total quality points earned by the total number of credits attempted, (repeated courses are counted only once). Grades earned in courses taken at other colleges for transfer are not computed in the quality point average at Slippery Rock University unless the courses were taken with Slippery Rock University's approval as a "Visiting Student" or "Distance Education Student" at another PA State System of Higher Education university. Further explanation concerning the calculation of the QPA may be directed to the student's academic adviser, the Advisement Center or the Office of Academic Records and Summer School.

X Symbol

The symbol "X" means "no grade given." This symbol will be used only in those rare situations when professors cannot assign students a letter grade or incomplete.

The "X" symbol will not affect the students' semester or cumulative QPA at the time it is given. However, the "X" symbol must be removed from the students' record prior to the end of the students' next semester of enrollment. Otherwise, it will be converted automatically to an "F" and will then be used in the students' semester and cumulative QPA calculations. The "X" symbol cannot be extended beyond the students' next semester of enrollment.

If graduating students receive an "X" during their final semester of enrollment, they will be permitted to graduate as long as the course in question is not required for graduation.

Name Change

Students may have their names changed on official university records only after submitting an official document (marriage certificate, court record, etc.) or a notarized statement that a name change has occurred and the new name is not being used for any deceptive or fraudulent purpose. Copies of the university's policy and a sample affidavit are available from the Office of Academic Records and Summer School.

Notice of Consumer Information Web Site and Annual Security Report

In accordance with the provisions of the Student Right to Know and Clery Acts, students are urged to access SRU's Consumer Information Website (Including campus crime statistics, graduation rates, and Students Rights to Privacy.)

Notice Designating Directory Information

Slippery Rock University hereby designates the following student information as public or "Directory Information." Such information may be disclosed without a student's previous consent by the institution for any purpose, at its discretion.

1. Name
2. Addresses (local, permanent, and e-mail)
3. Telephone number (local and permanent)
4. Date and place of birth
5. Program and concentration(s) and minor(s)
6. Student activities, including athletics
7. Weight and height (athletic teams)
8. Dates of attendance
9. Degrees and awards received
10. Date of graduation
11. All educational institutions previously attended
12. Academic Awards/Scholarships
13. Title of Master Thesis
14. Number of credits (full- or part-time) for which a student is registered
15. Pictures of students (for university use in publications, press releases, and advertisements)
16. Class level
17. Anticipated graduation date

Currently enrolled students have the opportunity to withhold disclosure of all 17 categories of information under the Family Educational Rights and Privacy Act of 1974. The University will not partially withhold this information, so students are advised to think carefully before requesting non-disclosure. To withhold disclosure, written notification must be received in the Office of Academic Records and Summer School, Slippery Rock University, Slippery Rock, PA 16057 prior to the end of the second week of each semester/summer session. Forms requesting the withholding of "Directory Information" are available in the Office of Academic Records and Summer School, Room 107, Old Main.

Slippery Rock University assumes that failure on the part of any student to specifically request the withholding of "Directory Information" indicates individual approval for disclosures. Former students and alumni are not covered under the Family Educational Rights and Privacy Act of 1974. As such, the University is not obligated to honor requests for non-disclosure from former students.

Note: Students requesting that "Directory Information" not be disclosed during their final semester of enrollment will have this information withheld indefinitely after leaving the University. Students are cautioned that making such a request may adversely impact future requests from potential employers, and other important individuals/organizations.

Prerequisites and Co-requisites

Students should not register for courses until they have completed all the appropriate prerequisites or are registered for the appropriate co-requisites as noted in the university catalog. The university's computer has been programmed to

check for pre/co-requisites. Professors reserve the right to withdraw students who have not completed/registered for the appropriate pre/co-requisites for their classes.

Readmission

Students who have interrupted their attendance at SRU for any reason may resume studies at Slippery Rock University by applying for readmission to the dean in whose college they previously studied, or the Director of Retention Services (even if they will change their major after entering the university). This must be done at least one month prior to the beginning of the semester/term in which they wish to enter. Students must submit official transcripts from all schools attended after leaving SRU before a readmission decision will be made. Credits earned at another college or university while they are not attending SRU may not be eligible for transfer to Slippery Rock University. Using a transient clearance form, students must obtain approval from their department and at times, their dean **before** taking the courses to ensure the transferability of credits to Slippery Rock University. Grades earned, as a transient student, will **not** be computed into the student's SRU grade point average. 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.

Records Privacy Policy

(Family Educational Rights and Privacy Act, PL 93-380; and "Right to Know Law" PA PL 390)

The Family Education Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. They are:

1. The right to inspect and review their education records within 45 days of the day the university receives a request for access.

Students should submit to the Director of Academic Records and Summer School, dean, department chairperson, or other appropriate official, written requests that identify the record(s) they wish to inspect. The university official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the university official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.

2. The right to request the amendment of their education records that they believe are inaccurate or misleading.

Students may ask the university to amend a record that they believe is inaccurate or misleading. They should write the university official responsible for the record, clearly identify the part(s) of the record they want changed, and specify why it is inaccurate or misleading.

If the university decides not to amend the record as requested by the student, the university will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

3. The right to consent to disclosures of personally identifiable information contained in their education records, except to the extent that FERPA authorizes disclosure without consent.

One exception that permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is a person employed by the university in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the university has contracted (such as an attorney, auditor, or collection agent); a person serving on the Council of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her

tasks.

A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities.

Upon request, the university may disclose education records without consent to officials of another school in which a student seeks or intends to enroll, or where the student is already enrolled so long as the disclosure is for purposes related to the student's enrollment or transfer.

The right to file a complaint with the U.S. Department of Education concerning alleged failures by Slippery Rock University to comply with the requirements of FERPA. The name and address of the office that administers FERPA is:

Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue, SW
Washington, DC 20202-5920

Copies of the university's policy governing the Family Education Rights and Privacy Act are available in the Office of Academic Records and Summer School, 107 Old Main. Questions concerning FERPA should be referred to the Executive Director of Academic Records, Summer School and Graduate Admissions.

Repeat of Courses

Students may attempt to improve their quality point average by repeating courses. The most recent grade earned is used in calculating the QPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the quality points and credits previously earned. However, all grades will appear on the transcript. Courses in which grades of D, F, and NC were earned at Slippery Rock University may not be repeated at any institution other than as a Visiting Student at another PA State System of Higher Education university for transfer to Slippery Rock University.

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 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 or audit basis.

Effective January 2010 undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career.

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.

The course repeat policy for post-baccalaureate students will be the same as the current graduate student policy. (See Graduate Catalog.)

Semester Credit Load

The number of credits a student may carry is determined by the cumulative quality point average as follows:

- If the cumulative QPA is less than 2.000, students are limited to a maximum of 16 credits, inclusive of any repeat courses that are scheduled.
- If the cumulative QPA is 2.000 to 2.499, a maximum load of 18 credits is permitted.

- If the cumulative QPA is 2.500 or above, a maximum of 21 credits is permitted. An additional fee is charged for each credit in excess of 18.

Senior Citizens

Senior citizens (persons 62 or older, who are receiving social security or equivalent retirement benefits) may **audit** courses at no cost at Slippery Rock University on a space available basis. Senior citizens must provide proof of age, retirement benefits, name, address, and social security number to the Office of Academic Records and Summer School in order to complete registration. Individuals 62 or older who are not working and are not receiving social security or retirement benefits may also qualify for this program. Senior citizens may register for classes no earlier than one week prior to the start of the semester/term. Senior citizens taking courses **for credit** are responsible for paying all applicable fees with the exception of tuition.

Summer Sessions

Summer sessions at Slippery Rock University are scheduled over a fifteen week period as follows: Pre-session (two and one-half weeks), Session I (four weeks), Session II (four weeks) and Summer Term (four weeks). Information on the summer sessions is made available through an online summer schedule/bulletin, which may be accessed from SRU website in mid-March prior to the summer sessions.

Testing for Advanced Placement

Students may qualify to earn a maximum of 45 credits by making satisfactory scores on tests administered through special examination programs, and thereby earn credit or be exempt from certain college courses. Students may not repeat a course by using Credit by Examination if they originally took the course on a graded (A-F), P/NC or audit basis. Credits earned by examination may not be used as part of the students' final 30 credits to be earned at the university.

- The Advanced Placement Program (AP) of the College Entrance Examination Board permits high school students to earn college credits at their schools while attending high school. Students must first take an advanced placement course prior to the advanced placement exam. Scores of three or higher will normally be awarded college credit. High school counselors may assist in this procedure.
- Departments at the university offer credit by examination for some courses. Approval for these tests should be secured from the faculty advisor, instructor, and appropriate departmental chairperson.
- The College Level Examination Program (CLEP) is administered by The College Board. This program is open to all students who meet the eligibility criteria. Under the program, students who feel their knowledge of certain subjects is extensive may elect to take the CLEP exams, which are of two types: general and subject. The general examinations are designed to reflect the learning that ordinarily takes place in the students' first two years of college. The subject examinations are designed to reflect the more specific knowledge which students may have acquired. General examinations each carry 6 credits. Subject examinations each carry 3-4 credits. Upon successfully passing an examination with a score at or above the American Council on Education's recommended minimum score, students will receive credit for the corresponding course(s), which permits registration in more advanced courses. Information on CLEP is available from the Office of Academic Records and Summer School and at the following website: www.collegeboard.com/clep
- The university also awards credit for a limited number of Excelsior College, ACT (PEP) exams and DSST exams offered by the Armed Services. Students may contact the Office of Academic Records and Summer School for a list of acceptable PEP and DSST exams.

Transcripts

Students may obtain official transcripts of their academic records from the Office of Academic Records and Summer School by written request. Transcripts may be mailed, faxed or sent electronically. Each mailed or electronic copy costs \$3.00, and written requests should include a check or money order made payable to Slippery Rock University. Students requesting that a transcript be faxed are assessed an additional \$2.00 faxed transcript fee (for a total of \$5.00).

Transcripts are typically processed in 24-48 hours. Students requesting "same day" service will be charged \$10 per transcript (\$12 per transcript if faxed). A complimentary copy of the transcript is sent to all students upon graduation. Transcripts are not released to students who have outstanding financial obligations to the university. The University only issues OFFICIAL transcripts. Unofficial transcripts do not exist.

A student's academic transcript will indicate any disciplinary action taken that leads to separation from the institution. That is, should a student be suspended or dismissed from the university under the provisions of the Code of Conduct, a notation will be placed on the student's transcript for the duration of the sanction. The notation will be removed upon expiration or by action of the vice president for student life.

Transient Student Status

Slippery Rock University students who are in good academic standing, or who are under academic probation/suspension and plan to take courses at another institution for transfer back to Slippery Rock University must complete and have approved by their advisor, chairperson and dean (if suspended) a transient student clearance form and comply with all regulations cited on that form. Students will not be permitted to take any of their final 30 credits as a transient student. Credit will not be awarded for transient courses determined by the Executive Director of Academic Records, Summer School and Graduate Studies to duplicate coursework already posted on students' SRU records. Transient credit will be awarded for courses in which grades of "C-" or better have been earned. Grades earned as a transient student will not be computed in a student's SRU cumulative QPA. Copies of the transient student form are available in the department chairpersons' offices, the Office of Academic Records and Summer School and online. Transient students may not take correspondence courses and credit earned by examination. Other policies governing transient status are available from the Office of Academic Records and Summer School.

Upper Division Course Work

All degrees require the completion of a minimum of 48 credit hours of upper division course work. Thirty-nine of the 48 credits must be at the 300 level or higher, the additional 9 credits may include any course requiring a 3 credit hour prerequisite. At least 24 of the 48 credits must be completed at Slippery Rock University.

At least half a student's major must consist of upper division course work (only 300-level and above). At least 9 credit hours of a student's minor must be taken at the upper division level (300-level and above or courses requiring a 3-credit prerequisite).

Students with fewer than 45 credits (Sophomore II) must have the permission of the instructor to enroll in 300 and 400 level courses.

Visiting Students

Students desiring to transfer credit and grades earned at other universities in the Pennsylvania State System of Higher Education back to Slippery Rock University may do so as "visiting students." Courses taken under this program are treated the same as courses taken at Slippery Rock University in computing the students' QPA. A special form, with a list of program requirements, is available in the Office of Academic Records and Summer School and must be

approved by the students' advisor or chairperson, academic dean, and the Executive Director of Academic Records, Summer School and Graduate Studies.

Withdrawal from the University

Students who withdraw from the university must either complete an official withdrawal form obtainable at the offices of Academic Records and Summer School or Retention Services, or notify the Director of Retention Services via a signed and dated letter of their intention to withdraw.

Students will be officially withdrawn from the university on the date the offices of Academic Records and Summer School or Retention Services receive notification in writing of their intent to withdraw, not the last day of class attendance.

It is expected that students living on-campus will move out of their residence hall and cease eating in the university's cafeterias immediately after withdrawing from school.

Students withdrawing from the university up to the last day of classes will be awarded withdrawal grades of "W" in all classes. Students waiting to withdraw from the university after the last day of classes (final exam week) will be withdrawn on the last day of the semester/term and will not be awarded a withdrawal grade in any class.

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.

Click on a link to be taken to the entry below.

- Freshmen Applicants
 - Admission Guidelines for New Freshmen
 - How to Apply for Admission as a New Freshman
 - Freshmen Residence Requirement
- Transfer Students
 - How Are Transfer Credits Evaluated?
- What is Academic Passport?
- Post Baccalaureate Students
- Special Student Admission
- Transient Students
- Visiting Students
- Faxed Transcripts/Documents
- Student Right-to-Know and the Clery Act
- International Students

Freshmen 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 freshman. Students who enroll in dual-enrollment college credit programs prior to high school graduation are still considered new freshmen students.

Admission Guidelines for New Freshmen

New freshmen 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 and standardized test scores. Admission guidelines are based upon the academic profiles of previously successful students. First-time, full-time students (new freshmen) who succeed most often at Slippery Rock possess a cumulative grade point average of 3.0 on a 4.0 scale in high school as well as SAT or ACT scores that are above average 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, class rank, service and leadership, special talent, essay quality and letters of recommendation. Waitlisted applicants are offered admission on a rolling, space available basis and applicants closest to the academic and standardized test admission guidelines are offered admission most frequently.

Slippery Rock University recommends that entering freshmen complete a college preparatory curriculum in high school consisting of four years of English; four years of social studies; 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; and two years of the same foreign language.

How to Apply for Admission as a New Freshman

Applicants need to supply the following credentials to apply for admission:

- A completed Application for Admission (admission applications are available through the Office of Admissions and via the web at www.sru.edu)
- A \$ 30.00 application fee (non-refundable)
- Official high school transcripts or GED, and senior year (12 th Grade) class schedule if enrolled in high school
- Official Composite Test Scores from the SAT or ACT

Official transcripts are those that either 1) are sent directly from the school to Slippery Rock University's Office of Admissions, or 2) are delivered to Slippery Rock University's Office of 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.

Slippery Rock University accepts either the SAT or ACT for the purposes of an admission decision, freshmen course scheduling, as well as Honors Program and Freshmen scholarship consideration. SAT or ACT scores are required for admission consideration for current high school students, home schooled students, or students who graduated from high school less than 2 years ago. Adult students who graduated from high school more than two years ago are not required to submit standardized test scores. Official SAT or ACT scores are results that arrive at the Slippery Rock University Office of Admissions either 1) electronically directly from the testing agency, 2) directly from the high school records office, or 3) delivered on hard copy to the Slippery Rock University Office of Admissions directly from the testing

agency. Slippery Rock University does not require ACT or SAT subject tests for admission or scholarship purposes. Only ACT and SAT composite scores are used for admission and scholarship consideration.

Credentials should be directed to the Office of Admissions at Slippery Rock University. Once all credentials are received, Slippery Rock University admits new freshmen on a rolling basis for all terms. Applicants who are offered admission must reply to Slippery Rock University to accept their offers of admissions, along with submitting a required enrollment deposit, before they are considered admitted. 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 freshmen students seeking admission for the fall semester are encouraged to apply early in the preceding fall prior to enrollment.

Freshman 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 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 Admissions.

Freshmen Residence Requirement

All new freshmen are required to live on campus. Freshmen 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 students are students who have graduated from high school and have subsequently enrolled in coursework at another college, university, or other type of post-secondary institution without completing a baccalaureate degree and intend to enroll at Slippery Rock University to pursue a degree-granting program. High School students who complete post-secondary coursework prior to their high school graduation or during the summer after graduation are considered new freshmen. Transfer students must be in good standing and eligible to return to the last institution attended in order to receive an offer of admission to Slippery Rock University. Transfer applicants who receive offers of admission generally hold a minimum cumulative grade point average of 2.0 or greater on a 4.0 scale from all institutions attended. Students who attended Slippery Rock University as degree seeking students and then stopped attending the university for any reason are considered readmission students. These students should contact their former college dean's office or go on-line for an application for readmission.

Students who plan to transfer to Slippery Rock University must apply for admission to the university by submitting the following credentials to the Office of Admissions:

- A completed Application for Admission (admission applications are available through the Office of Admission and via the web at www.sru.edu)
- A \$30.00 Application fee (non-refundable)
- Official transcripts from each post-secondary institution attended.
- Official high school transcripts may be requested depending on the number of transfer credits earned at the time of application. Students who hold a GED and not a high school diploma, should submit:
 - Official High School transcript, that delineates completed coursework at the time of departure from school, and
 - Official copy of the GED test scores.

A qualified student who is enrolled at another institution at the time of application to Slippery Rock University may be granted provisional admission until all current coursework is successfully completed and final official transcripts are submitted to the Office of Admissions.

How Are Transfer Credits Evaluated?

An unofficial evaluation of credits earned at a post-secondary institution is provided upon request. An official evaluation is provided when a student accepts the offer of admission by submitting an enrollment deposit. Courses in which grades of C and higher are earned are accepted in transfer provided the student meets all regular admission requirements. Students who qualify for the Academic Passport program may be allowed to transfer credits for which a D grade has been earned (see Academic Passport).

To qualify for graduation a student must fulfill all Slippery Rock University academic requirements and complete the last 30 credits in residence at the university. To be considered for graduation with honors, students must earn a minimum of 60 credits at Slippery Rock University (see Honors at Graduation).

What is Academic Passport?

The Academic Passport is a transfer program designed to facilitate the transfer of students from Pennsylvania community colleges to State System of Higher Education universities, and to support the transfer of undergraduate credits earned by students at other State System of Higher Education universities. Students who meet the established criteria will be granted an Academic Passport that guarantees admission to the university and the fullest consideration of transfer credits.

Academic Passport Criteria and Privileges

Students transferring with an Associate Degree

- Students who have earned a Pennsylvania community college Associate in Arts (AA), or an Associate in Science (AS) degree, which has a liberal arts component of a minimum of 30 credits, will be granted an Academic Passport and will be guaranteed admission to the university if the student has earned a minimum QPA of 2.000 from all institutions attended. The student must apply for admission in accordance with the established university policy on admission.
- Guaranteed admission to the university through Academic Passport does not necessarily guarantee admission to specific academic programs. Some academic majors may require higher admission standards than the Academic Passport requirement.
- For those students holding the appropriate associate degree, the letter grades of "D" or above are acceptable to the university. Some academic majors may require that the letter grade of "C" or above be earned for specific course-work.
- Students must meet all of the established program admission standards required of all Slippery Rock University students.
- In the acceptance and application of transfer credits for students holding an Academic Passport, the university will strive to apply all credits earned at the community college level toward the completion of the baccalaureate degree. In certain circumstances, such as a change in major or intended program of study, it may not be possible to apply all credits earned at the community college.

Students Transferring From Other Pennsylvania State System of Higher Education Universities

- Students transferring from other Pennsylvania State System of Higher Education universities who have attained a 2.000 QPA or higher in a minimum of 12 credit hours of college level course-work and hold a minimum 2.000 QPA from all institutions attended hold an Academic Passport and are guaranteed admission

to the university. The student must apply for admissions in accordance with the established university policy on admission.

- Guaranteed admission to the university through Academic Passport does not necessarily guarantee admission to specific academic programs. Some academic majors may require higher admission standards than the Academic Passport requirement.
- For those students holding the Academic Passport, the letter grades of "D" or above are acceptable to the university. Some academic majors may require that the letter grade of "C" or above be earned for specific course-work.
- Academic Passport students must meet all of the established program admission standards required of indigenous students.
- In the acceptance and application of transfer credits for students holding an Academic Passport, the university will strive to apply all credits to the completion of the baccalaureate degree. In certain circumstances, such as a change in major or intended program of study, it may not be possible to apply all credits earned.

Academic Passport Student Appeals Process

All questions and appeals regarding the transfer of credits to Slippery Rock University of Pennsylvania should be directed to the Transfer Services area of the Office of Admissions. All questions will be reviewed by the university's official credit evaluators and, if need be, will also be reviewed in consult with the Chairperson of the student's academic department. If a course syllabus is needed to further investigate the student's appeal, it will be the responsibility of the student to provide this information. The Office of Admissions will strive to respond to the student with a final determination within a two week (or less) period of time.

Transfer students are reminded that only the credits, not the grades, earned at other colleges/universities are accepted in transfer by Slippery Rock University. Transferred credits do not affect a student's Slippery Rock University Quality Point Average, which is based only on credits completed at Slippery Rock University.

Transfer students must list all institutions previously attended on their application for admission and submit official transcripts from all previously attended post-secondary institutions regardless of the dates/time in attendance. Failure to do so may lead to withdrawal of admission status and/or dismissal from the university. In addition, students failing to list coursework from other colleges will not be permitted to petition for the acceptance of these transfer credits after they have been admitted or readmitted to the university.

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 or may earn a second degree or 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 in that department.

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 Admission.

Admission Guidelines for Post Baccalaureate 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, require applicants to meet additional or more stringent admission criteria, including minimum Quality 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 post baccalaureate study varies. For additional information regarding the appropriate application process, refer to the postbaccalaureate application.

Special Student Admission

A special 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 who does not intend to use the course work toward a degree program at an institution of higher education. Special student non-degree admission is valid for one semester at a time. Students who wish to enroll as special 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 special student non-degree status. Special students are not eligible for financial aid.

Admission Guidelines for Special Student Admission

A special student must be high school graduate or have a GED to enroll. Special 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 special 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. Slippery Rock University offers Dual Enrollment opportunities at participating local high schools. This program allows eligible students to concurrently enroll in high school and college courses. Please check with your high school guidance office regarding dual enrollment options at your high school.

How to apply for Admission as a Non-Degree 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
- Official 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.

Special 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 semester at Slippery Rock with the intent of returning to their home institution to pursue their degree.

How to apply for Admission as a Transient Student

Applicants need to supply the following criteria to apply for admission:

- A completed Non-Degree Application for Admission with transient status requested or Summer School Transient Application
- Fall and Spring applicants will have to send an official transcript from their home institution to the Office of Undergraduate Admission
- For summer applicants no other documentation is required, although transient students are strongly encouraged to review their transient attendance and course selection with their academic advisor at their home school. Other transcripts may be required to meet specific course prerequisites. Contact the Office of Undergraduate Admissions or Academic Records and Summer School for more information.

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 Admissions for fall and spring semester, and admitted through the Office of Academic Records and Summer School for summer semester.

Visiting Students

Any current undergraduate student from one of the other 13 member universities of the State System of Higher Education in Pennsylvania that 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's 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 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 Summer School.

Faxed Transcripts/Documents

Transcripts and documents faxed to Slippery Rock University on behalf of students may be accepted unofficially for the purpose of making a conditional admission decision, 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. If ACT/SAT must be submitted via fax, score reports must be sent from a student's high school in order for them to be accepted.

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 (Clery Act) including:

- Annual Security Report
- Freshman and scholarship athlete graduation rates
- Students' Rights of Privacy (FERPA)
- 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** or contact the Office of University Police at 724-738-3333.

View the **Student Consumer Website** or contact the Office of Academic Records and Summer School at 724-738-2010.

International Students

Slippery Rock University actively seeks international students to provide diversity to its student population. Diversity expands the cultural awareness of students and others. The number of students admitted from individual countries may be limited to ensure a balanced representation of cultures. To be considered for admission, the following credentials must be submitted to the Office of International Services:

- Completed application for admission for international students.
- Official certified true copies in English of all secondary and post-secondary school transcripts that show year-by-year listing of courses, grades earned for each course, and credits earned for each course.
- Official certified true copies in English of all secondary and post-secondary school certificates, diplomas, degrees, and examination results.
- Proof of English language proficiency. This usually is determined by a score of 500 (paper test) or 173 (computer based test) or better on the Test of English as a Foreign Language (TOEFL) or by proficiency at the 112 level or better from one of the ELS (English Language Schools) language centers in the United States.
- Verification of applicant's ability to meet educational costs. Financial status is not used to determine academic qualification for admission to the university but must be verified to satisfy the U.S. Immigration and Naturalization Service requirements.

The deadline for submission of all application and supporting credentials is May 1 for fall admission and October 1 for spring admission. New international students are not admitted for summer terms. All applicants are considered automatically for financial aid.

For an application packet or further information, please contact the Office of International Services.

Contact Information

Whom to Contact at Slippery Rock About ...

Academic Records and Transcripts - Office of Academic Records and Summer School http://www.sru.edu/academics/enrollment/AcademicRecords/Pages/AcademicRecords.aspx	724- 738- 2010
Academic Services (FIRST Year Studies (FYRST) Program) http://www.sru.edu/academics/enrollment/academicervices/advisementcenter/Pages/AdvisementCenter.aspx	724- 738- 2009
Academic Services http://www.sru.edu/academics/enrollment/academicervices/Pages/academicervices.aspx	724- 738- 2012
Admissions (Freshman Undergraduate) - Office of Admissions http://www.sru.edu/academics/enrollment/undergraduate/Pages/UndergraduateAdmissions.aspx	724- 738- 2015
Admissions (International Undergraduate) - Office of International Services http://www.sru.edu/academics/internationalservices/Pages/InternationalServices.aspx	724- 738- 2057
Admissions (Transfer undergraduate) - Office of Admissions http://www.sru.edu/academics/enrollment/undergraduate/transfer/Pages/TransferAdmissionsHome.aspx	724- 738- 2015
Admissions (Readmission Undergraduate) - Office of Admissions http://www.sru.edu/academics/enrollment/undergraduate/Pages/UndergraduateAdmissions.aspx	724- 738- 2015

Admissions (Graduate) - Office of Graduate Admissions http://www.sru.edu/academics/enrollment/graduate/Pages/index.aspx	724- 738- 2051
Alumni - Office of Alumni Affairs http://rockalumnicafe.com/s/230/index.aspx	724- 738- 2018
Athletics - Office of Intercollegiate Athletics http://www.rockathletics.com/	724- 738- 2021
Campus Tours - Office of Admissions http://www.sru.edu/academics/enrollment/undergraduate/Pages/ApplySpringSummer.aspx	724- 738- 2015
Career Services - Office of Career Services http://www.sru.edu/academics/enrollment/career_services/Pages/index.aspx	724- 738- 2028
College of Business, Information, and Social Sciences http://www.sru.edu/academics/colleges/cbiss/Pages/index.aspx	724- 738- 2008
College of Education http://www.sru.edu/academics/colleges/education/Pages/Default%20-%20COE%20Homepage.aspx	724- 738- 2007
College of Health, Environment and Science http://www.sru.edu/academics/colleges/ches/Pages/welcome.aspx	724- 738- 4862
College of Humanities, Fine and Performing Arts http://www.sru.edu/academics/colleges/chfpa/Pages/HumanitiesHome.aspx	724- 738- 4863

Lifelong Learning http://www.sru.edu/academics/colleges/cbiss/lifelonglearning/Pages/LifelongLearning.aspx	724- 738- 1601
Counseling - Counseling Center http://www.sru.edu/studentlife/counseling/Pages/Welcome.aspx	724- 738- 2034
Diversity and Equal Opportunity http://www.sru.edu/financeandadministrativeaffairs/diversity/Pages/default.aspx	724- 738- 2016
Financial Aid - Office of Financial Aid http://www.sru.edu/academics/enrollment/financialAid/Pages/index.aspx	724- 738- 2044
Health Center - Health Services http://www.sru.edu/studentlife/healthservices/Pages/Home.aspx	724- 738- 2052
Honors Program - http://www.sru.edu/academics/provost/honors/Pages/HonorsProgram.aspx	724- 738- 4003
Information Technology http://www.sru.edu/academics/iats/Pages/Default.aspx	724- 738- 2800
International Student Information - Office of International Services http://www.sru.edu/academics/internationalservices/Pages/InternationalServices.aspx	724- 738- 2057
Multicultural Programs http://www.sru.edu/studentlife/multicultural/Pages/MulticulturalDevelopment.aspx	724- 738- 2700

Orientation - Office of Orientation http://www.sru.edu/academics/enrollment/orientation/Pages/Orientation.aspx	724- 738- 2067
Registration - Office of Academic Records /Summer School http://www.sru.edu/academics/enrollment/AcademicRecords/Pages/AcademicRecords.aspx	724- 738- 2010
Residence Halls - Office of Residence Life http://www.sru.edu/studentlife/reslife/Pages/welcome.aspx	724- 738- 2082
Retention Services - Office of Retention Services http://www.sru.edu/academics/enrollment/retention/Pages/RetentionServices.aspx	724- 738- 2011
Scholarships - Office of Financial Aid http://www.sru.edu/academics/enrollment/financialAid/Pages/index.aspx	724- 738- 2044
Student Activities/Organizations/Services/Student Life - Office of Student Organizations and Leadership http://www.sru.edu/studentlife/Pages/StudentLife.aspx	724- 738- 2003
Student Employment - Office of Career Services http://www.sru.edu/academics/enrollment/career_services/Pages/index.aspx	724- 738- 2028
Study Abroad - Office of International Services http://www.sru.edu/academics/internationalservices/Pages/InternationalServices.aspx	724- 738- 2057
Tuition and Fees/Billing/Payment - Office of Student Accounts http://www.sru.edu/financeandadministrativeaffairs/studentaccounts/Pages/home.aspx	724- 738- 2088

All communications should be directed to the proper university office at:
Slippery Rock University of Pennsylvania, Slippery Rock, PA 16057

Course Descriptions

Select [Add to Portfolio](#) to print descriptions.

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: 3

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: 3

ACCT 198 - Selected Topic

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

Credits: 3

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

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.

Prerequisites & Notes

ACCT 209

Credits: 3

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: 3

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: 3

ACCT 298 - Selected Topic

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

Credits: 3

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.

Prerequisites & Notes

ACCT 209

Credits: 3

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 & Notes

ACCT 210, CPSC 210, MGMT/ECON 219

Credits: 3

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.

Prerequisites & Notes

ACCT 308 or permission of the instructor

Credits: 3

ACCT 313 - Intermediate Accounting I

The study of the foundations of accounting theory and practice with emphasis placed on the conceptual framework of accounting and the development of generally accepted accounting procedures including standards promulgated by CAP, APB, FASB, EITF, and other standards setting bodies; and the application of GAAP in accounting for assets and liabilities. Ethical issues and concerns are stressed throughout the course.

Prerequisites & Notes

ACCT 209

Credits: 3

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.

Prerequisites & Notes

ACCT313

Credits: 3

ACCT 330 - 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 & Notes

ACCT 209, CPSC 210

Credits: 3

ACCT 340 - Legal Environment or Business I

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

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.

Prerequisites & Notes

ACCT 340

Credits: 3

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: 3

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: 3

ACCT 398 - Selected Topic

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

Credits: 3

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.

Prerequisites & Notes

ACCT 314

Credits: 3

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.

Prerequisites & Notes

ACCT 314 or permission of the instructor

Credits: 3

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.

Prerequisites & Notes

ACCT 313

Credits: 3

ACCT 419 - Auditing Systems

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

Prerequisites & Notes

ACCT 411 or permission of the instructor

Credits: 3

ACCT 450 - Internship

Supervised placement in selected public and private agencies at appropriate institutions. Prerequisites: Application and permission of the instructor.

Prerequisites & Notes

Application and permission of the instructor

Credits: Up to 12

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.

Prerequisites & Notes

12 credits of accounting courses, application and permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted

Credits: 1 to 3

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: 3

ACCT 498 - Selected Topic

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

Credits: 3

ACSD 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

ACSD 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

ACSD 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.

Prerequisites & Notes

N/A

ACSD 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.

ACSD 198 - Selected Topic

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

ACSD 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.

ACSD 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.

ACSD 298 - Selected Topic

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

ACSD 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.

ACSD 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: Varies

ACSD 398 - Selected Topic

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

ACSD 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: 3

ACSD 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.

ACSD 498 - Selected Topic

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

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

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.

Prerequisites & Notes

ARAB 101

Credits: 3

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.

Prerequisites & Notes

ARAB 102

Credits: 3

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

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

ART 105 - Basic Studio Drawing

This course provides the student with the option to work drawing. An introductory course in the studio techniques and the primary functions of this two dimensional studio discipline. Through creative studio practice, students discover relationships relevant to their role as an artist. (This course may not be repeated.)

Credits: 3

ART 106 - Basic Studio Painting

This course provides the student with the option to work painting. An introductory course in the studio techniques and the primary functions of this two dimensional studio discipline. Through creative studio practice, students discover relationships relevant to their role as an artist. (This course may not be repeated.)

Credits: 3

ART 107 - Basic Studio Photography

This course provides the student with the option to work photography. An introductory course in the studio techniques and the primary functions of this two dimensional studio discipline. Through creative studio practice, students discover relationships relevant to their role as an artist. (This course may not be repeated.)

Credits: 3

ART 108 - Basic Studio Printmaking

This course provides the student with the option to work printmaking. An introductory course in the studio techniques and the primary functions of this two dimensional studio discipline. Through creative studio practice, students discover relationships relevant to their role as an artist. (This course may not be repeated.)

Credits: 3

ART 109 - Basic Studio Metalsmithing

This course provides the student with the option to work metalsmithing. An introductory course in the studio techniques and the primary functions of this three dimensional studio discipline. Through creative studio practice, students discover relationships relevant to their role as an artist. (This course may not be repeated.)

Credits: 3

ART 110 - Basic Studio Sculpture

This course provides the student with the option to work sculpture. An introductory course in the studio techniques and the primary functions of this three dimensional studio discipline. Through creative studio practice, students discover relationships relevant to their role as an artist. (This course may not be repeated.)

Credits: 3

ART 111 - Basic Studio Fibers

This course provides the student with the option to work fibers. An introductory course in the studio techniques and the primary functions of this three dimensional studio discipline. Through creative studio practice, students discover relationships relevant to their role as an artist. (This course may not be repeated.)

Credits: 3

ART 112 - Basic Studio Ceramics

This course provides the student with the option to work ceramics. An introductory course in the studio techniques and the primary functions of this three dimensional studio discipline. Through creative studio practice, students discover relationships relevant to their role as an artist. (This course may not be repeated.)

Credits: 3

ART 114 - Basic Studio Digital Media

This course provides the student with the option to work digital media. An introductory course in the studio techniques and the primary functions of this two dimensional studio discipline. Through creative studio practice, students discover relationships relevant to their role as an artist. (This course may not be repeated.)

Credits: 3

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

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.

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: 3

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: 3

ART 198 - Selected Topic

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

Credits: 3

ART 200 - Activities and Fundamentals

A course providing for the study of child development through creative activities. It includes theory, experimentation with two and three-dimensional processes appropriate to the elementary classroom, methods of motivation, evaluation and classroom management.

Credits: 3

ART 205 - Art Synthesis Drawing

This course provides student options working in drawing. Emphasis is given to the synthesis of the student experience through art.

Prerequisites & Notes

One course at the basic studio level chosen from ART 100, 101, and 105 through 114. Limited to 6 credits in any one studio.

Credits: 3

ART 206 - Art Synthesis Painting

This course provides student options working in painting. Emphasis is given to the synthesis of the student experience through art.

Prerequisites & Notes

One course at the basic studio level chosen from ART 100, 101, and 105 through 114. Limited to 6 credits in any one studio.

Credits: 3

ART 207 - Art Synthesis Photography

This course provides student options working in photography. Emphasis is given to the synthesis of the student experience through art.

Prerequisites & Notes

One course at the basic studio level chosen from ART 100, 101, and 105 through 114. Limited to 6 credits in any one studio.

Credits: 3

ART 208 - Art Synthesis Printmaking

This course provides student options working in printmaking. Emphasis is given to the synthesis of the student experience through art.

Prerequisites & Notes

One course at the basic studio level chosen from ART 100, 101, and 105 through 114. Limited to 6 credits in any one studio.

Credits: 3

ART 209 - Art Synthesis Metalsmithing

This course provides student options working in metalsmithing. Emphasis is given to the synthesis of the student experience through art.

Prerequisites & Notes

One course at the basic studio level chosen from ART 100, 101, and 105 through 114. Limited to 6 credits in any one studio.

Credits: 3

ART 210 - Art Synthesis Sculpture

This course provides student options working in sculpture. Emphasis is given to the synthesis of the student experience through art.

Prerequisites & Notes

One course at the basic studio level chosen from ART 100, 101, and 105 through 114. Limited to 6 credits in any one studio.

Credits: 3

ART 211 - Art Synthesis Fibers

This course provides student options working in fibers. Emphasis is given to the synthesis of the student experience through art.

Prerequisites & Notes

One course at the basic studio level chosen from ART 100, 101, and 105 through 114. Limited to 6 credits in any one studio.

Credits: 3

ART 212 - Art Synthesis Ceramics

This course provides student options working in ceramics. Emphasis is given to the synthesis of the student experience through art.

Prerequisites & Notes

One course at the basic studio level chosen from ART 100, 101, and 105 through 114. Limited to 6 credits in any one studio.

Credits: 3

ART 213 - Art Synthesis Design

This course provides student options working in design. Emphasis is given to the synthesis of the student experience through art.

Prerequisites & Notes

One course at the basic studio level chosen from ART 100, 101, and 105 through 114. Limited to 6 credits in any one studio.

Credits: 3

ART 214 - Art Synthesis Digital Media

This course provides student options working in digital media. Emphasis is given to the synthesis of the student experience through art.

Prerequisites & Notes

One course at the basic studio level chosen from ART 100, 101, and 105 through 114. Limited to 6 credits in any one studio.

Credits: 3

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

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

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: 3

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: 3

ART 298 - Selected Topic

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

Credits: 3

ART 300 - Art Seminar

A seminar for advanced art studio majors, designed to sharpen the students' critical and evaluation skills.

Prerequisites & Notes

6 credits of advanced studio

Credits: 3

ART 305 - Advanced Studio Drawing

A continuation of art synthesis courses which provide an expanded range of approaches to the solution of advanced studio problems. This course provides student options in working with drawing. Students are limited to 9 credits in any one studio.

Prerequisites & Notes

6 credits chosen from ART 205 through 214.

Credits: 3

ART 306 - Advanced Studio Painting

A continuation of art synthesis courses which provide an expanded range of approaches to the solution of advanced studio problems. This course provides student options in working with painting. Students are limited to 9 credits in any one studio.

Prerequisites & Notes

6 credits chosen from ART 205 through 214.

Credits: 3

ART 307 - Advanced Studio Photography

A continuation of art synthesis courses which provide an expanded range of approaches to the solution of advanced studio problems. This course provides student options in working with photography. Students are limited to 9 credits in any one studio.

Prerequisites & Notes

6 credits chosen from ART 205 through 214.

Credits: 3

ART 308 - Advanced Studio Printmaking

A continuation of art synthesis courses which provide an expanded range of approaches to the solution of advanced studio problems. This course provides student options in working with printmaking. Students are limited to 9 credits in any one studio.

Prerequisites & Notes

6 credits chosen from ART 205 through 214.

Credits: 3

ART 309 - Advanced Studio Metalsmithing

A continuation of art synthesis courses which provide an expanded range of approaches to the solution of advanced studio problems. This course provides student options in working with metalsmithing. Students are limited to 9 credits in any one studio.

Prerequisites & Notes

6 credits chosen from ART 205 through 214.

Credits: 3

ART 310 - Advanced Studio Sculpture

A continuation of art synthesis courses which provide an expanded range of approaches to the solution of advanced studio problems. This course provides student options in working with sculpture. Students are limited to 9 credits in any one studio.

Prerequisites & Notes

6 credits chosen from ART 205 through 214.

Credits: 3

ART 311 - Advanced Studio Fibers

A continuation of art synthesis courses which provide an expanded range of approaches to the solution of advanced studio problems. This course provides student options in working with fibers. Students are limited to 9 credits in any one studio.

Prerequisites & Notes

6 credits chosen from ART 205 through 214.

Credits: 3

ART 312 - Advanced Studio Ceramics

A continuation of art synthesis courses which provide an expanded range of approaches to the solution of advanced studio problems. This course provides student options in working with ceramics. Students are limited to 9 credits in any one studio.

Prerequisites & Notes

6 credits chosen from ART 205 through 214.

Credits: 3

ART 313 - Advanced Studio Design

A continuation of art synthesis courses which provide an expanded range of approaches to the solution of advanced studio problems. This course provides student options in working with design. Students are limited to 9 credits in any one studio.

Prerequisites & Notes

6 credits chosen from ART 205 through 214.

Credits: 3

ART 314 - Advanced Studio Digital Media

A continuation of art synthesis courses which provide an expanded range of approaches to the solution of advanced studio problems. This course provides student options in working with digital media. Students are limited to 9 credits in any one studio.

Prerequisites & Notes

6 credits chosen from ART 205 through 214.

Credits: 3

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

ART 317 - Advanced Topics in Elementary Art

This course will provide elementary education majors with an understanding and an ability to use the elements of discipline-based art education in the classroom. Encompassing the four areas of Art Education (art criticism, art history, aesthetics and art production) the main emphasis of coursework will be to create a framework for rigorous and challenging study of art as it applies to the development of children in an elementary setting.

Credits: 3

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.

Prerequisites & Notes

ART 225

Credits: 3-6

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.

Prerequisites & Notes

ART 225

Credits: 3-6

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.

Prerequisites & Notes

ART 225

Credits: 3-6

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.

Prerequisites & Notes

ART 225

Credits: 3-6

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.

Prerequisites & Notes

ART 225

Credits: 3-6

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: 3

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: 3

ART 398 - Selected Topic

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

Credits: 3

ART 405 - Senior Studio Drawing

This course in studio work utilizes studio facilities in the accomplishment of the students' senior level artistic objectives. (3 credits may be repeated with the instructor's permission for a maximum of 9 credits).

Prerequisites & Notes

6 credits of advanced studio

Credits: 3

ART 406 - Senior Studio Painting

This course in studio work utilizes studio facilities in the accomplishment of the students' senior level artistic objectives. (3 credits may be repeated with the instructor's permission for a maximum of 9 credits).

Prerequisites & Notes

6 credits of advanced studio

Credits: 3

ART 407 - Senior Studio Photography

This course in studio work utilizes studio facilities in the accomplishment of the students' senior level artistic objectives. (3 credits may be repeated with the instructor's permission for a maximum of 9 credits).

Prerequisites & Notes

6 credits of advanced studio

Credits: 3

ART 408 - Senior Studio Printmaking

This course in studio work utilizes studio facilities in the accomplishment of the students' senior level artistic objectives. (3 credits may be repeated with the instructor's permission for a maximum of 9 credits).

Prerequisites & Notes

6 credits of advanced studio

Credits: 3

ART 409 - Senior Studio Metalsmithing

This course in studio work utilizes studio facilities in the accomplishment of the students' senior level artistic objectives. (3 credits may be repeated with the instructor's permission for a maximum of 9 credits).

Prerequisites & Notes

6 credits of advanced studio

Credits: 3

ART 410 - Senior Studio Sculpture

This course in studio work utilizes studio facilities in the accomplishment of the students' senior level artistic objectives. (3 credits may be repeated with the instructor's permission for a maximum of 9 credits).

Prerequisites & Notes

6 credits of advanced studio

Credits: 3

ART 411 - Senior Studio Fibers

This course in studio work utilizes studio facilities in the accomplishment of the students' senior level artistic objectives. (3 credits may be repeated with the instructor's permission for a maximum of 9 credits).

Prerequisites & Notes

6 credits of advanced studio

Credits: 3

ART 412 - Senior Studio Ceramics

This course in studio work utilizes studio facilities in the accomplishment of the students' senior level artistic objectives. (3 credits may be repeated with the instructor's permission for a maximum of 9 credits).

Prerequisites & Notes

6 credits of advanced studio

Credits: 3

ART 413 - Senior Studio Design

This course in studio work utilizes studio facilities in the accomplishment of the students' senior level artistic objectives. (3 credits may be repeated with the instructor's permission for a maximum of 9 credits).

Prerequisites & Notes

6 credits of advanced studio

Credits: 3

ART 414 - Senior Studio Digital Media

This course in studio work utilizes studio facilities in the accomplishment of the students' senior level artistic objectives. (3 credits may be repeated with the instructor's permission for a maximum of 9 credits).

Prerequisites & Notes

6 credits of advanced studio

Credits: 3

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.

Credits: 3-6

ART 425 - Senior Project Drawing

This course provides independent study in drawing, culminating in a public exhibition demonstrating the students' artistic stance.

Prerequisites & Notes

Permission of the instructor

Credits: 3

ART 426 - Senior Project Painting

This course provides independent study in painting, culminating in a public exhibition demonstrating the students' artistic stance.

Prerequisites & Notes

Permission of the instructor

Credits: 3

ART 427 - Senior Project Photography

This course provides independent study in photography, culminating in a public exhibition demonstrating the students' artistic stance.

Prerequisites & Notes

Permission of the instructor

Credits: 3

ART 428 - Senior Project Printmaking

This course provides independent study in printmaking, culminating in a public exhibition demonstrating the students' artistic stance.

Prerequisites & Notes

Permission of the instructor

Credits: 3

ART 429 - Senior Project Metalsmithing

This course provides independent study in metalsmithing, culminating in a public exhibition demonstrating the students' artistic stance.

Prerequisites & Notes

Permission of the instructor

Credits: 3

ART 430 - Senior Project Sculpture

This course provides independent study in sculpture, culminating in a public exhibition demonstrating the students' artistic stance.

Prerequisites & Notes

Permission of the instructor

Credits: 3

ART 431 - Senior Project Fibers

This course provides independent study in fibers, culminating in a public exhibition demonstrating the students' artistic stance.

Prerequisites & Notes

Permission of the instructor

Credits: 3

ART 432 - Senior Project Ceramics

This course provides independent study in ceramics, culminating in a public exhibition demonstrating the students' artistic stance.

Prerequisites & Notes

Permission of the instructor

Credits: 3

ART 433 - Senior Project Design

This course provides independent study in design, culminating in a public exhibition demonstrating the students' artistic stance.

Prerequisites & Notes

Permission of the instructor

Credits: 3

ART 434 - Senior Project Digital Media

This course provides independent study in digital media, culminating in a public exhibition demonstrating the students' artistic stance.

Prerequisites & Notes

Permission of the instructor

Credits: 3

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.

Prerequisites & Notes

Completion of 24 credits in studio art

Credits: Up to 12

ART 475 - Extended Studio Drawing

Advanced work drawing studio.

Prerequisites & Notes

Permission of the instructor

Credits: 1

ART 476 - Extended Studio Painting

Advanced work in painting studio.

Prerequisites & Notes

Permission of the instructor

Credits: 1

ART 477 - Extended Studio Photography

Advanced work photography studio.

Prerequisites & Notes

Permission of the instructor

Credits: 1

ART 478 - Extended Studio Printmaking

Advanced work printmaking studio.

Prerequisites & Notes

Permission of the instructor

Credits: 1

ART 479 - Extended Studio Metalsmithing

Advanced work metalsmithing studio.

Prerequisites & Notes

Permission of the instructor

Credits: 1

ART 480 - Extended Studio Sculpture

Advanced work sculpture studio.

Prerequisites & Notes

Permission of the instructor

Credits: 1

ART 481 - Extended Studio Fibers

Advanced work fiber studio.

Prerequisites & Notes

Permission of the instructor

Credits: 1

ART 482 - Extended Studio Ceramics

Advanced work ceramics studio.

Prerequisites & Notes

Permission of the instructor

Credits: 1

ART 483 - Extended Studio Design

Advanced work in design studio.

Prerequisites & Notes

Permission of instructor

Credits: 1

ART 484 - Extended Studio Digital Media

Advanced work digital media studio.

Prerequisites & Notes

Permission of the instructor

Credits: 1

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 to 3

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: 3

ART 498 - Selected Topic

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

Credits: 3

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

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

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

BIOL 104 - Principles of Biology

A laboratory and lecture course that emphasizes basic biological principles to prepare students for subsequent sequential courses required of biology majors.

Credits: 4

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

BIOL 120 - Practical Botany

Basic structures, functions, and uses of plants. This course, for the non-biology 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

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: 3

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: 3

BIOL 198 - Selected Topic

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

Credits: 3

BIOL 201 - General Botany

Basic biochemical, morphological, and physiological aspects of plant biology as they relate to evolution. Includes a lab.

Prerequisites & Notes

BIOL 101 or 102 or 104

Credits: 4

BIOL 207 - Land Plants and Their Environment

This course for non-biology majors surveys the common plants native to Pennsylvania. Includes a lab.

Credits: 3

BIOL 208 - Introduction to Wildlife Management

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

BIOL 210 - Medical Microbiology

The study of pathogenic microorganisms to include taxonomy, structure, biological activities, host defense mechanisms, disease transmission, and disease states. Includes a lab.

Prerequisites & Notes

BIOL 101 or 102 or 216

Credits: 3

BIOL 212 - General Zoology

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 & Notes

BIOL 101 or 102 or 104

Credits: 4

BIOL 213 - Medical Immunology

A lecture and laboratory course for medical technology majors which emphasizes immunological principals of medical importance.

Prerequisites & Notes

BIOL 210

Credits: 1

BIOL 214 - Medical Parasitology

A lecture and laboratory course for medical technology majors which emphasizes the protozoans and metazoa of medical importance.

Prerequisites & Notes

BIOL 210

Credits: 1

BIOL 215 - Medical Mycology

A lecture and laboratory course for medical technology majors which emphasizes the fungi of medical importance.

Prerequisites & Notes

BIOL 210

Credits: 1

BIOL 216 - Anatomy and Physiology

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

BIOL 217 - Anatomy and Physiology

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. This course includes a lab.

Credits: 3

BIOL 250 - Genetics

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 & Notes

BIOL 101 or 102 or 104

Credits: 4

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: 3

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: 3

BIOL 298 - Selected Topic

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

Credits: 3

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 & Notes

Advanced standing and BIOL 101 or 102 or 104

Credits: 3

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 & Notes

N/A

Credits: N/A

BIOL 302 - Ecology of Amphibians & Reptiles

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 & Notes

N/A

Credits: N/A

BIOL 303 - Behavioral Ecology

This 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.

Prerequisites & Notes

BIOL 201 General Botany OR BIOL 212 General Zoology

Credits: 3

BIOL 305 - Wetlands and Aquatic Plants

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 & Notes

General Biology (Biology 101) or Principles of Biology (Biology 104)

Credits: 3

BIOL 306 - Freshwater Biomonitoring

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 & Notes

General Biology (Biology 101) or Principles of Biology (Biology 104)

Credits: 3

BIOL 307 - Vertebrate Ecology

This 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.

Credits: 3

BIOL 308 - Aquatic Ecosystem Management / Lab

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 & Notes

N/A

Credits: N/A

BIOL 310 - Plant Systematics

Evolutionary trends in floristic morphology are used to examine family relationships among the major groups of vascular plants. Includes a lab.

Prerequisites & Notes

BIOL 201

Credits: 3

BIOL 311 - Entomology

Insects, including their taxonomy, structure, function, ecology, and economic importance.

Prerequisites & Notes

BIOL 212

Credits: 3

BIOL 320 - Ornithology

Anatomy, physiology, taxonomy, ecology, and behavior of birds. Two weekend field trips are required. Includes a lab.

Prerequisites & Notes

BIOL 212

Credits: 3

BIOL 321 - Wildlife Management

This 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.

Credits: 3

BIOL 322 - Conservation Biology

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 & Notes

N/A

Credits: N/A

BIOL 325 - Biometry

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.

Credits: 3

BIOL 326 - Field Methods in Biogeography

This 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.

Credits: 3

BIOL 327 - Limnology

This 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.

Credits: 3

BIOL 330 - Microbiology

A consideration of the structure, metabolism, growth, and genetics of microorganisms with emphasis placed on the bacteria and viruses. Includes a lab.

Prerequisites & Notes

BIOL 250 and CHEM 200 or 201

Credits: 3

BIOL 331 - Mammology

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 & Notes

N/A

Credits: N/A

BIOL 335 - Cell Biology

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.

Prerequisites & Notes

BIOL 250 and CHEM 200 or 201

Credits: 3

BIOL 340 - Vertebrate Anatomy

A comparative study of the adult structure of the organs and systems of representative vertebrates. Laboratory included.

Prerequisites & Notes

BIOL 212

Credits: 3

BIOL 343 - Embryology

Developmental processes of vertebrate embryology. A comparative study of gaetogenesis, fertilization, cleavage, gastrulation, organogenesis, and embronic adaptations. Includes a lab.

Prerequisites & Notes

BIOL 340 or permission of the instructor

Credits: 3

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 & Notes

The successful completion (or the equivalent) of two years of basic science courses at the university level

Credits: 2

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 & Notes

BIOL 201, 212, 250

Credits: 3

BIOL 356 - Field Ecology / Lab

This 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.

Credits: 4

BIOL 357 - Environmental Microbiology

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 & Notes

BIOL 101 or 104 or equivalent, CHEM 200 or 202

Credits: 4

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.

Credits: 3

BIOL 370 - Molecular Biology

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 & Notes

BIOL 250 and CHEM 201 or CHEM 202

Credits: 3

BIOL 371 - Vertebrate Field Zoology

Taxonomy, life histories, and ecological relationships of representative vertebrates are stressed. Several field trips are required.

Credits: 3

BIOL 373 - Ichthyology

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 & Notes

N/A

Credits: N/A

BIOL 375 - Ecology of Fish / Lab

This 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.

Credits: 4

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: 3

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: 3

BIOL 398 - Selected Topic

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

Credits: 3

BIOL 401 - Ecology

Emphasis is placed on the structure, composition, and dynamics of ecosystems. Lab work primarily consists of field studies.

Prerequisites & Notes

BIOL 101 or 104, and CHEM 108 and junior standing

Credits: 3

BIOL 405 - Animal Physiological Ecology

The adaptations of animals to deal with specialized environmental situations are studied at levels ranging from biochemical to organismal.

Prerequisites & Notes

BIOL 104, 212, CHEM 107, 108

Credits: 4

BIOL 410 - Animal Physiology

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 & Notes

Co-requisite: CHEM 201

Credits: 3

BIOL 430 - Pathogenic Microbiology

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 & Notes

BIOL 330

Credits: 3

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.

Credits: Up to 12

BIOL 451 - Plant Physiology

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 & Notes

BIOL 201 and CHEM 201

Credits: 3

BIOL 465 - Plant Anatomy

A macroscopic 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 & Notes

BIOL 201

Credits: 3

BIOL 470 - Histology

Microscopic structure and arrangement of tissues in multicellular organisms. Prepared microscopic slides of representative animal organs are studied. Includes a lab.

Prerequisites & Notes

BIOL 212 or permission of the instructor

Credits: 3

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 to 3

BIOL 492 - Biology Seminar

For junior and senior biology majors. Each semester a different area of current research interest is chosen for study.

Credits: 1

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: 3

BIOL 498 - Selected Topics

The in depth examination of a specific topic. The nature of the topic selected and its treatment determined in consultation with the instructor.

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

Credits: 1 to 3

BIOL 590 - Experimental

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

Credits: 3

BIOL 595 - Workshop

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

Credits: 1

BIOL 598 - Selected Topic

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

Credits: 3

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.

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.

CDEV 198 - Selected Topic

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

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

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

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.

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.

CDEV 298 - Selected Topic

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

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.

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: Variable

CDEV 398 - Selected Topic

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

CDEV 490 - Independent Study

A program of independent work conducted 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 to 3

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.

CDEV 498 - Selected Topic

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

CHEM 104 - Introduction Chemistry I

This course is the first course in a two-semester sequence for non-science 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 two-semester 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

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 course 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 & Notes

CHEM 104

Credits: 3

CHEM 107 - General Chemistry I

Topics include nomenclature, stoichiometry, kinetic-molecular theory, gas laws, electronic structure, periodicity, and chemical bonding. Stoichiometry is emphasized.

Prerequisites & Notes

ACSD 110 and co-requisites MATH 120, or 125 or 225

Credits: 3

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.

Prerequisites & Notes

A grade of C or higher in CHEM 107

Credits: 3

CHEM 110 - Contemporary Chemistry Laboratory

Laboratory to accompany Chemistry 103 providing basic chemistry and environmentally related experiences. One two-hour laboratory per week.

Prerequisites & Notes

Co-requisite: CHEM 104

Credits: 1

CHEM 111 - General Chemistry I Lab

A laboratory to accompany CHEM 107. Laboratory experiments are designed to develop basic laboratory skills and illustrate concepts.

Prerequisites & Notes

Co-requisite: CHEM 107

Credits: 1

CHEM 112 - General Chemistry II Lab

A laboratory to accompany CHEM 108. Laboratory experiments illustrate the concepts of General Chemistry II.

Prerequisites & Notes

CHEM 111 and co-requisite: CHEM 108

Credits: 1

CHEM 113 - Clinical Chemistry Laboratory

Laboratory to accompany CHEM 103 providing basic chemistry and health-related experiences. One two-hour laboratory per week.

Prerequisites & Notes

Co-requisite: CHEM 104

Credits: 1

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: 3

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: 3

CHEM 198 - Selected Topic

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

Credits: 3

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 & Notes

CHEM 108, 112

Credits: 3

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 & Notes

A grade of C or higher in CHEM 108 and CHEM112.

Credits: 3

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.

Prerequisites & Notes

A grade of C or higher in CHEM 201

Credits: 3

CHEM 211 - Organic Chemistry Laboratory I

A laboratory course in which students employ the synthetic techniques and analytical procedures of organic chemistry.

Prerequisites & Notes

CHEM 108 and 112, and co-requisite: concurrent registration in CHEM 201 or completion of CHEM 201

Credits: 1

CHEM 212 - Organic Chemistry Laboratory II

A laboratory course in which students employ the synthetic techniques and analytical procedures of organic chemistry.

Prerequisites & Notes

CHEM 211 and concurrent registration in CHEM 202 or completion of CHEM 202

Credits: 1

CHEM 240 - Industrial Hygiene

Requirements to preserve worker health and safety will be surveyed.

Prerequisites & Notes

CHEM 107, 108, and 200

Credits: 3

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 & Notes

CHEM 108, 112

Credits: 3

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: 3

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: 3

CHEM 298 - Selected Topic

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

Credits: 3

CHEM 301 - Physical Chemistry 1

Thermodynamics and chemical kinetics. Cross listed as PHYS301.

Prerequisites & Notes

CHEM 108, 112, PHYS 212 or 213 and MATH 230

Credits: 3

CHEM 302 - Physical Chemistry II

Quantum mechanics and spectroscopy.

Prerequisites & Notes

CHEM 108, 112, PHYS 211, 212 or 213 and MATH 231

Credits: 3

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 & Notes

Co-requisite: CHEM/PHYS 301

Credits: 1

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.

Prerequisites & Notes

Concurrent registration: CHEM 302

Credits: 1

CHEM 335 - Biochemistry I

Investigates the basic theme of intermediary metabolism. A background for this study is gained through study of the chemistry of cellular constituents.

Prerequisites & Notes

CHEM 202

Credits: 3

CHEM 336 - Biochemistry Laboratory I

A laboratory course in which the student uses techniques employed in biochemical investigations.

Prerequisites & Notes

CHEM 212 and co-requisite: CHEM 335

Credits: 1

CHEM 337 - Biochemistry II

The study of structures and physical properties of biological molecules.

Prerequisites & Notes

CHEM335 and 336

Credits: 3

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 & Notes

CHEM 336 and co-requisite: CHEM 337

Credits: 1

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 & Notes

CHEM 108, 112

Credits: 4

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 & Notes

CHEM 108, 112

Credits: 3

CHEM 351 - Analytical Chemistry Lab

Students develop practical skills employed in the quantitative analysis of chemical systems.

Prerequisites & Notes

CHEM 108, 112 and co-requisite: CHEM 350

Credits: 1

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 & Notes

CHEM 108, 112

Credits: 4

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: 3

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: 3

CHEM 398 - Selected Topic

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

Credits: 3

CHEM 415 - Forensic Analysis

The application of analytical chemistry including instrumental methods to the investigation and interpretation of crime scene evidence.

Prerequisites & Notes

CHEM 350, 351

Credits: 3

CHEM 416 - Forensic Analysis Lab

The application of instrumental methods of analysis to the interpretation of crime scene evidence.

Prerequisites & Notes

CHEM 350, 351 and co-requisite: CHEM 415

Credits: 1

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 & Notes

CHEM 350, MATH 225 and PHYS 211

Credits: 3

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.

Prerequisites & Notes

Concurrent registration in CHEM 425 and knowledge of a computer language

Credits: 1

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 & Notes

CHEM 108 and 112

Credits: 3

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.

Prerequisites & Notes

Co-requisite: CHEM 302

Credits: 3

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.)

Prerequisites & Notes

16 credits (minimum) in chemistry and Junior or Senior standing

Credits: Up to 12

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 & Notes

CHEM 302 and CHEM 442

Credits: 1

CHEM 460 - Polymer Chemistry

A one semester introductory course that covers the synthesis, kinetics, properties, and applications of polymers.

Prerequisites & Notes

CHEM 202 or permission of the instructor

Credits: 3

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 & Notes

CHEM 202 and 212

Credits: 5

CHEM 490 - Independent Study

Independent research under the guidance of a faculty 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.

Prerequisites & Notes

Permission of the instructor, departmental chairperson and dean of the college where the study will be conducted

Credits: 1 to 3

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

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.

Prerequisites & Notes

Permission of the chairperson

Credits: 1 to 3

CHEM 498 - Selected Topics

The in-depth examination of a specific topic. The nature of the topic selected and its treatment determined in consultation with the instructor.

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

Credits: 1 to 3

CHEM 590 - Experimental

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

Credits: 3

CHEM 595 - Workshop

Varies.

Credits: 3

CHEM 598 - Selected Topic

Varies.

Credits: 3

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

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.

Prerequisites & Notes

CHIN 101 or equivalent

Credits: 3

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.

Prerequisites & Notes

CHIN 102 or equivalent

Credits: 3

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: 3

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: 3

CHIN 198 - Selected Topic

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

Credits: 3

CHIN 202 - Intermediate Chinese I

Comprehensive review of the Mandarin language with emphasis on developing the students' abilities for proficient oral and written accomplishments.

Prerequisites & Notes

CHIN 103 or equivalent

Credits: 3

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: 3

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: 3

CHIN 298 - Selected Topic

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

Credits: 3

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

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: 3

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: 3

CHIN 398 - Selected Topic

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

Credits: 3

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.

Prerequisites & Notes

Permission of the instructor, departmental chairperson, and the dean of the college where the study will be conducted.

Credits: 1-3

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: 3

CHIN 498 - Selected Topic

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

Credits: 3

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

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 and cultural processes and aesthetic appreciation.

Credits: 3

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.

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.

COMM 198 - Selected Topic

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

COMM 200 - Public Speaking

Theory and practice of developing and presenting oral messages in a variety of communication contexts. Students will be expected to develop an understanding of the communication process and to demonstrate proficiency in speechmaking.

Prerequisites & Notes

ENGL 101 or equivalent and sophomore standing

Credits: 3

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.

Prerequisites & Notes

COMM 115 or ART 115

Credits: 3

COMM 215 - Small Group Communication

Communication problems and processes in small groups. Topics include role and nature of the small group, communication structure, problem-solving techniques, and leadership.

Credits: 3

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 foster an increased awareness of particular skills and knowledge that can foster more effective intercultural communication.

Credits: 3

COMM 231 - Introduction to Public Relations

This course seeks to introduce public relations students to the history, role, context of public relations, and the process through which public relations professionals establish and maintain lines of communication between an organization and its publics. As such, the course examines the nature of public opinion, methods of audience analysis, message design, and engages in skill development relevant to the professional practice of the public relations.

Credits: 3

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 242 - News Writing

Basic course in journalistic news structuring techniques and straight news writing. Students write news stories and conduct news interviews.

Prerequisites & Notes

ENGL 101 or exemption

Credits: 3

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

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, (2) development of techniques for composition, lighting, scriptwriting, storyboarding, directing, and editing.

Credits: 3

COMM 258 - Interactive Multimedia I

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.

Credits: 3

COMM 262 - Broadcast Announcing

This skill course is intended to develop a mastery of voice techniques used in broadcasting. The course focuses on analytical and vocal techniques associated with on-air announcing for radio and television. Topics include voice analysis, pronunciation and articulation, broadcasting equipment and announcing for commercials, music, sports and news.

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.

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.

COMM 298 - Selected Topic

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

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 & Notes

COMM 242

Credits: 3

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. This course is a prerequisite or co-requisite for all upper division communication courses for majors.

Prerequisites & Notes

COMM 110

Credits: 3

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 & Notes

COMM 200. COMM 310 is a prerequisite or co-requisite for all majors.

Credits: 3

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.

Prerequisites & Notes

COMM 215. COMM 310 is a prerequisite or co-requisite for all majors.

Credits: 3

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.

Prerequisites & Notes

COMM 310 is a prerequisite or co-requisite for all majors.

Credits: 3

COMM 318 - Professional Presentation

Principles and applications of communication techniques and media for presentations and processes common to professional settings.

Prerequisites & Notes

Senior Standing, CPSC 110 or equivalent experience and familiarity with PC's and software recommended

Credits: 3

COMM 332 - Case Studies in Public Relations and Integrated Communications

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 communications 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 communications practice are emphasized.

Prerequisites & Notes

COMM 231

Credits: 3

COMM 333 - Public Relations Writing

Course seeks to further develop the writing skills of public relations 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 & Notes

COMM 231, 242, and 310

Credits: 3

COMM 334 - Publication Production II

The course continues to expose students to the in-depth study of electronic publication issues, it specifically deals with design and layout issues related to newspapers, annual reports and other multiple-page publications. The course covers issues related to prepares, separations, advanced topography and paper selection.

Prerequisites & Notes

COMM 232

Credits: 3

COMM 335 - 2-D 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 & Notes

COMM 201

Credits: 3

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 & Notes

COMM 242. COMM 310 is a prerequisite or co-requisite for all majors.

Credits: 3

COMM 343 - Feature Journalism

Course will focus on writing feature articles for newspapers and magazines.

Prerequisites & Notes

COMM 242

Credits: 3

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 & Notes

COMM 242

Credits: 3

COMM 348 - Advanced 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 & Notes

COMM 242; 343

Credits: 3

COMM 350 - Editing for Video

This course provides students with the opportunity to expand their knowledge of videotape editing. Special attention is given to expanding skill sets associated with digital non-linear editing.

Prerequisites & Notes

COMM 254

Credits: 3

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.

Prerequisites & Notes

Prerequisites: COMM 254

Credits: 3

COMM 355 - TV Field Production

An advanced course in the processes and techniques of single-camera field production and editing. Students will report, video tape, write, and edit packages for television news.

Prerequisites & Notes

COMM 254

Credits: 3

COMM 359 - Interactive Multimedia II

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 & Notes

COMM 258

Credits: 3

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 & Notes

110, 232, 254, or consent of instructor. COMM 310 is a prerequisite or co-requisite for all majors.

Credits: 3

COMM 362 - 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

COMM 363 - 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.

Credits: 3

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.

COMM 393 - Junior Seminar

The seminar is designed to assist students in conducting a self-assessment while exploring the corporate culture of the communication field. The student will develop a portfolio, attend job seminars, establish a credential file, conduct mock and actual interviews, participate in an on-site mentoring/shadow program and make a public presentation of their portfolio.

Prerequisites & Notes

Junior standing

Credits: 1

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.

COMM 398 - Selected Topic

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

COMM 405 - International Journalism

An examination of journalism as it is practiced globally - not only by U.S. journalists but also by their counterparts on every continent. We'll analyze news organizations and practices, government policies toward journalism, the roles of old and new media technologies, shifting audiences, and other forces influencing the nature and movement of news within countries and across borders.

Prerequisites & Notes

Junior Standing

Credits: 3

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).

Prerequisites & Notes

Senior standing and a major or minor in communication. COMM 310 is a prerequisite or co-requisite for all majors.

Credits: 3

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.

Prerequisites & Notes

Advanced standing. COMM 310 is a prerequisite or co-requisite for all majors.

Credits: 3

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 & Notes

COMM 110, 200. COMM 310 is a prerequisite or co-requisite for all majors.

Credits: 3

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.

Prerequisites & Notes

Advanced standing, COMM 310

Credits: 3

COMM 431 - Public Relations and Integrated Communications Campaigns

Course gives students a thorough experience in conducting public relations and integrated communications 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 & Notes

COMM 231, 332, 333. COMM 310 is a prerequisite or co-requisite for all majors. Also Recommended COMM 232 and/or 254.

Credits: 3

COMM 441 - Issues in Journalism

Study of contemporary controversies and problems in journalism.

Prerequisites & Notes

Advanced standing. COMM 310 is a prerequisite or co-requisite for all majors.

Credits: 3

COMM 449 - Communication Projects

This course provides students an opportunity to investigate in-depth, approved topics in applied communication.

Prerequisites & Notes

Junior standing or permission of the instructor.

Credits: 3

COMM 450 - Internship

Supervised placement or research in selected private or public agencies.

Prerequisites & Notes

Junior status, 18 credits in the major, 2.500 QPA in major and 2.000 QPA overall. COMM 310 is a prerequisite or co-

requisite for all majors.

Credits: Up to 12

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 communications both inside and outside of the team. Other topics include budgeting, development of human capital, leadership, time management and legal issues.

Prerequisites & Notes

Completion of 9 credits at Level 2.

Credits: 3

COMM 455 - History of Broadcasting

Survey of the history and development of radio and television broadcasting in the United States.

Prerequisites & Notes

COMM 310 is a prerequisite or co-requisite for all majors.

Credits: 3

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.

Prerequisites & Notes

COMM 362. COMM 310 is a prerequisite or co-requisite for all majors.

Credits: 3

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.

Prerequisites & Notes

COMM 310 is a prerequisite or co-requisite for all majors.

Credits: 3

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.

Prerequisites & Notes

Advanced standing. COMM 310 is a prerequisite or co-requisite for all majors.

Credits: 3

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.

Prerequisites & Notes

Permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. COMM 310.

Credits: 3

COMM 493 - Senior Seminar

The seminar is designed to assist students in conducting a self-assessment while exploring the corporate culture of the communication field. The student will further develop a portfolio, attend job seminars, conduct mock and actual interviews, participate in an on-site mentoring/shadow program and make a public presentation of their portfolio.

Prerequisites & Notes

Senior standing and COMM 393

Credits: 1

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.

COMM 498 - Selected Topics

The in-depth examination of a specific topic. The nature of the topic selected and its treatment determined in consultation with the instructor.

A **Selected Topics** course is a normal, departmental offering which is directly 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 & Notes

COMM 310 is a prerequisite or co-requisite for all majors.

Credits: 3

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

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 the ethical, legal and social issues involved in the use of these collaborative technologies.

Credits: 3

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

CPSC 130 - Introduction to Programming and Information Systems

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 & Notes

ACSD 110

Credits: 3

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 & Notes

ACSD 110

Keywords: computer science

Credits: 3

CPSC 150 - 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 & Notes

CPSC 140, and MGMT/ECON 219 or any Math course beyond MATH 120, or permission of instructor

Credits: 4

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.

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.

CPSC 198 - Selected Topic

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

CPSC 207 - System Software and Architecture for End Users

This course introduces the student to prevalent operating systems and the hardware and networking of those systems. User level commands in the current PC operating system and the Unix operating system for managing files, system utilities, and task management are introduced. The architecture of the PC and how it relates to the OS is discussed conceptually and physically examined. The hardware and software required for inter-connecting systems is discussed.

Credits: 3

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 & Notes

CPSC099 or 100 or 110 or 130

Credits: 3

CPSC 217 - Structured and Dynamic Web Programming

This course is designed to cover the features of popular programming languages specifically for creating web pages. Mouse rollovers, browser detects, pop-up windows that launch when a web page loads or in response to specific actions, and form data-checking are just a few of the most popular uses of web programming languages that will be discussed. Programming will be done in a representative programming language.

Prerequisites & Notes

CPSC 130, 140

Credits: 3

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 from an advanced point of view. 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 programming expertise in at least one other language. For different languages, this course may be repeated for credit toward graduation, but not toward a computer science major or minor.

Prerequisites & Notes

CPSC 150 or CPSC 217

Credits: 3

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.

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.

CPSC 298 - Selected Topic

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

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.

Prerequisites & Notes

Advanced standing

Credits: 3

CPSC 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 & Notes

CPSC099 or 100 or 110 or 130

Credits: 3

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 & Notes

CPSC099 or 100 or 110 or 130

Credits: 3

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.

Prerequisites & Notes

CPSC 140, MATH 120

Credits: 4

CPSC 317 - Scripting Languages

This course emphasizes programming using scripting languages for the purpose of collecting and manipulating system information by system administrators and managers. Programming concepts such as data types and control structures will be discussed as well as operating system commands. A variety of languages and utilities will be discussed such as the Bourne shell, Perl, awk, and the Common Gateway Interface. The student is expected to have programming experience and knowledge of the Unix and Windows environments.

Prerequisites & Notes

CPSC 207, 217

Credits: 3

CPSC 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 & Notes

CPSC 130 or 140 or 210

Credits: 3

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 & Notes

CPSC 317

Credits: 3

CPSC 343 - File Processing

A practical study of information storage and retrieval using computer data files. Fundamental file structures and organization are emphasized and exemplified through a programming language. Advanced file structures and organizations are discussed.

Prerequisites & Notes

CPSC 150

Credits: 3

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 & Notes

CPSC 140 and ECON219 or MGMT219 or MATH152 or MATH352

Credits: 3

CPSC 365 - 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 & Notes

CPSC 210 and MGMT 351

Credits: 3

CPSC 370 - Computer Organization

The fundamental elements of digital logic and their use in computer construction, different kinds of data representation, elements of machine and assembly language programming and the interaction between the hardware design and the instruction set architecture of the computer.

Prerequisites & Notes

CPSC 150

Credits: 3

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 intertwined. This course builds and elaborates on the concepts introduced in CPSC 140 and 150. This course will be taught in a language other than that used in CPSC 140 and 150.

Prerequisites & Notes

CPSC 150

Credits: 3

CPSC 376 - Programming Languages

Programming languages are studied from the view of users and analyzed using criteria such as readability, reliability, and writeability. Features of programming languages are analyzed so that students understand the various programming constructs that exist and the problems those constructs might present when implemented by a compiler or interpreter. Topics include data types, data structures, binding, scope, control mechanisms, conversions, storage management, reliability, portability, modularity, implementation methods, and language extensibility. This course is taught in the Unix environment. Students are expected to learn multiple languages, including one from a functional paradigm.

Prerequisites & Notes

CPSC 150

Credits: 3

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 & Notes

MATH 131 or CPSC311

Credits: 3

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.

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.

CPSC 398 - Selected Topic

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

CPSC 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 & Notes

CPSC 323

Credits: 3

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 & Notes

CPSC 150 or CPSC 217

Credits: 3

CPSC 427 - Interface Design

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.

Prerequisites & Notes

CPSC 317 and CPSC 413

Credits: 3

CPSC 443 - Software 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.

Prerequisites & Notes

CPSC 323 - Database Systems

Credits: 3

CPSC 450 - Internship

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

Prerequisites & Notes

Computer science or information systems major with junior or senior standing, 2.750 QPA overall, 3.000 major QPA and application to the department one semester prior to the term in which the internship is to be undertaken

Credits: Up to 12

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.

Prerequisites & Notes

CPSC 374 or permission of the instructor

Credits: 3

CPSC 464 - Principles of Concurrent Programming and Operating Systems

An 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 & Notes

CPSC 370, 374

Credits: 3

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 & Notes

CPSC 370, 374, 376 and 378

Credits: 3

CPSC 474 - Computer Architecture

Architectural features of computer systems are studied. Central processors, storage systems, various forms of parallelism, microcode, and system performance are included as central topics. Hardware support for vector operations, programming languages, concurrency, and distributed processing are included, along with salient architectural features of concurrent integrated processors.

Prerequisites & Notes

CPSC 370

Credits: 3

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.

Prerequisites & Notes

CPSC 374 or permission of the instructor

Credits: 3

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.

Prerequisites & Notes

CPSC 374 or permission of the instructor

Credits: 3

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.

Prerequisites & Notes

CPSC 374 or permission of the instructor

Credits: 3

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 to 3

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.

CPSC 498 - Selected Topics

The in-depth examination of a specific topic. For different topics, this course may be repeated for required elective credits toward a computer science major or minor.

A **Selected Topics** course is a normal, departmental offering which is directly 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 & Notes

Permission of the instructor

Credits: 1 to 3

CPSC 590 - Experimental

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

Credits: 3

CPSC 595 - Workshop

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

Credits: 3

CPSC 598 - Selected Topic

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

Credits: 3

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

CRIM 190 - Experimental

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

Credits: 3

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: 3

CRIM 198 - Selected Topic

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

Credits: 3

CRIM 205 - Introduction to Criminology and 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

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.

Prerequisites & Notes

CRIM205

Credits: 3

CRIM 290 - Experimental

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

Credits: 3

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: 3

CRIM 298 - Selected Topic

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

Credits: 3

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.

Prerequisites & Notes

CRIM 205: Introduction to Criminology

Credits: 3

CRIM 317 - Statistical Methods

Introduction to basic statistical concepts and research techniques used in social research. Also listed as PROF and SOWK 317

Prerequisites & Notes

CRIM205 or SOWK251

Credits: 3

CRIM 318 - Research Methods

Major methods and procedures used in sociological research. Also listed as PROF and SOWK 318

Prerequisites & Notes

CRIM 317

Credits: 3

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 & Notes

CRIM 205 and CRIM 273

Credits: 3

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 & Notes

CRIM 205 and CRIM 273

Credits: 3

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

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

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 sociological view of institutional changes.

Prerequisites & Notes

CRIM205

Credits: 3

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.

Prerequisites & Notes

CRIM 205- Introduction to Criminology and Criminal Justice/ Junior standing or above

Credits: 3

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.

Prerequisites & Notes

CRIM 205

Credits: 3

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: 3

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: 3

CRIM 398 - Selected Topic

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

Credits: 3

CRIM 404 - Adjudication in Crime and Justice

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.

Prerequisites & Notes

CRIM 205- Introduction to Criminology and Criminal Justice/ Junior standing or above

Credits: 3

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.

Prerequisites & Notes

Senior standing CRIM Majors
CRIM 105, CRIM 205, CRIM 273

Credits: 3

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.

Prerequisites & Notes

CRIM205; CRIM majors or minors only; Junior or Senior standing

Credits: 3

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.

Prerequisites & Notes

CRIM 205, CRIM 273

Credits: 3

CRIM 450 - Internship

Supervised placement in selected professional agencies.

Prerequisites & Notes

Permission of field committee

Credits: Up to 12

CRIM 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: 3

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: 3

CRIM 498 - Selected Topics

The in-depth examination of a specific topic. The nature of the topic selected and its treatment determined in consultation with the instructor.

A **Selected Topics** course is a normal, departmental offering which is directly 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 & Notes

Introductory course in the student's major, e.g. CRIM 205 or SOWK 251

Credits: 1 to 3

DANC 100 - Introduction to Dance

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

DANC 101 - Wellness for Dancers

This course will cover nutrition, time management, study skills, somatic practices, conditioning, relaxation, and injury prevention techniques specific to the needs of dancers. Students will be assessed in all areas to determine strengths and deficiencies, and programs will be developed to allow each student to work on their individual assessments. Yoga, Pilates-based conditioning, and Bartenieff Fundamentals may also be included.

Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1

DANC 105 - Dance Fundamentals

Students will explore the elements of dance through creative activities and have movement experiences in the dance genres of folk, square and social dance. Students will gain an understanding of dance as an academic discipline, as well as the importance of dance as an art form, entertainment, and life-long social/recreational activity.

Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1

DANC 112 - Tap Dance I

Various techniques, styles, and tap dance steps will be explored in this course. A historical overview of tap dance and its development as an American art form (with African and European connections) will be presented and discussed. Combinations of steps and dance compositions will be learned and performed.

Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1

DANC 120 - Modern Dance I

This beginning level course sets the foundation for all modern dance experiences, introducing the student to the concept of proper alignment; the ability to demonstrate and synthesize corrections and comments; the basic movements of modern dance (including the correct vocabulary and technique); a knowledge and understanding of the elements of dance-space, time and energy; an understanding of performance and performing; and an understanding of dance as an art form.

Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1

DANC 121 - Ballet I

The beginning student will develop a basic understanding of ballet terminology and technique and develop artistry through performance.

Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1

DANC 122 - Jazz Dance I

Jazz I focuses on establishing a basic foundation in jazz with emphasis on proper alignment, technique, and the unique stylistic components of Jazz.

Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1

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: 3

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: 3

DANC 198 - Selected Topic

A **Selected Topics** course is a normal, departmental offering which is directly 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: 3

DANC 199 - LMA/Performance Techniques

This course is designed to build on the performance principles learned in Composition I and technique classes. The student will deepen their awareness of the techniques of performance through exploring Laban Movement Analysis and investigating the elements of performance.

Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1

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.

Prerequisites & Notes

Dance 224 Improvisation

Credits: 3

DANC 212 - Tap Dance II

Tap Dance II class is designed for the student who wants to extend their tap dancing skills from a beginning to an intermediate level. Simple to complex tap progressions and challenging rhythms that integrate footwork and traveling steps into improvised movement scores and set movement compositions will be explored. A variety of musical accompaniment will be used in this course from pop, jazz, R&B, disco, Broadway and blues. Tap shoes and beginning level tap skills are required.

Students will be required to attend certain dance events for this course; some may require a fee.

Prerequisites & Notes

Permission of instructor is required.

Credits: 3

DANC 216 - Principles of Dance Production

This course provides knowledge and practical experience in the many aspects of dance production and performance. Areas of study will include: auditions, theories and techniques of rehearsals, lighting, make-up and costuming for dance, audio and video recording procedures, and the technical requirements for dance production and performance. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 3

DANC 220 - Modern Dance II

This second level course is a furthering and continuation of setting the foundation established in Modern Dance I, 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.

Prerequisites & Notes

Permission of the instructor

Credits: 2

DANC 221 - Ballet II

This course will develop technique and artistry, and will include barre and center exercises of increased complexity and difficulty. The student will develop precision in executing movements and develop the facility to learn movements quickly. 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.

Prerequisites & Notes

Permission of the instructor

Credits: 2

DANC 222 - Jazz Dance II

This intermediate level course is a furthering and continuation of setting the foundation in Jazz Dance I. This second level jazz technique course is designed to refine and enhance the student's performance skills, technique, and stylistic approaches to jazz dance. 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.

Prerequisites & Notes

Permission of the instructor

Credits: 2

DANC 223 - Creative Dance for Children

This course is the foundation course for developing skills in teaching methods of creative dance. The teaching and learning process as it applies to children's dance and creative movement will be explored.

Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1

DANC 224 - Improvisation

This course provides the student opportunities to explore the processes of discovering, creating and performing movement spontaneously.

Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2

DANC 271 - Dance Technology

This course will introduce the student to three software packages for Macintosh with specific creative applications to dance as an art form. Software includes computer choreography (Life Forms), digital video recording and editing (Adobe Premiere), and interactive authoring (Authorware).

Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 3

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: 3

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: 3

DANC 298 - Selected Topic

A **Selected Topics** course is a normal, departmental offering which is directly 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: 3

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.

Prerequisites & Notes

DANC 200

Credits: 3

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.

Prerequisites & Notes

*No prerequisites. *Introduction to DANC 62100 highly recommended.

Credits: 3

DANC 318 - Dance History I: Through the Nineteenth Century

This course examines the historical and philosophical aspects of dance as an art form and as a social and cultural medium through the nineteenth century. The focus is on approaches, styles, and contributions of leading dance artists of the historical eras.

Students will be required to attend certain dance events for this course; some may require a fee.

Prerequisites & Notes

DANC 100

Credits: 3

DANC 320 - Modern Dance 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.

Prerequisites & Notes

Permission of the instructor

Credits: 2

DANC 321 - Ballet III

Exercises learned in levels I and II increase in speed, complexity and duration in level III. New movements and their terminology will be introduced. Emphasis is also placed on the development and improvement of the student's performance qualities. 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.

Prerequisites & Notes

Permission of the instructor

Credits: 2

DANC 322 - Jazz III

This third level course requires the student with a proficient level in jazz dance to extend their knowledge and acquire additional understanding of technical material and performance quality. Emphasis will be placed on the attainment of artistic qualities essential for the performance of jazz dance repertory. Course may be repeated for a total of 6 credits.

Students will be required to attend certain dance events for this course; some may require a fee.

Prerequisites & Notes

Permission of the instructor

Credits: 2

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 & Notes

DANC 223 and DANC 326; co-requisite DANC 350

Credits: 3

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

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

DANC 350 - Field Experience

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 & Notes

DANC 223 and DANC 326; co-requisite: DANC 323

Credits: 1

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: 3

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: 3

DANC 398 - Selected Topic

A **Selected Topics** course is a normal, departmental offering which is directly 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: 3

DANC 399 - Repertory

This course provides students with an in-depth experience in an aspect of dance, i.e., repertory, and rehearsal and performance. Course may be repeated for a total of 4 credits.

Students will be required to attend certain dance events for this course; some may require a fee.

Prerequisites & Notes

Permission of the instructor

Credits: 1

DANC 419 - Dance History II: Twentieth and Twenty-first Centuries

This course examines dance in the 20th and 21st centuries, including ballet, jazz, modern and world dance genres. 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

DANC 420 - Modern Dance 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.

Prerequisites & Notes

Permission of the instructor

Credits: 2

DANC 421 - Ballet IV

In this fourth level course, students will review and build upon the content of levels I-III and will learn advanced-level movement and terminology. The focus of the course will be on technique and artistic presentation. 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.

Prerequisites & Notes

Permission of the instructor

Credits: 2

DANC 422 - Jazz IV

This fourth level course is designed to enhance the student's development of performance skills, technique, and styles of jazz dance. Emphasis will be placed on the attainment of artistic qualities essential for the performance of jazz dance repertory. Course may be repeated for a total of 6 credits.

Students will be required to attend certain dance events for this course; some may require a fee.

Prerequisites & Notes

Permission of the instructor

Credits: 2

DANC 425 - Senior Synthesis

Advanced level research, writing and discussions will lead to the development, production, and presentation of the student's senior project (to be determined by the student and faculty). Philosophical aspects of dance, aesthetics, and dance as an art form will be the basis of this course. Practical experiences in resume and grant writing, graduate school applications, interviews, and career planning will be covered.

Students will be required to attend certain dance events for this course; some may require a fee.

Prerequisites & Notes

All dance major core courses, demonstrated technical proficiency in Modern IV and senior standing. DANC 100, 101, 199, 200, 216, 223, 224, 300, 318, 323, 324, 326, 350, 419, 420, 498, Level III proficiency in Ballet and Jazz. In addition to these prerequisites, dance majors enrolled in Senior Synthesis must register for a minimum of 2 semester hours of dance technique during the semester in which they take Senior Synthesis. In addition to the prerequisites, dance majors enrolled in Senior Synthesis must register for a minimum of 2 semester hours of dance technique during the semester in which they take Senior Synthesis.

Credits: 3

DANC 426 - Modern Dance 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.

Prerequisites & Notes

Permission of the instructor

Credits: 2

DANC 428 - Modern Dance 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.

Prerequisites & Notes

Permission of the instructor

Credits: 2

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: Up to 12

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: 3

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: 3

DANC 498 - Selected Topics: World Dance

This course is an in-depth examination of a world dance genre, including but not limited to: Butoh, Classical Indian Dance, African Dance, Hula, Flamenco, Hip-hop or another world form.

Students will be required to attend certain dance events for this course; some may require a fee.

A **Selected Topics** course is a normal, departmental offering which is directly 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 & Notes

Permission of the instructor

Credits: 2

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.

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.

ECON 198 - Selected Topic

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

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

ECON 202 - Principles of Microeconomics

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

Credits: 3

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

ECON 219 - Business Statistics

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-linked as MGMT 219.

Credits: 3

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.

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.

ECON 298 - Selected Topic

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

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 & Notes

Econ 201, 202

Credits: 3

ECON 302 - Microeconomic Analysis

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

Prerequisites & Notes

ECON 201, 202

Credits: 3

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.

Prerequisites & Notes

ECON 201

Credits: 3

ECON 306 - Comparative Economic Systems

Analysis of resource allocation within capitalist, socialist, communist and fascist systems.

Prerequisites & Notes

Econ 201, 202

Credits: 3

ECON 307 - Urban Economics

Analysis of the economic functions and problems of modern urban areas including theoretical and practical proposed solutions.

Prerequisites & Notes

ECON/FIN 201, 202

Credits: 3

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.

Prerequisites & Notes

ECON 202

Credits: 3

ECON 315 - Environmental Economics

Economic causes and effects of pollution. Evaluation of costs, benefits and risks of alternative solutions to the problem of damage and destruction of the environment.

Prerequisites & Notes

ECON 202

Credits: 3

ECON 316 - Evolution of Economic Thought

This course provides a look at economics from an historical perspective. Original works of many early economists will be examined. Ideal for anyone interested in how our economic system has developed.

Prerequisites & Notes

ECON 201

Credits: 3

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 & Notes

ECON 219 or MGMT 219 or permission of the instructor

Credits: 3

ECON 326 - International Economics

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

Prerequisites & Notes

ECON 201, 202

Credits: 3

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.

Prerequisites & Notes

ECON 202

Credits: 3

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.

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.

ECON 398 - Selected Topic

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

ECON 402 - Public Finance

Nature, incidence and economic effects of taxation; government spending; public debt management; fiscal administration.

Prerequisites & Notes

ECON 201,202

Credits: 3

ECON 405 - Industrial Organization

Examines the reasons for different market structures and how the structure influences the strategies of firms and their profits. Particular attention is paid to the role of advertising and product differentiation in a firm's attempt to create or sustain economic profits. The course stresses the conditions in which government regulation of an industry is warranted plus highlights obstacles to effective regulations. Prerequisite: ECON 202.

Prerequisites & Notes

ECON 202

Credits: 3

ECON 408 - Development Economics

Study of the growth process including institutional problems, political, cultural and technological problems, development theories, planning and programming.

Prerequisites & Notes

ECON 201, 202

Credits: 3

ECON 412 - Economics Seminar

Application of advanced economic theory for problem solving and research. Topic selection will vary with instructor.

Prerequisites & Notes

ECON 301, 302 or permission of the instructor

Credits: 3

ECON 415 - Trade Flow Analysis

Brings to bear the principles of comparative advantage, the factors proportions theorem, and the regional theory of world trades on the analysis of trade flows and economic growth.

Credits: 3

ECON 450 - Internship

Supervised placement and research in selected public and private agencies at appropriate institutions.

Prerequisites & Notes

Application and permission of the instructor.

Credits: Up to 12

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 to 3

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.

ECON 498 - Selected Topic

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

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

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

EGEO 103 - Concepts of Evolution and the Fossil Record

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. Students registering for 303 will be required to do additional work and take more comprehensive exams than the students registered in 103. Course cross-listed as EGEO303.

Prerequisites & Notes

Concurrent registration in EGEO 304 is required for EGEO 303

Credits: 3

EGEO 110 - Environmental Geology Lab

Complement of EGEO 100; laboratory study of geologic hazards and geologic resources, including resource depletion and waste disposal issues. Course requires a weekend field trip to pertinent regional destinations.)

Prerequisites & Notes

EGEO 100 must be taken prior to or concurrently

Credits: 1

EGEO 111 - Physical Geology Lab

Complement to EGEO 101; laboratory studies of minerals, rocks and maps illustrate the concepts of EGEO 101.

Prerequisites & Notes

EGEO 101 must be taken prior to or concurrently

Credits: 1

EGEO 121 - Meteorology

Introduction to principles controlling weather and their effect on people and the environment. Includes lab.

Credits: 3

EGEO 131 - Oceanography

Introduction to the physical, chemical and biological aspects of the marine environment.

Credits: 3

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.

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.

EGEO 198 - Selected Topic

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

EGEO 201 - Earth Materials and Processes

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.

Prerequisites & Notes

Any 100-level course in EGEO

Credits: 3

EGEO 202 - Earth History

The evolutionary history of the earth and its life. Two Saturday field trips required.

Prerequisites & Notes

EGEO 201

Credits: 3

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 & Notes

EGEO 202, MATH 125

Credits: 3

EGEO 212 - Earth History Lab

Complement to EGEO 102; introduction to fossils, interpretation of geologic maps, and principles used in historical geology.

Prerequisites & Notes

Concurrent registration in EGEO 202

Credits: 1

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.

Prerequisites & Notes

EGEO 121

Credits: 3

EGEO 231 - Aerial Photography Interpretation

Introduction to photogrammetry, remote sensing, and interpretation of geologic and cultural imagery.

Prerequisites & Notes

EGEO 101 or 201 or permission of the instructor

Credits: 3

EGEO 241 - Geomorphology

A study of landforms, their origin and relation to geologic processes, structure, and climate.

Prerequisites & Notes

EGEO 111

Credits: 3

EGEO 242 - Glacial Geology

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 & Notes

EGEO 111

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.

Prerequisites & Notes

EGEO 121

Credits: 3

EGEO 271 - Geotechniques: Lab

Training in laboratory techniques and instruments for geological, geophysical and environmental surveys.

Credits: 2

EGEO 272 - Geotechniques: Geologic Reports

Training in the use of library facilities and bibliographies, literature searches, construction of index cards, writing of abstracts and technical reports, and oral reporting.

Prerequisites & Notes

EGEO 102, ENGL 103, COMM 200 (can be taken concurrently) or permission of instructor

Credits: 1

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.

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.

EGEO 298 - Selected Topic

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

EGEO 303 - Concepts of Evolution and the Fossil Record

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. Students registering for 303 will be required to do additional work and take more comprehensive exams than the students registered in 103. Course cross-listed as EGEO103.

Prerequisites & Notes

Concurrent registration in EGEO 304 is required for EGEO 303

Credits: 3

EGEO 304 - Paleontology Laboratory

Laboratory examination of invertebrate fossils, and selected chordates (graptolites and conodonts), including morphology, taxonomy, identification, laboratory preparations and biostratigraphy. One weekend field trip is required.

Prerequisites & Notes

EGEO 112 and 271 or permission of the instructor; co-requisite: EGEO 303

Credits: 1

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 & Notes

EGEO 102, 281

Credits: 3

EGEO 327 - Structural Geology

Origin and description of primary and secondary structures of sedimentary, igneous, and metamorphic rocks.

Prerequisites & Notes

EGEO 112, 272

Credits: 3

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.

Prerequisites & Notes

EGEO 102, 112

Credits: 3

EGEO 340 - Air Pollution Meteorology

A study of meteorological parameters of air pollution concentration, dispersion, and removal. Includes air pollution forecasting and modeling.

Prerequisites & Notes

EGEO 121

Credits: 3

EGEO 351 - Mineralogy

Systematic crystallography, crystal chemistry, physics, genesis, occurrence, and identification of minerals.

Prerequisites & Notes

EGEO 111, 271, 272, CHEM 108, 112 and permission of the instructor

Credits: 4

EGEO 352 - Petrology

Classification, occurrence, and genesis of igneous, sedimentary and metamorphic rocks. Identification using hand specimens and polarizing microscope (thin sections).

Prerequisites & Notes

EGEO 351

Credits: 4

EGEO 360 - Introduction to Hydrology

A study of the occurrence and movement of water and human's effect on this basic resource.

Prerequisites & Notes

EGEO 101 and 201 or permission of the instructor

Credits: 3

EGEO 362 - Stratigraphy

Principles of stratigraphy, stratigraphic mapping, and graphic techniques used in stratigraphic interpretation. Two Saturday field trips may be required.

Prerequisites & Notes

Permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted

Credits: 3

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.

Prerequisites & Notes

students must complete 45 credits hours prior to enrolling in this class

Credits: 3

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.

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.

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.

EGEO 399 - Field Camp

Field Camp is final requirement and is usually conducted at a field study location.

Credits: 4

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 & Notes

CHEM 107 and EGEO 201

Credits: 3

EGEO 450 - Internship

Supervised placement and research in selected public and private agencies.

Prerequisites & Notes

Permission of chairperson

Credits: Up to 12

EGEO 451 - Geochemistry

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 & Notes

CHEM 108, 112 and EGEO 201 or equivalent

Credits: 4

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.

Prerequisites & Notes

EGEO 451 or permission of the instructor

Credits: 1

EGEO 460 - Hydrogeology

A study of the quantitative and qualitative interrelationships of geologic materials and processes with ground water.

Prerequisites & Notes

EGEO 360 or permission of the instructor

Credits: 3

EGEO 476 - Geotechniques: Geophysics

Lab and field techniques.

Prerequisites & Notes

EGE 460 and permission of the instructor

Credits: 1

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.

Prerequisites & Notes

Senior standing or permission of the instructor

Credits: 1

EGEO 482 - Senior Seminar

A seminar for advanced undergraduates in which students and staff participate in discussions concerning classical and current geological problems.

Prerequisites & Notes

Senior standing or permission of the instructor

Credits: 1

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.

Prerequisites & Notes

Permission of the instructor, departmental chairperson and dean of the college where the study will be conducted

Credits: 1 to 3

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.

EGEO 498 - Selected Topics

The in-depth examination of a specific topic. The topic selected and its treatment depend on the instructor.

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

Credits: 1 to 3

EGEO 590 - Experimental

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

Credits: 3

EGEO 595 - Workshop

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

Credits: 3

EGEO 598 - Selected Topic

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

Credits: 3

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 studied 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). A field experience component of 20 contact hours of direct observation in a variety of early childhood settings serving children from diverse backgrounds, including infant through grade 4, are included.

Prerequisites & Notes

None

Credits: 3

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.

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.

ELEC 198 - Selected Topic

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

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.

Prerequisites & Notes

None

Credits: 3

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 & Notes

Prerequisites: ELEC100 and ELEC200

Co-Requisites: ELEC281 and ELEC237

Credits: 3

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 & Notes

Prerequisites: ELEC100 and ELEC200
Co-Requisites: ELEC230 and ELEC281

Credits: 3

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 & Notes

Prerequisites: Sophomore Standing, ELEC100 and ELEC200
Co-requisite: ELEC230 and ELEC237

Credits: 3

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 & Notes

ELEC100 and ELEC200

Credits: 3

ELEC 288 - Children's Literature

This course introduces candidates to the values of children's literature and the wide range of genre available for enhancing the development and learning of children. Course content includes identifying and selecting outstanding literature for literacy content, children's needs and interests, multicultural perspectives, and curriculum enrichment. A field component includes the opportunity for candidates to implement strategies for the creative presentation of literature and the stimulation of creative responses by school-aged children.

Prerequisites & Notes

Prerequisite: Sophomore Standing; Corequisite: ELEC 281.

Credits: 3

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.

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.

ELEC 298 - Selected Topic

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

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 & Notes

Admission to the College of Education; ELEC 281, 288; Co-requisites ELEC 342, 362.

NOTE: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 1

ELEC 303 - Literature in Early Childhood Education

This course presents an overview of the value of children's literature in early childhood education, the range of genre appropriate for this age group, and effective strategies for providing rich literary experiences for young children which cultivate a love of books and reading.

Prerequisites & Notes

NOTE: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 3

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 & Notes

Minimum overall QPA, professional conduct standards, and major QPA prerequisites may apply; details are available in the department office or from the student's advisor.

Credits: 3

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.

Prerequisites & Notes

NOTE: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 3

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.

Prerequisites & Notes

Prerequisites: ELEC314, ELEC337 and ELEC 348
Co-Requisites: ELEC340 and ELEC330

Credits: 1

ELEC 314 - Developmental Formal & Informal Assessment

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.

Prerequisites & Notes

Prerequisites: ELEC230, ELEC281 and ELEC237
Co-requisites: ELEC337

Credits: 3

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 & Notes

CDEV 248 and ELEC 306.

NOTE: Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 3

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 & Notes

Successful completion of block 2 in elementary education; Co-requisites: ELEC 332. NOTE: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 3

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 & Notes

One year of college language study or placement in 201. NOTE: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 3

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 & Notes

ELEC 306 and 2.5 QPA. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 3

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.

Prerequisites & Notes

NOTE: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 3

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.

Prerequisites & Notes

Prerequisites: ELEC337 and ELEC 314

Co-requisites: ELEC340 and ELEC311

Credits: 3

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 & Notes

ELEC 301, 342, 362; Co-requisites: ELEC 320. NOTE: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 3

ELEC 337 - Literacy Practices for the Emergent Learner(PreK-grade 1)

Through a blend of theory and practice, this course explores research-based 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 & Notes

Prerequisites: ELEC230, ELEC281 and ELEC237

Co-requisite: ELEC314

Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 3

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?

Prerequisites & Notes

Prerequisites: MATH210, MATH310, ELEC237 AND ELEC230

Co-requisites: ELEC340 AND ELEC311

Credits: 3

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 school-aged children.

Prerequisites & Notes

MATH 210 and 310 or equivalent. Co-requisites: ELEC 301 and 362. Co- or pre-requisite SEFE 270. NOTE: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education handbook..

Credits: 3

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 & Notes

ELEC 306 and 2.5 QPA.

Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 3

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.

Prerequisites & Notes

Eligibility for student teaching

Credits: 3

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 & Notes

ELEC 301, 342, 362.

NOTE: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 3

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.

Prerequisites & Notes

Two science courses, one with related laboratory; Co-requisites: ELEC 301, 342. NOTE: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards.

Credits: 3

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 & Notes

ELEC 301, 342, 362.

NOTE: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 3

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 & Notes

ELEC 332. The Teaching of Elementary Reading. Note: Admission to and retention in the teacher education program are prerequisites for teacher education coursework: Minimum over all QPA, professional dispositions, and major QPA prerequisites also apply. These are specified in the Teacher Education Policy Manual.

Credits: 3

ELEC 385 - Creativity

An interdisciplinary approach to child-centered teaching through creative instructional materials, drama, music, and a variety of art media.

Prerequisites & Notes

CDEV 342.

Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 3

ELEC 390 - Experimental Course

A unique and specifically focused course within the general purview of 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 & Notes

NOTE: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education

Credits: 0

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.

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 & Notes

ELEC 306.

NOTE: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 3

ELEC 398 - Selected Topic

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

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 & Notes

ELEC 327, 337.

Minimum overall QPA, professional conduct standards, and major QPA prerequisites apply. Details are available in the departmental office or from the student's advisor.

Credits: 3

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 & Notes

Prerequisites: ELEC 330, ELEC 340, ELEC 311

Co-requisites: ELEC 440, ELEC 460, ELEC 470

Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply. Details are available in the departmental office or from the student's advisor.

Credits: 3

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 & Notes

ELEC 327, 337 and 2.5 QPA.

Minimum overall QPA, professional conduct standards, and major QPA prerequisites apply. Details are available in the departmental office or from the student's advisor.

Credits: 3

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 & Notes

ELEC 427, 447 and 2.5 QPA.

Minimum overall QPA, professional conduct standards, and major QPA prerequisites apply. Details are available in the departmental office or from the student's advisor.

Credits: 3

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 & Notes

Prerequisites: ELEC311, ELEC330, ELEC340

Co-requisites: ELEC470, ELEC460 and ELEC420

Credits: 3

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.

Prerequisites & Notes

ELEC 327, 337 and 2.5 QPA.

NOTE: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are

specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 3

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 & Notes

ELEC 447.

Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 12

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.

Prerequisites & Notes

Must show evidence of taking all of the Praxis II tests PRIOR to Student Teaching

Credits: 12, 6, 3

ELEC 456 - Student Teaching: Early Childhood

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 & Notes

Must show evidence of taking all of the Praxis II tests PRIOR to Student Teaching

Credits: 12, 6, 3

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 & Notes

Prerequisites: ELEC311, ELEC330, ELEC340

Co-requisites: ELEC470, ELEC440 and ELEC420

Credits: 3

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 & Notes

Prerequisites: ELEC311, ELEC330 and ELEC340

Co-requisites: ELEC460, ELEC440 and ELEC420

Credits: 3

ELEC 480 - Assessment and Differentiating Literacy

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. 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. This course will also provide teacher candidates with information to differentiate their teaching to meet the needs of all learners.

Prerequisites & Notes

ELEC337 and ELEC330

Credits: 3

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.

Prerequisites & Notes

NOTE: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 1 to 3

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.

ELEC 498 - Selected Topics

Experimental courses covering topics supplementary to teaching in the elementary school may be offered on an irregular basis with this course designation.

A **Selected Topics** course is a normal, departmental offering which is directly 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 & Notes

NOTE: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 1 to 3

ENGL 099 - Connecting Reading and Writing

This course is designed to provide entering students with an introduction to college-level writing, reading, and thinking processes. It is a workshop style course, connecting students to the various academic, social, and cultural contexts that inform their reading, writing, and thinking. Students are placed in the course after receiving an SAT Verbal score of 390 or below, an ACT Writing score of 13 or under, or an SAT Essay Writing Component score of 6 or under (based on scores of two readers). Students meeting one of those criteria may sit for an on-site timed essay during orientation for possible exemption from this course. Credit earned in this course will not count toward the university's 120 credit hour minimum required for graduation. Enrollment is continuous until students earn a "C" or better. Students who excel in this course, with the professor's approval, may be placed directly into College Writing II and receive 3 credit hours towards graduation.

Credits: 3

ENGL 101 - College Writing I

In this course, students will investigate the purposes, both academic and non-academic, for writing and reading. Students will develop increased writing fluency, clarity, and coherence; a fuller understanding of 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 are placed in this course after receiving an SAT Verbal score of 400 or above, an ACT Writing score of 14 or better, or SAT Essay Writing Component scores of 8 or 10 (based on scores of two readers). Students meeting one of those criteria may bring a writing sample and then sit for an on-site timed essay during orientation for possible exemption from this course. Students who receive an SAT Essay Writing Component score of 11 or 12 are automatically exempted from College Writing I. All students exempted from this course will receive 3 hours of credit towards the university's 120 credit hour minimum required for graduation.

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.

Prerequisites & Notes

ENGL 101

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.

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.

ENGL 198 - Selected Topic

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

ENGL 204 - Composition and Rhetoric

Expository and persuasive writing based on the study and application of rhetorical theory.

Prerequisites & Notes

ENGL 101

Credits: 3

ENGL 205 - Introduction to Professional Writing

This course will introduce a variety of documents typically produced by writers in professional workplace. It will build essential skills for communicating with varied audience with whom one may interact in a professional capacity. Students will work on developing collaborative skills, on rhetorical strategies, on document design, and on refining writing style for clarity, conciseness, and standard usage. The concept of organizational cultures will be introduced, as well as ethical considerations and responsibilities that accompany professional discourse.

Credits: 3

ENGL 210 - Interpreting Literature

Students read and interpret texts from diverse genres, writers, and cultural perspectives, and learn ways of critical reading that speak to the human condition, including issues of diversity.

Prerequisites & Notes

ENGL 101, or its equivalent, and sophomore standing.

Credits: 3

ENGL 214 - Film Analysis

A survey of contemporary and classic films.

Credits: 3

ENGL 220 - Writing About Literature

Writing as the practical application of literary interpretation and research, using recent computer technology.

Prerequisites & Notes

ENGL 101, 103

Credits: 3

ENGL 225 - Introduction to Creative Writing

Introduction to Creative Writing is a foundations course, offering 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 writers is assigned.

Prerequisites & Notes

ENGL 101

Credits: 3

ENGL 242 - African-American Literature

A study of black American literature as it pertains to the American experience.

Prerequisites & Notes

ENGL 101 and 210 or English major status

Credits: 3

ENGL 243 - Literature of the Women's Movement

Women authors from various periods read with a woman's perspective on the world. Prerequisite: ENGL 101 and 210 or English Major status.

Prerequisites & Notes

ENGL 101 and 210 or English Major Status

Credits: 3

ENGL 244 - Native American Literature

A study of Native American Literature as it pertains to the American experience.

Prerequisites & Notes

ENGL 101 and 210 or English major status

Credits: 3

ENGL 246 - Latino Literature of the U.S.

Study of U.S. Latino literature written in English. Focus will be on how region determines varying components (identity, theme, form, or mood), exemplified in distinctions between immigration, barrio, southwestern, Chicago, and L.A. literatures.

Prerequisites & Notes

ENGL 101 and 210 or English major status

Credits: 3

ENGL 248 - Eastern Literature

Study of such standard works as the Bhagavad-Gita, the writings of Confucius, and the Bible, in addition to other works from India, China, and the countries of the near East.

Prerequisites & Notes

ENGL 101 and 210 or English major status

Credits: 3

ENGL 249 - Life/Lit/Service

Life/Lit/Service will explore selected literary and linguistic concerns-e.g. representations of place, class, ethnicity and/or dialectal variation-through 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.

Prerequisites & Notes

Permission of instructor.

Credits: 1

ENGL 260 - Elementary College Latin I

An introduction to the Latin language, concentrating on the study of basic forms, grammar, and introductory readings.

Credits: 3

ENGL 261 - Elementary College Latin II

Further study of the Latin language, concentrating on the study of advanced grammar and introductory readings.

Prerequisites & Notes

English 260 or permission of the instructor

Credits: 0

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 & Notes

ENGL 101 and 210 or English major status

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.

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.

ENGL 298 - Selected Topic

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

ENGL 305 - Practicum: Teaching Writing

Experience in developing, responding to, evaluating, and grading student writing tasks, and in tutoring student writers, combined with an introduction to theory used in the teaching of writing. Required for certification to teach English in the secondary schools.

Prerequisites & Notes

ENGL 101

Credits: 3

ENGL 306 - Technical and Scientific Writing

Offers practice in integrating research skills and document design with understanding of style, technical concepts, genre, and audience. Features writing of technical and scientific reports, articles, and other documents for practical contexts. Technical and scientific writing occurs in many academic disciplines and professional fields; employs electronic media and design; includes production and presentation of written work; and is both individually and collaboratively written.

Prerequisites & Notes

ENGL 101

Credits: 3

ENGL 307 - Writing for Electronic Media and Film

This course develops writing skills that enable students to write basic continuity for public service announcements, slide-tape instructional programs, local level video tape productions, and other applications as they relate to electronic media and film.

Prerequisites & Notes

ENGL 101

Credits: 3

ENGL 308 - Advertising Copywriting

Work in the writing and production of advertising copy.

Prerequisites & Notes

ENGL 101

Credits: 3

ENGL 309 - Advanced Professional Writing

Advanced level work in the rhetorical principles and practices of grant and proposal writing; report writing; policy writing; new media writing, including marketing communication; document and information design; and portfolio preparation.

Prerequisites & Notes

ENGL 205

Credits: 3

ENGL 311 - Chaucer

Selections from The Canterbury Tales, Troilus and Criseyde, and other works of Geoffrey Chaucer.

Prerequisites & Notes

ENGL 101 and 210 or English major status

Credits: 3

ENGL 312 - Shakespeare

Selected comedies, tragedies and histories with their literary and historical background.

Prerequisites & Notes

ENGL 101 and 210 or English major status

Credits: 3

ENGL 314 - European Film

The critical analysis of films from European Union countries with particular emphasis on countries with high annual film productivity such as France, United Kingdom, Italy, Spain, and Germany. Emphasis in on contemporary films with optional contrast to historical trend-setting films.

Prerequisites & Notes

English 210 or English major status

Credits: 3

ENGL 315 - The Cinematic Review: Historical and Critical Writing

A survey of significant motion pictures with emphasis upon the techniques of film making and film reviewing.

Prerequisites & Notes

ENGL 101

Credits: 3

ENGL 316 - Asian Film

The critical analysis of films from India and East Asia. Emphasis is on contemporary films from China and Japan. Also meets requirements for the Asian Studies Minor.

Prerequisites & Notes

ENGL 210 or declared English major

Credits: 3

ENGL 317 - British Literature I

A comprehensive study of authors and literary works from the Old English period through Milton.

Prerequisites & Notes

ENGL 101

Credits: 3

ENGL 318 - British Literature II

A comprehensive survey of authors and literary works from the Civil War and Restoration through the early 20th century.

Prerequisites & Notes

ENGL 101

Credits: 3

ENGL 319 - American Literature I

A comprehensive survey of American literature from Puritan times through Melville.

Prerequisites & Notes

ENGL 101 and 210 or English major status

Credits: 3

ENGL 320 - American Literature II

A comprehensive survey of American literature from Whitman through modern times.

Prerequisites & Notes

ENGL 101 and 210 or English major status

Credits: 3

ENGL 328 - Young Adult Literature

Surveys literature for adolescents and young people and is intended to cultivate book appreciation, improve book knowledge, and provide curriculum enrichment in intermediate, junior and senior high school libraries. Includes a study of selection aids, book talks and a study of current non-print materials.

Credits: 3

ENGL 331 - Historical Development of the English Language

An examination of each historical period to discover the structure of the language, its spelling, vocabulary, syntax, and the influences of social conditions upon it.

Prerequisites & Notes

ENGL 101

Credits: 3

ENGL 332 - Traditional Grammar

Brief history of the English language; thorough study of traditional and transformational grammar with emphasis on syntax. Differences between prescriptive and descriptive grammar and problems of current usage.

Prerequisites & Notes

ENGL 101

Credits: 3

ENGL 333 - Concepts in Linguistics

An examination of language structure: phonology, morphology, syntax and semantics, and an introduction to psycho, socio, and historical linguistics.

Prerequisites & Notes

ENGL 101

Credits: 3

ENGL 336 - Second Language Acquisition

A course designed to acquaint the prospective teacher with theories of second language acquisition (SLA). SLA surveys the processes of acquiring/ learning language including the following issues: sound system-phonemic inventory; words-lexicon; semantics; syntax; critical period for second language learning; linguistic creativity, competence and performance.

Credits: 3

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. Reading of classic and contemporary creative nonfiction is assigned.

Prerequisites & Notes

ENGL 225

Credits: 3

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. Reading of classic and contemporary fiction is assigned. This course may be repeated for up to six credits.

Prerequisites & Notes

ENGL 225

Credits: 3

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. Reading of classic and contemporary poetry is assigned. This course may be repeated for up to six credits.

Prerequisites & Notes

ENGL 225

Credits: 3

ENGL 360 - Latin Language and Literature

A reading course in classical and medieval Latin verse and prose, with a continuing review of grammar as necessary.

Prerequisites & Notes

English 261 or permission of the instructor.

Credits: 3

ENGL 389 - Stratford Shakespeare Tour

Study of the works and time of Shakespeare, climaxed by a trip to the Stratford Shakespeare Festival in Stratford, Ontario, Canada. Offered in the summer only. Travel fee required.

Prerequisites & Notes

ENGL 101 and 210 or English major status

Credits: 3

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.

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.

ENGL 398 - Selected Topics

The in-depth examination of a specific topic. The nature of the topic selected and its treatment determined in consultation with the instructor.

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

Credits: 1 to 3

ENGL 402 - World Literature

Critical analysis of selected works by writers outside the U.S. and Britain.

Prerequisites & Notes

ENGL 101, 103 and 210 or English major status

Credits: 3

ENGL 403 - Literary Criticism

Selected criticisms from Plato to Frye, with application of critical approaches and principles to works of several genres.

Prerequisites & Notes

ENGL 101, 103 and 210 or English major status

Credits: 3

ENGL 409 - Advanced Research Writing

Course will instruct majors in the B.S. in Professional Writing and B.S. in Creative Writing majors in the goals, audiences, sources, methods, and processes requisite for research and professionalization as writers.

Credits: 3

ENGL 410 - Literature of the Environment

Encourage 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 & Notes

ENGL 101 and 210 or English major status

Credits: 3

ENGL 429 - Grant and Proposal Writing

A review of the research and rhetoric associated with writing successful grants and proposals.

Prerequisites & Notes

ENGL103

Credits: 3

ENGL 450 - Internship

Provides work experience at an outside agency, such as newspapers, radio stations, industrial firms, government or social service, and the Pittsburgh Pirates and Pittsburgh Penguins public relations offices.

Prerequisites & Notes

At least two sequential courses in the writing sequence and approval of advisor

Credits: Up to 12

ENGL 480 - Literature Seminar

This seminar focuses on a major author or pair of authors, a single literary genre, or a specific literary period.

Prerequisites & Notes

ENGL 101, 103 and 210 or English major status

Credits: 3

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 & Notes

Permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted

Credits: 1 to 3

ENGL 491 - Senior Writing Project

Creative or expository writing projects.

Prerequisites & Notes

Dean's approval

Credits: 1 to 3

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.

ENGL 498 - Selected Topics

The in-depth examination of a specific topic. The nature of the topic selected and its treatment determined in consultation with the instructor.

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

Credits: 1 to 3

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.

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.

ENVS 198 - Selected Topic

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

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.

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.

ENVS 298 - Selected Topic

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

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.

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.

ENVS 398 - Selected Topic

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

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.

Prerequisites & Notes

Four courses completed in the natural sciences and mathematics area of the liberal studies program

Credits: 3

ENVS 450 - Environmental Science Internship

Academic credit may be earned through a practicum experience, working for an agency or business.

Prerequisites & Notes

A minimum of 16 credits completed in the major and approval of the agency or business, the program director and the advisor

Credits: Up to 12

ENVS 480 - Environmental Systems Analysis

The student will investigate an environmental problem in conjunction with an appropriate faculty member as a research project.

Prerequisites & Notes

A minimum of 16 credits completed in the major and the approval of the program director and the advisor

Credits: 3

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.

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.

ENVS 498 - Selected Topic

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

ERS 100 - Introduction to Exercise Science: Careers and Content

This course introduces students to the field of exercise science and the evolution of the profession. Opportunities are provided to identify characteristics of exercise science professionals, **diverse perspectives**, and current trends in the field. Emphasis is placed on career planning and employment opportunities.

Credits: 3

ERS 101 - Applied Anatomy

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

ERS 107 - 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 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.

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.

ERS 200 - Measurement and Statistical Application in Exercise Science

This course focuses on the collection, analysis, and interpretation of health and fitness data. Computer software applications are used to analyze data with descriptive and inferential statistics.

Credits: 3

ERS 201 - Exercise Physiology

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.

Prerequisites & Notes

ERS 101

Credits: 3

ERS 202 - Biomechanics

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. **Biomechanics of movement in people with physical disabilities is also explored.** Laboratory included.

Prerequisites & Notes

ERS 101 and PHYS 201

Credits: 3

ERS 205 - Introduction to Equine Science

Includes equine evolution, behavior, breeds, genetics, basic anatomy and physiology, and simple equine biomechanics. Opportunities for practical experiences with equines.

Credits: 3

ERS 217 - Care and Prevention of Athletic Injuries

Studies and applies principles and techniques used in prevention, care and rehabilitation of athletic injuries. Clinical experience required.

Credits: 3

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.

Prerequisites & Notes

Admission into the athletic training program

Credits: 3

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.

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.

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.

ERS 301 - Exercise Leadership: Group Fitness

This course provides opportunities for practical skills and instruction in various group fitness activities. Emphasis is placed on physiological and biomechanical principles related to group fitness, as well as choreography, safety, and modifications for diverse populations. Current trends and research in the area of group fitness are explored.

Prerequisites & Notes

ERS 201 and ERS 202

Credits: 3

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.

Prerequisites & Notes

ERS 201 and ERS 202

Credits: 3

ERS 307 - Concepts in General Medicine for the Physically Active

This course will focus on general pathologies, conditions and disabilities commonly encountered in the practice of athletic training and exercise science with physically active clients of all ages, abilities, and diverse backgrounds. This will include the role of pharmacological agents and how various drugs effect patient / client response to activity and other therapeutic interventions.

Prerequisites & Notes

ERS 101

Credits: 3

ERS 317 - Therapeutic Modalities Theory

Familiarizes the athletic training student with contemporary physical modalities, appropriate physiology, indications, contraindications, and methods of application.

Prerequisites & Notes

Admission into the athletic training program

Credits: 3

ERS 321 - Care and Prevention of Injuries of the Physically Active

Studies and applies principles and techniques used in prevention, care, and rehabilitation of fitness related injuries.

Prerequisites & Notes

ERS 264 - Applied Anatomy

Credits: 3

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.

Prerequisites & Notes

Admission into the athletic training program

Credits: 3

ERS 330 - Stress Management

This course provides a comprehensive view of stress and stress management. The theories of stress, the psychophysiology of stress, the relation of stress to the different dimensions of wellness, the assessment of stress, and prevention and intervention techniques are covered. A physical activity component is included focusing on stress reduction techniques.

Credits: 3

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 & Notes

ERS 101 or permission of the instructor, and admission into the athletic training program

Credits: 3

ERS 347 - Theory of Therapeutic Techniques in Rehabilitation

Presents treatment theories and techniques necessary in the planning and implementation of therapeutic exercise for prevention of athletic injuries and/or care of the athlete.

Prerequisites & Notes

Admission into the athletic training program

Credits: 3

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.

Credits: 3

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.

Prerequisites & Notes

Admission into the athletic training program

Credits: 3

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.

ERS 395 - Workshop

Varies.

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.

ERS 400 - Wellness Promotion and Programming

This course examines wellness promotion in **diverse** settings, including community, worksite, clinical, and commercial. Emphasis is placed on synthesis of various concepts related to wellness programming and guidelines for planning, implementing, and evaluating successful programs. **Social and cultural considerations for wellness programming are examined.** Opportunities for planning, implementing, and evaluating programs **for diverse populations** are provided.

Prerequisites & Notes

Acceptance into major. Grade of C or better is required in this course.

Credits: 3

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.

Prerequisites & Notes

Acceptance into major. ERS 301 and ERS 302. Corequisite: ERS 402. Grade of C or better required in this course.

Credits: 3

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.

Prerequisites & Notes

Acceptance into major. ERS 301 and ERS 302. Corequisite: ERS 401. Grade of C or better is required in this course.

Credits: 3

ERS 407 - Current Strategies 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.

Prerequisites & Notes

ERS387

Credits: 3

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.** Laboratory included.

Prerequisites & Notes

Acceptance into major. ERS 401, ERS 402, and BIO 216. Grade of C or better required in this course.

Credits: 3

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.**

Prerequisites & Notes

Acceptance into major. ERS 401 and ERS 402. Grade of C or better required in this course.

Credits: 3

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.

Prerequisites & Notes

Acceptance into major. ERS 401 and ERS 402. Valid CPR/AED certification and proof of professional liability insurance. Grade of C or better is required in this course.

Credits: 3

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.

Prerequisites & Notes

Completion of 9 credits of ERS 387

Credits: 3

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).

Prerequisites & Notes

ERS 302 or permission of instructor

Credits: 3

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 & Notes

ERS 401 and ERS 402 or permission of instructor

Credits: 3

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 & Notes

ERS 401 and ERS 402 or permission of instructor

Credits: 3

ERS 433 - Research Methods in Exercise Science

This course examines the scientific method and the role of research in developing knowledge in the areas of health, wellness, fitness, and physical activity. Students develop skills to become critical consumers of research and other publicly disseminated information. Students design a research project using the concepts learned in the class.

Prerequisites & Notes

ERS 401, ERS 402, and MATH 152 or permission of instructor

Credits: 3

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.

Prerequisites & Notes

Acceptance into major. Grade of C or better in all 400-level courses (ERS 400, ERS 401, ERS 402, ERS 410, ERS 411, ERS 412, and ERS 424). 2.75 Overall and Major QPA. Student will have one semester to remedy QPA and grade deficiency(s) prior to internship. Valid First Aid and CPR/AED certification and proof of professional liability insurance. Grade of C or better is required in this course.

Credits: 12

ERS 452 - Intern-Adapted Physical Activity Program

This course is designed to provide students an opportunity to apply Adapted Physical Activity practical skills in a setting serving individuals with disabilities in exercise, physical education, recreation, or sport.

Credits: 3

ERS 476 - Physiological Aspects of Aging and Human Performance

A study of the physiological aspects of the aging process with emphasis on the effects of physical activity on health in the later years of life and on the degenerative process of aging. The course will stress the physiological responses to aging that are influenced by exercise and the physiological rationale for lifelong physical activity.

Credits: 3

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.

Prerequisites & Notes

Senior standing

Credits: 3

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.

ERS 498 - Selected Topic

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

ERS 590 - Experimental

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

Credits: 3

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.

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.

FIN 198 - Selected Topic

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

FIN 211 - Real Estate Fundamentals

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

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.

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.

FIN 298 - Selected Topic

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

FIN 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 & Notes

ECON201 and 202

Credits: 3

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.

Prerequisites & Notes

ECON 201

Credits: 3

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 & Notes

ECON 219 or MGMT 219, or permission of the instructor

Credits: 3

FIN 320 - Managerial Finance

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

Prerequisites & Notes

ACCT 210

Credits: 3

FIN 321 - Investments

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

Prerequisites & Notes

FIN 320 or permission of the instructor

Credits: 3

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.

Prerequisites & Notes

FIN 320 or permission of the instructor

Credits: 3

FIN 323 - Financial Markets and Institutions

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

Prerequisites & Notes

FIN 320 or permission of the instructor

Credits: 3

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.

Prerequisites & Notes

FIN 320

Credits: 3

FIN 327 - Management of Working Capital

In-depth analysis of financial management of business firms with special emphasis on the management of working capital.

Prerequisites & Notes

FIN 320

Credits: 3

FIN 328 - Long Term Financial Management

This course will examine such topics as capital budgeting under certainty, uncertainty and inflationary conditions, lease/buy decisions, capital structure theory, dividend policy and the value of the firm, sources of long-term financing and financing with options.

Prerequisites & Notes

FIN 320

Credits: 3

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.

Prerequisites & Notes

FIN 320

Credits: 3

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.

Prerequisites & Notes

FIN 320

Credits: 3

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 entrepreneurial ventures.

Prerequisites & Notes

FIN 320

Credits: 3

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.

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.

FIN 398 - Selected Topic

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

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 & Notes

FIN 321, FIN 329, ACCT 240, ACCT 308 or permission of the instructor

Credits: 3

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 & Notes

FIN 321, FIN 329, FIN 409, ACCT 240, ACCT 308 or permission of the instructor

Credits: 3

FIN 420 - Finance Seminar

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

Prerequisites & Notes

FIN 320 or permission of the instructor

Credits: 3

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.

Prerequisites & Notes

FIN 321

Credits: 3

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.

Prerequisites & Notes

FIN 320

Credits: 3

FIN 430 - International Banking

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

Prerequisites & Notes

FIN 320, FIN 323 is recommended

Credits: 3

FIN 450 - Internship

Supervised placement and research in selected public and private agencies at appropriate institutions.

Prerequisites & Notes

Application and permission of the instructor

Credits: Up to 12

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.

Prerequisites & Notes

12 credits of major courses, application, permission of the instructor, departmental chairperson and dean of the college where the study will be conducted

Credits: 1 to 3

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.

FIN 498 - Selected Topic

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

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

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 & Notes

FREN 101 or the equivalent.

Credits: 3

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 & Notes

FREN 102 or the equivalent

Credits: 3

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: 3

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: 3

FREN 198 - Selected Topic

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

Credits: 3

FREN 201 - French Conversation 1

A functional course in speaking and writing French, stressing everyday vocabulary and sentence structure. Some grammar review.

Prerequisites & Notes

FREN 103 or the equivalent

Credits: 3

FREN 220 - Reading in French

An introduction to reading in French at the intermediate level.

Prerequisites & Notes

FREN 103 or the equivalent

Credits: 3

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: 3

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: 3

FREN 298 - Selected Topic

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

Credits: 3

FREN 300 - French Grammar and Composition 1

An intermediate grammar review course emphasizing the basic structure of French.

Prerequisites & Notes

FREN 201 or 220 or the equivalent

Credits: 3

FREN 301 - French Conversation 2

Development of French vocabulary and conversation skills through intensive study of selected theme areas.

Prerequisites & Notes

FREN 201, 220 or permission of the instructor

Credits: 3

FREN 303 - Business French

An introduction to basic French language usage in commerce and commercial correspondence.

Prerequisites & Notes

FREN 201 or 220 or the equivalent

Credits: 3

FREN 305 - French Civilization

An advanced course in the study of the development of French civilization from the earliest times to the end of the 19th century.

Prerequisites & Notes

FREN 201 or 220 or the equivalent

Credits: 3

FREN 306 - Modern France

A study of contemporary French life and attitudes today.

Prerequisites & Notes

FREN 201 or 220 or the equivalent

Credits: 3

FREN 315 - French Study Abroad

Permission of instructor required.

FREN 320 - Main Currents in French Literature

An introduction to the study of French literature through prose, drama and poetry.

Prerequisites & Notes

FREN 201 or 220 or the equivalent

Credits: 3

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 & Notes

FREN 201 or 220

Credits: 3

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 & Notes

Six credits at the 200 or above level

Credits: 3

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: 3

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: 3

FREN 398 - Selected Topic

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

Credits: 3

FREN 400 - French Grammar and Composition 2

An advanced course in the study of French grammar and usage.

Prerequisites & Notes

FREN 300

Credits: 3

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 & Notes

Six credits of French at the 300 level

Credits: 3

FREN 402 - Eighteenth-Century Novel

A study of the Age of Enlightenment as reflected in the novel.

Prerequisites & Notes

Six credits of French at the 300 level

Credits: 3

FREN 403 - Nineteenth-Century French Literature

Readings from the romantic, realistic and naturalistic movements.

Prerequisites & Notes

Six credits of French at the 300 level

Credits: 3

FREN 404 - Modern French Literature

A study of various aspects of modern French literature.

Prerequisites & Notes

Six credits of French at the 300 level

Credits: 3

FREN 411 - Literature of the Classical Period

A study of French Classicism, emphasizing the plays of Corneille, Moliere and Racine.

Prerequisites & Notes

Six credits of French at the 300 level

Credits: 3

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.

Prerequisites & Notes

FREN300 or equivalent

Credits: 3

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.

Prerequisites & Notes

Permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted

Credits: 1 to 3

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: 3

FREN 498 - Selected Topic

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

Credits: 3

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

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 & Notes

GERM 101 or the equivalent

Credits: 3

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 & Notes

GERM 102 or the equivalent

Credits: 3

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: 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: 3

GERM 198 - Selected Topic

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

Credits: 3

GERM 201 - Communication in German

A functional course in speaking and writing German, stressing everyday vocabulary and sentence structure.

Prerequisites & Notes

GERM 103 or the equivalent

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 & Notes

GERM 103 or the equivalent

Credits: 3

GERM 257 - German Immersion

Varies.

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: 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: 3

GERM 298 - Selected Topic

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

Credits: 3

GERM 300 - German Grammar Review

An intermediate grammar review course, emphasizing the basic structures of German.

Prerequisites & Notes

GERM 201 or 220 or the equivalent

Credits: 3

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 & Notes

GERM 201 or 220 or the equivalent

Credits: 3

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 & Notes

GERM 201 or 220 or the equivalent

Credits: 3

GERM 306 - Modern German Civilization

A study of the civilization of German-speaking areas in the twentieth century.

Prerequisites & Notes

GERM 201 or 220 or the equivalent

Credits: 3

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 & Notes

GERM220 or permission of instructor

Credits: 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.

Prerequisites & Notes

GERM307 or permission of instructor

Credits: 3

GERM 320 - Main Currents in German Literature

An introduction to the study of German literature through prose, drama, and poetry.

Prerequisites & Notes

GERM250 or 255 or equivalent

Credits: 3

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 & Notes

GERM250 or 255

Credits: 3

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: 3

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: 3

GERM 398 - Selected Topic

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

Credits: 3

GERM 400 - Advanced Grammar

An advanced course in the study of German grammar and usage.

Prerequisites & Notes

GERM300

Credits: 3

GERM 411 - Contemporary German Literature

A study of the outstanding authors writing in German in the twentieth century.

Prerequisites & Notes

6 credits of German at the 300 level

Credits: 3

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.

Prerequisites & Notes

Permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted.

Credits: 1-3

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: 3

GERM 498 - Selected Topic

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

Credits: 3

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.

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.

GERO 198 - Selected Topic

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

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

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.

GERO 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.

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.

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.

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.

GERO 398 - Selected Topic

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

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

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.

Prerequisites & Notes

Nine credits of approved gerontology coursework or permission of the gerontology coordinator

Credits: Up to 12

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.

Prerequisites & Notes

GERO 265 or equivalent work experience; additional coursework in gerontology is desirable

Credits: 3

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.

Prerequisites & Notes

Permission of gerontology coordinator, instructor, departmental chairperson and dean of the college where the study will be conducted

Credits: 1 to 3

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.

GERO 498 - Selected Topic

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

GERO 595 - Workshop

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

Credits: 3

GERO 598 - Selected Topic

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

Credits: 3

GES 100 - Discover Geography

An introductory course that surveys the field of geography and demonstrates the relevance of basic geographic concepts and methodologies.

Credits: 3

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

GES 107 - Environments and Peoples of the Developed World

An introductory course that surveys the developed world, stressing the economic, social, political, and environmental characteristics of US and Canada, Europe, the Russian Republics, and Japan.

Credits: 3

GES 109 - Environments and Peoples of the Developing World

An introductory course that surveys the developing world, stressing the economic, social, political, and environmental characteristics of Latin America, Africa, and Asia.

Credits: 3

GES 115 - Map Reading and Interpretation

Provides fundamental map concepts with an emphasis on using and understanding an atlas, making and interpreting computer maps, and reading and interpreting topographic maps.

Credits: 1

GES 135 - Introduction to Environmental Problems

An introduction to some of the more crucial environmental problems and alternative solutions that are available.

Credits: 3

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

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.

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.

GES 198 - Selected Topic

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

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

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

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

GES 215 - Rural and Urban Planning

An introduction to social and physical planning for rural areas, towns and cities. Cross-listed with PUBA 215.

Credits: 3

GES 220 - General Methods of Fieldwork

A survey of methodology commonly employed for field research, including techniques of field observation, the use of field equipment, field mapping procedures, and the identification and tabulation of primary field data.

Prerequisites & Notes

G&ES 115

Credits: 3

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.

Prerequisites & Notes

G&ES 135 or permission of the instructor

Credits: 3

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 244 - Environmental Justice

An examination of basic factors underlying the spatial allocation and development of resources.

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.

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.

GES 298 - Selected Topic

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

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

GES 302 - Cultural Geography

This course explores basic environmental and spatial approaches in the field of cultural geography. These approaches include cultural ecology, cultural history, cultural diffusion, cultural region, cultural integration and symbolism, and the cultural landscape.

Credits: 3

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

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

GES 308 - Europe

The evolution of nations, the cultural landscape, and the spatial-economic organization of Europe.

Credits: 3

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

GES 310 - Urban Geography

The course is designed to provide insights into the nature of cities and smaller urban places.

Credits: 3

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.

Prerequisites & Notes

G&ES 115

Credits: 3

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

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. Cross listed as G&ES525.

Prerequisites & Notes

G&ES 115

Credits: 3

GES 330 - Political Geography

The effects of politics on geography and the effects of geographic factors on politics.

Credits: 3

GES 331 - Economic Geography

Examines human use and economic organization of the earth.

Credits: 3

GES 345 - Population Analysis

A study of the techniques of population analysis with respect to growth, distribution, fertility, migration, and other demographic characteristics.

Prerequisites & Notes

Some background in algebra or statistics

Credits: 3

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 decision in response to climate change.

Credits: 3

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.

Prerequisites & Notes

EGEO121; Co-requisite G&ES355

Credits: 1

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

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.

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.

GES 398 - Selected Topic

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

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

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.

Prerequisites & Notes

G&ES 315 or permission of the instructor

Credits: 3

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

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, environmental modeling, urban planning, and economic location. Includes a lab.

Prerequisites & Notes

G&ES 315, 325

Credits: 3

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

GES 444 - World Environmental Thought

Students will explore and evaluate geographic and environmental ideas from western and non-western cultures.

Prerequisites & Notes

Junior standing and/or permission of the instructor

Credits: 3

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 & Notes

G&ES/PUBA 215

Credits: 3

GES 450 - Internship

Supervised placement and field experience in a selected public or private agency.

Prerequisites & Notes

Permission of the instructor

Credits: Up to 12

GES 489 - Field Studies

Students use the scientific method in selecting a topic, collecting data in the field, analyzing these data, and preparing a formal paper.

Prerequisites & Notes

Permission of the instructor

Credits: 3

GES 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: 3

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.

GES 498 - Selected Topics

The in-depth examination of a specific topic. The topic selected and its treatment depend on the instructor.

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

Credits: 1 to 3

GES 590 - Experimental

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

Credits: 3

GES 595 - Workshop

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

Credits: 3

GES 598 - Selected Topic

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

Credits: 3

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

HIST 152 - Rise of the Modern World

European peoples and nations from the Renaissance and Reformation to the French Revolution and the Napoleonic Wars.

Credits: 3

HIST 153 - Twentieth Century World

Contemporary history in the perspective of World War I and II, the Great Depression and the challenge of totalitarianism to democracy; Lenin vs. Wilson; Mussolini, Franco, Hitler and Tojo vs. Churchill and Roosevelt; Stalin and Mao Tse-tung.

Credits: 3

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.

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.

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.

HIST 201 - Colonial America to 1825

The colonies, the American Revolution, the new nation and Jeffersonian democracy to the Jacksonian period, including some study of ethnic groups.

Credits: 3

HIST 202 - United States, 1825-1900

Jacksonian era to world power, including sectionalism, manifest destiny, Civil War and Reconstruction and problems of industrialization.

Credits: 3

HIST 203 - U.S. History Since 1900

Social, economic and political history of the 20th century, including World War I, and the twenties, the New Deal, World War II, postwar problems and the African American's struggle for acceptance.

Credits: 3

HIST 205 - Historians Craft

The course will introduce students to the skills associated with historical research and writing by means of word processing. In addition, various schools of historical thought will be analyzed.

Prerequisites & Notes

Credits: 3

HIST 233 - 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

HIST 234 - 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

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.

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.

HIST 298 - Selected Topic

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

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 pre-Hellenistic 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.

Prerequisites & Notes

None

Credits: 3

HIST 305 - Russia to 1855

A social, political and cultural history from ancient times to the death of Nicholas I.

Credits: 3

HIST 306 - Russia Since 1855

Continuity and change in Russia from the reign of Alexander II through the Soviet period.

Credits: 3

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

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

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 socio-economic 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

HIST 322 - Germany in the Twentieth Century

Germany's drive for recognition as a world power, culminating in the horror of World War I, failure of the Weimar Republic, the rise of Hitler and Nazism, World War II and the division into East and West Germany.

Credits: 3

HIST 330 - Warfare in the Twentieth Century

A survey of wars in this century with emphasis on World Wars I and II. Technical innovation, military theory, and strategy will be examined along with their relationship to the nations involved.

Credits: 3

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

HIST 332 - England Since 1689

The rise to world dominion through sea power to the rivalry with Germany.

Credits: 3

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

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

HIST 337 - Indians of the United States

The history and culture of the seven major geographic-cultural groups of native Americans, including analysis of the clash of cultures with European civilization.

Credits: 3

HIST 340 - The Historical and Political Legacies of the Vietnam Era

Course examines the roots, nature, and course of the war in Vietnam and the accompanying cultural and political developments in the United States with a particular concern for the influences of war on our contemporary social and political context. Cross-listed as POLS 340.

Credits: 3

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

HIST 344 - The American City

Growth, impact and significance of the city and town in American history. A study of ethnology, religion, and education as factors in urban development with emphasis on industrialization as it transformed society and thought.

Credits: 3

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

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

HIST 352 - Latin America Since 1830

Developing countries of Latin America, their internal problems, international relations and historic evolution to the present.

Credits: 3

HIST 357 - Challenges of the American Experience I (to 1865)

An interdisciplinary course including American literature, history, philosophy, and politics examining the roots of American institutions, values and cultures and their significance for the challenges confronting contemporary society.

Credits: 3

HIST 358 - Challenges of the American Experience II (1865 to the Present)

An interdisciplinary course including American literature, history, philosophy, and politics examining the roots of American institutions, values and cultures and their significance for the challenges confronting contemporary society.

Credits: 3

HIST 362 - Africa North of the Zambezi

Language groups, migrations of peoples, external influences, colonialism, and the emergence of independent states.

Credits: 3

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

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

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

HIST 376 - Modern Japan

This course will investigate the history of the Japanese people from the beginning of the nineteenth century to the present and explore Japan's increasingly important role in the modern world.

Credits: 3

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

HIST 381 - East Asian Military Traditions

This course will examine the cultural and historic factors which have distinguished Asian military traditions from the time of Sun Tze's *The Art of War* in the fifth century B.C. through the nineteenth and twentieth century writings of such Asian militarists as Yamagata Aritomo, Mao Tse-Tung, and Vo Nguyen Giap.

Credits: 3

HIST 382 - Modern Asian Pacific Rim

This course will examine the political, social, economic, technological, and cultural factors which have affected the evolution of the Pacific Rim into the most vital and growing economic region on the globe.

Credits: 3

HIST 386 - Modern China

This course will examine the history of modern China, the major factors, which influenced its course, and the values, which operate in Chinese society today.

Credits: 3

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.

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.

HIST 398 - Selected Topic

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

HIST 422 - Greece and Rome

The major events in the evolution of classical civilization.

Credits: 3

HIST 424 - The Middle Ages

Major political, social, economic, and intellectual events in the feudal era of Western Europe.

Credits: 3

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

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

HIST 435 - Pennsylvania

The founding and growth of Pennsylvania to the present.

Credits: 3

HIST 437 - Westward Movement

The westward movement in continental United States from discovery to 1890. Special emphasis on the trans-Mississippi West.

Credits: 3

HIST 442 - Studies in U.S. Women's History

An in-depth investigation into specific topics of women's studies through individual reading assignments and group discussions.

Prerequisites & Notes

3 credits in women's studies or permission of the instructor

Credits: 3

HIST 445 - Environmental Thought in the United States

American philosophical foundations of environmental thought in American history with emphasis upon changing attitudes and evaluations of successes and failures.

Credits: 3

HIST 450 - History Internship

Supervised placement and research in selected public and private agencies at appropriate institutions.

Credits: Up to 12

HIST 451 - U.S. Foreign Relations to 1890

Foreign relations from the beginning of our national history to the era of imperialism and the Spanish-American War.

Credits: 3

HIST 452 - U.S. Foreign Relations Since 1890

American foreign policy from the Spanish-American War to the present.

Credits: 3

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. May be used as a political science elective.

Credits: 3

HIST 455 - Economic U.S. History

American economic development, with emphasis on change and growth in commerce, industry, labor, finance, and governmental participation. May be used as an economics elective.

Credits: 3

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

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 to 3

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.

HIST 498 - Special Topics

Selected topics such as JFK assassination and history and film are offered on a rotational basis as staffing allows.

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

Credits: 3

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 this 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

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.

Prerequisites & Notes

For community health, exercise science, physical education and school health majors only or by permission of the instructor. Freshman or sophomore standing only

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.

Prerequisites & Notes

For community health, exercise science, physical education and school health majors only or by permission of the instructor. Freshman or sophomore standing only

Credits: 3

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.

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.

HLTH 198 - Selected Topic

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

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

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

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

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.

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.

HLTH 298 - Selected Topic

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

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 & Notes

HLTH 102 and 103 or permission of the instructor

Credits: 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.

Prerequisites & Notes

BIOL 216 and 217, or permission of the instructor

Credits: 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 & Notes

CHEM 104 or 107 and BIOL 210 or permission of the instructor

Credits: 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.

Prerequisites & Notes

Junior standing

Credits: 3

HLTH 312 - Data Management for Health Science

Explores methods of data collection, manipulation and reporting for health science. Includes computer applications.

Prerequisites & Notes

MATH 152 or permission of the instructor. Basic computer literacy is recommended

Credits: 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 & Notes

HLTH 312

Credits: 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

HLTH 316 - Human Sexuality

Surveys a broad range of information about human sexuality from biological, psychological, sociological, religious, and medical perspectives.

Credits: 3

HLTH 362 - School Health Education Teaching 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.

Prerequisites & Notes

Include successful completion of HLTH262 (minimum grade of "C") and acceptance into the College of Education

Credits: 3

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.

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.

HLTH 398 - Selected Topic

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

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.

Prerequisites & Notes

HLTH 301 and senior standing or permission of the instructor

Credits: 3

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 & Notes

HLTH 313 Biostatistics or a statistics course approved by the instructor with permission of the instructor and senior standing

Credits: 3

HLTH 414 - Death and Dying

This course develops effective understanding of all aspects of death and dying including: grief, funerals, children's view of death, psychological aspects of death, doctors and death, and euthanasia.

Credits: 3

HLTH 424 - Nutrition and Exercise

Focuses on the specific nutritional requirement for physical conditioning for persons involved in competitive and/or recreational activities. Emphasizes the development and/or maintenance of a healthy cardiovascular system.

Prerequisites & Notes

HLTH 314

Credits: 3

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.

Prerequisites & Notes

Senior Standing

Credits: 3

HLTH 450 - Internship

Provides opportunity to apply theory and develop competencies through a work-related experience in an appropriate cooperating enterprise. Summers only.

Prerequisites & Notes

Program/major specified requirements and/or approval of instructor

Credits: Up to 12

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: 12, 6, 3

HLTH 462 - Field Experience in School Health Education Methods

The course focuses on Health Education instructional and assessment techniques that can be utilized for health promotion in school settings. Development of a comprehensive school health curriculum using the National Health Education Standards and the Assessment Framework is emphasized including appropriate scope and sequence, content, and skills. Special emphasis is accorded to meeting the Pennsylvania Chapter Regulations that address teaching HIV/AIDS, human sexuality, family life education, tobacco, alcohol, and other forms of chemical abuse. The course includes a practica in the schools that allows opportunities to observe, practice, and reflect on specific school health education teaching strategies.

Prerequisites & Notes

Successful completion of HLTH 262 and 362 (minimum of "C") and acceptance in the College of Education

Credits: 3

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.

Prerequisites & Notes

Permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted.

Credits: 1 to 6

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.

HLTH 498 - Selected Topic

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

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.

HONR 195 - 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.

HONR 198 - Selected Topic

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

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.

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.

HONR 298 - Selected Topic

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

HONR 385 - The Great Books

Seminars on selected topics from the classic works of human thought.

Credits: 3

HONR 386 - The Great Books

Seminars on selected topics from the classic works of human thought.

Credits: 3

HONR 387 - The Great Books

Seminars on selected topics from the classic works of human thought.

Credits: 3

HONR 388 - The Great Books

Seminars on selected topics from the classic works of human thought.

Credits: 3

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.

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.

HONR 398 - Selected Topic

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

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.

HONR 498 - Selected Topic

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

HSA 231 - The US Healthcare System

This course offers an overview of the U.S. healthcare delivery system, its policy makers, values, ethics, and other issues that confront it. It focuses on the ever-changing components of the healthcare system and on the technical, economic, political, ethical, and social forces responsible for those changes. The roles of governmental and professional agencies and organizations are presented. The organization and delivery of healthcare services in all its settings are also covered. Opportunities are provided to students for social awareness, civic responsibility, and personal development as these relate to the allocation and use of healthcare resources. This course equips the student to become an informed healthcare consumer and introduces them to healthcare as an option for employment. The course is open to all majors.

Prerequisites & Notes

None

Credits: 3

HSA 332 - Health Services Planning and Evaluation

Provides knowledge about comprehensive health planning, comparing concepts, models, and approaches.

Prerequisites & Notes

ECON/MGMT 219 AND COMM 231 AND HSA 231 AND MRKT 330 AND PROF 250 OR MGMT 351

Credits: 3

HSA 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. The course presents a critical analysis of selected topics of interest to the health services management major as well as other students interested in healthcare.

Prerequisites & Notes

This course is open to all majors with junior standing.

Credits: 3

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 & Notes

CPSC 210; HSA 231; CPSC 323

Credits: 3

HSA 437 - Financial Management of Healthcare Organizations

This course is designed to enrich the student's understanding of common financial management and reimbursement strategies used in profit and not-for-profit healthcare organizations. It will expose students to various techniques necessary to equip them with practical skills to manage finances in a variety of healthcare settings such as: acute, longterm, and ambulatory care.

Prerequisites & Notes

HSA 231, PROF 205

Credits: 3

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 & Notes

HSA 231; PROF 250 OR MGMT 351; MRKT 330; ACCT 340

Credits: 3

HSA 450 - Internship in Health Services Administration

Provides the student with an opportunity to apply theory to practice and develop competencies through a work-related experience in a profit, or not-for-profit healthcare organization.

Prerequisites & Notes

Completion of all Health Services Administration Courses and approval of professor.

Credits: 12

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

INDS 102 - Learning Strategies

Students will develop effective learning strategies, goals, and decision-making 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

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 self-knowledge and knowledge about majors and the world of work.

Credits: 1

INDS 110 - Research.com

A self-paced course introducing the resources of the university library. Students will select and use print and non-print materials on assigned subjects as preparation for future library research in various disciplines. Should be scheduled after the completion of any remedial English or communication course. For course information contact the library.

Credits: 1

ITAL 101 - Italian Language and Culture I

A broad and practical working foundation in the language.

Credits: 3

ITAL 102 - Italian Language and Culture II

A broad and practical working foundation in the language.

Prerequisites & Notes

ITAL 101 or equivalent

Credits: 3

ITAL 103 - Italian Language and Culture III

A broad and practical working foundation in the language.

Prerequisites & Notes

ITAL 102 or equivalent

Credits: 3

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: 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: 3

ITAL 198 - Selected Topic

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

Credits: 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: 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: 3

ITAL 298 - Selected Topic

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

Credits: 3

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.

Prerequisites & Notes

Permission of the instructor, departmental chairperson and dean of the college where the study will be conducted

Credits: 1 to 3

JAPN 101 - Japanese language Culture I

This course is the first in a three course series which will provide an introduction to the Japanese language.

Credits: 3

JAPN 102 - Japanese language Culture II

This course is the second in a three course series which will provide an introduction to the Japanese language.

Prerequisites & Notes

JAPN 101 or equivalent

Credits: 3

JAPN 103 - Japanese language Culture III

This course is the third in a three course series which will provide an introduction to the Japanese language.

Prerequisites & Notes

JAPN 102 or equivalent

Credits: 3

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: 3

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: 3

JAPN 198 - Selected Topic

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

Credits: 3

JAPN 202 - Intermediate Japanese I

Comprehensive review of Japanese language with emphasis on developing the students’ abilities for proficient oral and written accomplishments.

Prerequisites & Notes

JAPN 103 or equivalent.

Credits: 3

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: 3

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: 3

JAPN 298 - Selected Topic

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

Credits: 3

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: 3

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: 3

JAPN 398 - Selected Topic

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

Credits: 3

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.

Prerequisites & Notes

Permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted.

Credits: 1-3

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: 3

JAPN 498 - Selected Topic

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

Credits: 3

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

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.

Prerequisites & Notes

KORN 101 or equivalent

Credits: 3

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.

Prerequisites & Notes

KORN 102 or equivalent

Credits: 3

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: 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: 3

KORN 198 - Selected Topic

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

Credits: 3

KORN 202 - Intermediate Korean I

Comprehensive review of Korean grammar with emphasis on developing the students' abilities for proficient oral and written accomplishments.

Prerequisites & Notes

KORN 103 or equivalent

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: 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: 3

KORN 298 - Selected Topic

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

Credits: 3

KORN 306 - Modern Korean Civilization

Course analyzes the most significant characteristics, foreign influences, and cultural traditions that have comprised Korean culture from its origins to 1900. Course will be taught in English and is open to all interested students.

Credits: 3

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: 3

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: 3

KORN 398 - Selected Topic

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

Credits: 3

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.

Prerequisites & Notes

Permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted.

Credits: 1-3

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: 3

KORN 498 - Selected Topic

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

Credits: 3

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

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.

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.

MARS 198 - Selected Topic

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

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

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

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

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 & Notes

MARS 110 or permission of the instructor

Credits: 3

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.

Prerequisites & Notes

Four years of high school math or permission of the instructor

Credits: 3

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.

Prerequisites & Notes

A chemistry or biology or related laboratory course

Credits: 3

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.

Prerequisites & Notes

One year of biology or permission of the instructor

Credits: 3

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.

Prerequisites & Notes

One semester of biology or permission of the instructor

Credits: 3

MARS 250 - Wetland Ecology

The ecology and management of wetland wildlife with emphasis on the management of wetlands as ecological systems.

Credits: 3

MARS 260 - Marine Ecology

A study of the ecology of marine organisms, the relationship of plants and animals to physical, chemical and biological factors and their zonation and communities.

Prerequisites & Notes

One year of biology or permission of the instructor

Credits: 3

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

MARS 280 - Field Biology

Varies.

Credits: 3

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

MARS 290 - Experiment

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

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.

MARS 298 - Selected Topics

An opportunity for intensive study on a specific topic of interest. Course duration from 1 to 3 weeks.

A **Selected Topics** course is a normal, departmental offering which is directly 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 & Notes

Variable, depending on the topic

Credits: 1 to 3

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 & Notes

General Biology

Credits: 3

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 & Notes

General Biology

Credits: 3

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.

Prerequisites & Notes

General Microbiology

Credits: 3

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.

Prerequisites & Notes

Marine Invertebrates, Invertebrate Zoology or a thorough Zoology course with permission of the instructor

Credits: 3

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 & Notes

MARS 110 and one year of Chemistry or permission of the instructor

Credits: 3

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 & Notes

A course in General Biology and/or one semester of Botany or permission of the instructor

Credits: 3

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 & Notes

General Biology and/or permission of the instructor

Credits: 3

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 & Notes

Six credits of Biology, including General Zoology

Credits: 3

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.

Prerequisites & Notes

One year of biology or permission of the instructor

Credits: 3

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 & Notes

Introductory Biology

Credits: 3

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 & Notes

MARS 110 and one semester of Geology or permission of the instructor

Credits: 3

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 & Notes

Introductory Oceanography, one year of Physics, Algebra and Trigonometry and one semester of Calculus or permission of the instructor

Credits: 3

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.

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, locomotion 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

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.

MARS 398 - Developmental Biology of Marine Organisms

Principles of development and differentiation in marine organisms at the molecular and supramolecular levels of organization. The laboratory will include both descriptive and experimental embryology.

Prerequisites & Notes

Introductory Biology

Credits: 3

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.

Prerequisites & Notes

One year of Geology or Biology or permission of the instructor

Credits: 3

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.

Prerequisites & Notes

One year of Biology

Credits: 3

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

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

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 Pflasteria in the coastal waters of N.C. and VA. Cross listed as MARS551.

Prerequisites & Notes

MARS 110

Credits: 3

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 & Notes

Oceanography, Physical Geology, College Algebra or permission of the instructor

Credits: 3

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.

Prerequisites & Notes

Physical Geology and one year of Math or permission of the instructor

Credits: 3

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.

Prerequisites & Notes

One year of Geology or Physical Geography (landforms) or permission of the instructor

Credits: 3

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.

Credits: 3

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

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

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

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.

Prerequisites & Notes

Nine credits in Biology

Credits: 3

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.

MARS 498 - Selected Topics

An opportunity of intensive study in a specific topic of interest. Course duration from 1 to 3 weeks.

A **Selected Topics** course is a normal, departmental offering which is directly 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 & Notes

Variable, depending on the topic

Credits: 1 to 3

MARS 500 - Problems in Marine Science

Graduate or undergraduate students after advanced registration in the course may complete the course requirements by either of the following options: Students may elect to take a 200-, 300-, or 400-level course in which they desire advanced work and complete, in addition to the regular course requirements, an approved project in the area under the direction of the instructor; or the student may do an independent research project. In order to be admitted to the latter option, students must submit a research proposal to the academic committee of the Marine Science Consortium. The proposal must include the scope and duration of the proposed research, equipment and facilities required, and a recommendation and approval from the academic advisor.

Credits: 3

MARS 510 - Oceanography (In-Service Teachers)

An introductory course to familiarize teachers with the nature of the oceans and create an awareness of the interdisciplinary nature of oceanography. The teachers will have the opportunity to participate in field activities, develop skills in handling marine instruments, and perform investigative laboratory activities, which will enhance their effectiveness in classroom teaching of oceanography through personal experience.

Credits: 3

MARS 530 - Coastal Sedimentation

Study of depositional environments of marine-dominated shorelines; their processes, sediments, sedimentary facies; models for recognizing ancient counterparts in rock record; and growth and development of barrier island-tidal deltas.

Prerequisites & Notes

Introductory course in Sedimentation or Marine Geology or permission of the instructor

Credits: 3

MARS 540 - Environmental Science Education

A field-oriented approach to environmental education with special emphasis on coastal zones. Students will relate their own disciplines to education for quality environments. Consideration will be given to sources, facilities, methods, techniques and concepts used in environmental education.

Credits: 3

MARS 551 - Coastal Environment 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 Pfiesteria in the coastal waters of N.C. and VA. Cross listed as MARS451.

Prerequisites & Notes

MARS115

Credits: 3

MARS 555 - Ocean Resources

This is an introductory course designed to emphasize the potential resources and the feasibilities of their exploitation. The role of ocean science and engineering in accomplishing this goal will be covered.

Credits: 3

MATH 113 - Mathematics as a Liberal Art

A cultural enrichment course, which introduces topics and applications from different branches of mathematics.

Prerequisites & Notes

ACSD 110 or equivalent

Credits: 3

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 & Notes

ACSD 110 or equivalent

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 & Notes

ACSD 110 or equivalent

Credits: 3

MATH 120 - Intermediate Algebra

Linear functions, equations, inequalities, polynomials, algebra of functions, rational exponents, quadratic equations and inequalities, systems of equations.

Prerequisites & Notes

ACSD 110 or equivalent

Credits: 3

MATH 122 - Matrices and Linear Programming

The algebra of matrices with applications in linear programming, algebraic and graphical solutions.

Prerequisites & Notes

MATH 120 or equivalent

Credits: 3

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 & Notes

MATH 120 or MATH 125 or equivalent

Credits: 3

MATH 125 - Precalculus

A bridge between high school algebra and calculus involving polynomial, trigonometric, logarithmic, exponential functions, complex numbers, and the conic sections.

Prerequisites & Notes

MATH 120; or two years of high school algebra and appropriate placement score

Credits: 4

MATH 131 - Discrete Mathematics

Topics include propositional calculus, set theoretic concepts, relations and functions, mathematical induction, counting techniques, recursion, graphs and trees.

Prerequisites & Notes

MATH 125; or high school Trigonometry/Precalculus and appropriate placement score

Credits: 3

MATH 152 - Elementary Statistics I

Introduction to statistics: descriptive statistics, bivariate data, elementary probability, random variables, normal and binomial probability distributions, Central Limit Theorem, confidence intervals, and hypothesis Testing. MINITAB

will be used.

Prerequisites & Notes

ACSD 110 or equivalent

Credits: 3

MATH 153 - Elementary Statistics II

Review of Elementary Statistics I, confidence intervals and hypothesis testing of means, proportions, and standard deviations of two populations, nonparametric methods, multinomial experiments, linear regression and correlation, and one-way ANOVA. MINITAB will be used.

Prerequisites & Notes

MATH 152 or equivalent

Credits: 3

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.

Prerequisites & Notes

Co-requisites: MATH 225 (1 credit)

Credits: 1

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.

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.

MATH 198 - Selected Topic

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

MATH 210 - Elementary Mathematics I

This course explores the development of the number system through the integers, using a problem solving approach. Emphasis on place-value and arithmetic operations is essential if these future teachers are to engage their students in higher levels of mathematics.

Prerequisites & Notes

ACSD 110 or equivalent and Freshman II standing

Credits: 3

MATH 225 - Calculus I

Limits, continuity. Differential calculus for algebraic and transcendental functions of one variable with applications. Introduction to integration.

Prerequisites & Notes

A grade of C or higher in MATH 125; or high school Trigonometry/Precalculus and appropriate placement score

Credits: 4

MATH 230 - Calculus II

Integral calculus for functions of one variable. Definite integrals, techniques of integration, and applications. Infinite series.

Prerequisites & Notes

A grade of C or higher in MATH 225

Credits: 4

MATH 231 - Calculus III

Differential and integral calculus for functions of several variables and vector fields.

Prerequisites & Notes

A grade of C or higher in MATH 230

Credits: 4

MATH 235 - Modern Concepts of Mathematics

Basic logic and set theory, and methods of proof, induction, relations and functions.

Prerequisites & Notes

MATH 225, 131

Credits: 3

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.

Prerequisites & Notes

MATH 230

Credits: 3

MATH 252 - Introduction to Statistical Modeling

Linear correlation and regression, multiple regression, polynomial regression, analysis of variance, and time series. MINITAB will be used for data analysis.

Prerequisites & Notes

MATH 153 and either MATH 123 or 125

Credits: 3

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.

Prerequisites & Notes

MATH 230

Credits: 3

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.

Prerequisites & Notes

Permission from instructor

Credits: 1

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.

Prerequisites & Notes

MATH280

Credits: 2

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.

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.

MATH 298 - Selected Topic

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

MATH 301 - Differential Equations I

First and second order differential equations, infinite series solutions, Laplace transforms, existence and uniqueness theorems.

Prerequisites & Notes

MATH 240; Co-requisite: MATH 231

Credits: 3

MATH 302 - Differential Equations II

A continuation of MATH 301. Systems of ordinary differential equations, non-linear systems and stability, partial differential equations.

Prerequisites & Notes

MATH 301

Credits: 3

MATH 304 - Geometric Structures

Finite and infinite axiomatic systems, including Euclidean and projective geometrics.

Prerequisites & Notes

MATH 235

Credits: 3

MATH 309 - Linear Algebra

Vector spaces, linear transformations, matrices, and determinants with applications.

Prerequisites & Notes

MATH 240; Co-requisite: MATH 231

Credits: 3

MATH 310 - Elementary Mathematics II

This course finishes exploring the development of the number system by looking at the rational and real numbers and then looks at measurement, statistics, and probability. This course will not count as an upper division course for mathematics majors.

Prerequisites & Notes

MATH 210

Credits: 3

MATH 311 - Introduction to Operations Research

Linear programming, transportation and assignment problems, branch and bound algorithm, simulation.

Prerequisites & Notes

MATH 122 or 240

Credits: 3

MATH 313 - Introductory Analysis I

Cardinality, topology of the real numbers, sequences and continuity of functions.

Prerequisites & Notes

MATH 231, 235

Credits: 3

MATH 314 - Introductory Analysis II

Differentiation, Mean Value Theorem, Integration, series (convergence, exponential, trigonometric functions).

Prerequisites & Notes

MATH 313

Credits: 3

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 & Notes

Some competence in a computer language. Prerequisite MATH 240.

Credits: 3

MATH 320 - Theory of Numbers

A study of the properties of natural numbers and number theoretic functions.

Prerequisites & Notes

MATH 235

Credits: 3

MATH 325 - Abstract Algebra I

An introduction to groups. Topics include integers mod n , cyclic groups, permutation groups, normal subgroups, isomorphisms, finite Abelian groups.

Prerequisites & Notes

MATH 235

Credits: 3

MATH 326 - Abstract Algebra II

An introduction to rings. Topics include integral domains, fields, polynomial rings.

Prerequisites & Notes

MATH 325

Credits: 3

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 & Notes

PHYS 211 and MATH 240; Co-requisite: MATH 231

Credits: 3

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.

Prerequisites & Notes

Math 231 and Math 240

Credits: 3

MATH 352 - Mathematical Statistics I

An introduction to the mathematical foundations of probability theory including discrete and continuous probability distributions, random variables, mathematical expectation, moment, and moment generating functions.

Prerequisites & Notes

MATH 230

Credits: 3

MATH 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 & Notes

MATH 352

Credits: 3

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.

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.

MATH 398 - Selected Topic

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

MATH 403 - Elementary Topology

Topological properties of the real line.

Prerequisites & Notes

MATH 309, 313

Credits: 3

MATH 406 - Intermediate Analysis

Selected topics.

Prerequisites & Notes

MATH 314

Credits: 3

MATH 407 - Complex Variables

Complex numbers, analytic functions, complex integration, convergence of sequences and series, and applications.

Prerequisites & Notes

MATH 313

Credits: 3

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 to 3

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.

Prerequisites & Notes

MATH 235 and one 300 or higher level math course or permission of the instructor

Credits: 1

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.

MATH 498 - Selected Topics

The in-depth examination of a specific topic. The nature of the topic selected and its treatment determined in consultation with the instructor.

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

Credits: 1 to 3

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.

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.

MGMT 198 - Selected Topic

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

MGMT 219 - Business Statistics

Probability and statistics in a business environment, encompassing descriptive statistics, probability theory, hypothesis testing, linear regression and correlation. Cross-listed as ECON 219.

Prerequisites & Notes

Algebraic proficiency and microcomputer proficiency.

Credits: 3

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.

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.

MGMT 298 - Selected Topic

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

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 & Notes

MGMT/ECON 219

Credits: 3

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.

Prerequisites & Notes

MGMT351 and junior standing

Credits: 3

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

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.

Prerequisites & Notes

MGMT 320 and 351

Credits: 3

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.

Prerequisites & Notes

MGMT 351

Credits: 3

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 & Notes

MGMT351

Credits: 3

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 & Notes

MGMT 320 and 351

Credits: 3

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 & Notes

MGMT 219 or MATH 152

Credits: 3

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.

Prerequisites & Notes

MGMT 354

Credits: 3

MGMT 365 - 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 & Notes

CPSC 210 and MGMT 351

Credits: 3

MGMT 370 - Entrepreneurship and Innovation

This integrative course introduces students to issues related to new venture creation, such as, the importance of innovation and creativity in opportunity recognition, analysis of market potential, identification and acquisition of human and financial resources, assessing a venture's financial strength, ethical and legal issues, and the launch of a new business.

Prerequisites & Notes

FIN 320; MGMT 351; MRKT 330 or permission of instructor

Credits: 3

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.

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.

MGMT 398 - Selected Topic

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

MGMT 450 - Internship

Supervised placement, work, and research in selected public and private organizations.

Prerequisites & Notes

Application and permission of the instructor

Credits: Up to 12

MGMT 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 & Notes

MGMT 351

Credits: 3

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.

Prerequisites & Notes

MGMT 351

Credits: 3

MGMT 453 - Collective Bargaining

The major issues in the negotiation process: bargaining, public policy implications, impasse resolution, strikes, and legislation affecting collective bargaining.

Prerequisites & Notes

MGMT 351

Credits: 3

MGMT 454 - Management Seminar

Contemporary methods and theories of management are discussed in terms of current organizational practice.

Prerequisites & Notes

MGMT 320, 354 and senior standing

Credits: 3

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.

Prerequisites & Notes

MGMT 354

Credits: 3

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.

Prerequisites & Notes

MGMT 351

Credits: 3

MGMT 457 - International Management

Examination of environments, resources, strategies and models of managerial functions in international organizations.

Prerequisites & Notes

MGMT 351

Credits: 3

MGMT 458 - Integrated Business Policy

Integrated Business Policy uses a computerized business simulation as a learning tool to enhance student understanding of the interaction and influence of functional areas of business on an organization's strategy and policy. Course material presents the scope of management's ethical responsibilities and the organization's commitment to diversity.

Prerequisites & Notes

All other core courses and business administration senior

Credits: 3

MGMT 459 - Small Business Institute

In this course student consulting teams analyze actual problem situations of cooperating regional businesses.

Prerequisites & Notes

Application and permission of the instructor

Credits: 3

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 cost-benefit analysis, and training budgeting. Current trends in training and development will be covered including computer based training, competency based training and cross cultural training.

Prerequisites & Notes

MGMT 354

Credits: 3

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.

Prerequisites & Notes

MGMT 351, three credits of CPSC

Credits: 3

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 to 3

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.

MGMT 498 - Selected Topic

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

MGMT 590 - Experimental

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

Credits: 3

MGMT 595 - Workshop

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

Credits: 3

MGMT 598 - Selected Topic

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

Credits: 3

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

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: 1 to 9

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: 3

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: 3

MODL 198 - Selected Topic

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

Credits: 3

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: 3

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: 3

MODL 298 - Selected Topic

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

Credits: 3

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: 3

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: 3

MODL 398 - Selected Topic

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

Credits: 3

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. 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: 3

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: 3

MODL 498 - Selected Topic

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

Credits: 3

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.

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.

MRKT 198 - Selected Topic

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

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.

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.

MRKT 298 - Selected Topic

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

MRKT 330 - 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

MRKT 331 - Distribution Management

Principles, methods and problems relating to wholesaling, retailing and physical distribution management.

Prerequisites & Notes

MRKT 330

Credits: 3

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 & Notes

MRKT 330

Credits: 3

MRKT 333 - Consumer Behavior

The buying process with emphasis on economic, social, cultural and psychological determinants of consumer choice.

Prerequisites & Notes

MRKT 330

Credits: 3

MRKT 334 - Advertising Management

Management of advertising, including background, roles, planning, media strategy, message, testing, research, evaluation, and administration of advertising.

Prerequisites & Notes

MRKT 330

Credits: 3

MRKT 335 - Retail Management

Store location and layout, retail personnel management, merchandising policies and control, and marketing strategy.

Prerequisites & Notes

MRKT 330 or permission of the instructor

Credits: 3

MRKT 336 - Sales Management

Provides foundations of sales processes and management to prepare students for careers in selling or sales management.

Prerequisites & Notes

MRKT 330 or permission of the instructor

Credits: 3

MRKT 338 - E-Commerce

The role, structure, organization, and use of the Internet as a channel of distribution to conduct electronic commerce.

Prerequisites & Notes

MRKT 330, CPSC 110 or equivalent

Credits: 3

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.

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.

MRKT 398 - Selected Topic

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

MRKT 430 - Marketing Research

Research methodology as a managerial tool used in problem solving and decision making in marketing.

Prerequisites & Notes

ECON 219 or MGMT 219, MRKT 330 and senior standing

Credits: 3

MRKT 431 - Marketing Seminar

Advanced topics in marketing with emphasis on the analysis and solution of marketing problems.

Prerequisites & Notes

MGMT 320, MRKT 332, 333 and senior standing

Credits: 3

MRKT 437 - International Marketing

The marketing issues of firms engaged in international business with emphasis on strategies for successful foreign market penetration.

Prerequisites & Notes

MRKT 330

Credits: 3

MRKT 450 - Internship

Supervised placement, work, and research in selected public and private organizations.

Prerequisites & Notes

Application and permission of the instructor

Credits: Up to 12

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.

Prerequisites & Notes

12 credits of major courses, application, permission of the instructor, departmental chairperson and dean of the college where the study will be conducted

Credits: 1 to 3

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.

MRKT 498 - Selected Topic

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

MRKT 590 - Experimental

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

Credits: 3

MRKT 595 - Workshop

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

Credits: 3

MRKT 598 - Workshop

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

Credits: 3

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. ++

Prerequisites & Notes

None. Fills a Liberal Studies requirement as a Human Institutions & Personal Relationships Enrichment Course.

Credits: 3

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

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.

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.

MS 198 - Selected Topic

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

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

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

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 pre-Hellenistic 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

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.

Prerequisites & Notes

Permission of the department chair required to take this course

Credits: 3

MS 280 - Leadership Seminar

This course involves individualized instruction, research and presentation on research in areas required to fill in a student's knowledge base to be able to move into the ROTC advanced course. This course may be taken only once.

Prerequisites & Notes

3.0 QPA in military science studies, permission of the instructor, department chairperson and dean of the college

Credits: 3

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.

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.

MS 298 - Selected Topic

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

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. ++

Prerequisites & Notes

Permission of the department chair required to take this course

Credits: 4

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.++

Prerequisites & Notes

Permission of the department chair required to take this course

Credits: 4

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.

Credits: 3

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.

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.

MS 398 - Selected Topic

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

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. ++

Prerequisites & Notes

Permission of the department chair required to take this course

Credits: 4

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. ++

Prerequisites & Notes

Permission of the department chair required to take this course

Credits: 4

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 & Notes

MS 301, 302, 350 and professor of military science permission

Credits: 3

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.

Prerequisites & Notes

3.000 QPA in military science studies, permission of the instructor, department chairperson and dean of the college where the study will be conducted

Credits: 1 to 3

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.

MS 498 - Selected Topic

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

MUSI 101 - Introduction to Music

A survey course designed to develop the student perception and understanding of changing musical styles and practices in Western culture.

Credits: 3

MUSI 102 - Introduction to 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

MUSI 104 - Introduction to 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

MUSI 105 - Jazz

The stylistic development of jazz and its relevance to society.

Credits: 3

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.

Prerequisites & Notes

Proficiency on a musical instrument or voice

Credits: 3

MUSI 107 - Fundamentals of Music

Understanding and using music notation and terminology.

Credits: 3

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

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 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

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. 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

MUSI 114 - Symphonic Wind Ensemble

A chamber ensemble composed of select musicians chosen by audition, performing contemporary literature as well as transcriptions for winds and percussion. 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.

Prerequisites & Notes

Audition with the director of the Symphonic Wind Ensemble and the instrumental faculty

Credits: 1

MUSI 115 - Concert Choir

Approximately 50 men and women, chosen by audition, to study and perform the great choral literature from the Renaissance to the present. Concerts are presented on campus and on tours. 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

MUSI 116 - Choral Ensemble

A large ensemble chosen by audition to study and perform the great choral literature. Two and one-half 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

MUSI 117 - Chamber Singers

A selected small ensemble of well-blended voices appropriate for the performance of madrigals and other chamber vocal music. 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

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 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

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. Six 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

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. Four and one-half hours of rehearsal per week. 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

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. Two and one-half 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

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 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

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. 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

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

MUSI 125 - Percussion

This small select ensemble of percussionists studies and performs music composed and transcribed for both percussion and mallet ensembles. 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

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 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

MUSI 127 - Orientation to Music Therapy

Orientation to the field of music therapy through lectures, readings, films, and field trips to clinical centers.

Credits: 1

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 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

MUSI 132 - Class Piano II

Continued development of skills begun in Class Piano I (MUSI 131). Music majors only.

Prerequisites & Notes

MUSI 131 or equivalent

Credits: 1

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

MUSI 134 - Class Voice II

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.

Prerequisites & Notes

MUSI 133

Credits: 1

MUSI 135 - Class Strings

A study of the fundamental concepts needed to play and teach beginning string instruments (violin, viola, cello, or string bass). No previous experience required. Instruments are provided by the university.

Credits: 1

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

MUSI 138 - Functional Guitar for Music Therapy II

Continued development of skills begun in Class Guitar I (MUSI 137). Music majors only.

Prerequisites & Notes

MUSI 137 or equivalent

Credits: 1

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.

Prerequisites & Notes

Co-requisite: MUSI 154

Credits: 2

MUSI 154 - Musicianship Skills I

Students will develop aural, rhythmic and keyboard skills, sight-singing, intervals and triad recognition, simple meters, basic harmonic progressions, major and minor keys and scales. Two class meetings each week.

Prerequisites & Notes

Co-requisite: MUSI 151

Credits: 1

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.

Prerequisites & Notes

Audition

Credits: 3

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.

Prerequisites & Notes

Audition

Credits: 3

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.

Prerequisites & Notes

Audition

Credits: 3

MUSI 168 - Applied Performance Woodwinds

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 & Notes

Audition

Credits: 3

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.

Prerequisites & Notes

Audition

Credits: 3

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.

Prerequisites & Notes

Audition

Credits: 3

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

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

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

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

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

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

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.

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.

MUSI 198 - Selected Topic

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

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 & Notes

MUSI 127,137

Credits: 1

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 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 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

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. 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

MUSI 214 - Symphonic Wind Ensemble

A chamber ensemble composed of select musicians chosen by audition, performing contemporary literature as well as transcriptions for winds and percussion. 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.

Prerequisites & Notes

Audition with the director of the Symphonic Wind Ensemble and the instrumental faculty

Credits: 1

MUSI 215 - Concert Choir

Approximately 50 men and women, chosen by audition, to study and perform the great choral literature from the Renaissance to the present. Concerts are presented on campus and on tours. 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

MUSI 216 - Choral Ensemble

A large ensemble chosen by audition to study and perform the great choral literature. Two and one-half 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

MUSI 217 - Chamber Singers

A selected small ensemble of well-blended voices appropriate for the performance of madrigals and other chamber vocal music. 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

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 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

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. Six 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

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. Four and one-half hours of rehearsal per week. 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

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. Two and one-half 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

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 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

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. 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

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

MUSI 225 - Percussion

This small select ensemble of percussionists studies and performs music composed and transcribed for both percussion and mallet ensembles. 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

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 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

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 & Notes

MUSI 127, 137, 138, 199 or concurrent enrollment

Credits: 1

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 & Notes

MUSI 127, 137, 138, 199 or concurrent enrollment

Credits: 0/1

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 & Notes

MUSI 228, 229

Credits: 0/1

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 four credits. Permission of the instructor.

Credits: 1

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.

Prerequisites & Notes

MUSI 132 or equivalent

Credits: 1

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.

Prerequisites & Notes

MUSI 234 or equivalent

Credits: 1

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 & Notes

MUSI 127, 199 and 228

Credits: 2

MUSI 237 - Opera Performance

Performance of scenes, arias, or full operas, taking into consideration the interest and skill of each student. Two to three hours of rehearsal per week; more rehearsal as needed in weeks leading to performance. Each course number may be repeated up to four times.

Prerequisites & Notes

Declared Voice major or permission of the instructor.

Credits: 1

MUSI 245 - Class Brass

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

MUSI 246 - Class Woodwinds

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).

Credits: 1

MUSI 247 - Class Percussion

A study of the fundamental concepts needed to play and teach beginning percussion instruments (pitched and non-pitched).

Credits: 1

MUSI 253 - Music Theory and Analysis II

This course is a continuation of Comprehensive Musicianship 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.

Prerequisites & Notes

MUSI 151 or equivalent; Co-requisite: Should be taken concurrently with MUSI 256

Credits: 2

MUSI 254 - Music Theory and Analysis III

This course is a continuation of the Comprehensive Musicianship 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.

Prerequisites & Notes

MUSI 253 or equivalent; Co-requisite: should be taken concurrently with MUSI 257

Credits: 2

MUSI 255 - Music Theory and Analysis IV

This course is a continuation of the Comprehensive Musicianship 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.

Prerequisites & Notes

MUSI 254 or equivalent; Co-requisite: should be taken concurrently with MUSI 258

Credits: 2

MUSI 256 - Musicianship Skills II

Students will work on more advanced harmonies, cadences, phrases, basic harmonization, triadic patterns, sight-singing skip, compound meters. Two class meetings per week.

Prerequisites & Notes

MUSI 154 or equivalent; Co-requisite: should be taken concurrently with MUSI 253

Credits: 1

MUSI 257 - Musicianship Skills III

Continued study of chromatic harmony and more complex melodic passages, complex meters. Two class meetings per week.

Prerequisites & Notes

MUSI 256 or equivalent; Co-requisite: should be taken concurrently with MUSI 254

Credits: 1

MUSI 258 - Musicianship Skills IV

Study of rhythmic counterpoint and late 19th century and 20th century harmony. Two class meetings per week.

Prerequisites & Notes

MUSI 257 or equivalent; Co-requisite: should be taken concurrently with MUSI 255

Credits: 1

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.

Prerequisites & Notes

Audition

Credits: 3

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.

Prerequisites & Notes

Audition

Credits: 3

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.

Prerequisites & Notes

Audition

Credits: 3

MUSI 268 - Applied Performance Woodwinds

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 & Notes

Audition

Credits: 3

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.

Prerequisites & Notes

Audition

Credits: 3

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.

Prerequisites & Notes

Audition

Credits: 3

MUSI 273 - 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.

Prerequisites & Notes

MUSI 101 or MUSI 151

Credits: 3

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, oratoria, 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

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

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

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

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

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

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

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

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.

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.

MUSI 298 - Selected Topic

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

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, French, German and Italian songs. The course is open to all voice majors.

Prerequisites & Notes

MUSI 133 or 181

Credits: 1

MUSI 300 - Marching Band Field Charting

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.

Prerequisites & Notes

One semester prior experience in the Marching Pride or concurrent enrollment

Credits: 1

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.

Prerequisites & Notes

MUSI 101 or permission of the instructor

Credits: 3

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 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

MUSI 312 - Music Therapy for Children

Application of music therapy techniques and materials in all areas of mental health and special education.

Prerequisites & Notes

MUSI 236 and SPED 100

Credits: 3

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. 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

MUSI 314 - Symphonic Wind Ensemble

A chamber ensemble composed of select musicians chosen by audition, performing contemporary literature as well as transcriptions for winds and percussion. 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.

Prerequisites & Notes

Audition with the director of the Symphonic Wind Ensemble and the instrumental faculty

Credits: 1

MUSI 315 - Concert Choir

Approximately 50 men and women, chosen by audition, to study and perform the great choral literature from the Renaissance to the present. Concerts are presented on campus and on tours. 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

MUSI 316 - Choral Ensemble

A large ensemble chosen by audition to study and perform the great choral literature. Two and one-half 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

MUSI 317 - Chamber Singers

A selected small ensemble of well-blended voices appropriate for the performance of madrigals and other chamber vocal music. 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

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 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

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. Six 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

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. Four and one-half hours of rehearsal per week. 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

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. Two and one-half 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

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 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

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. 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

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

MUSI 325 - Percussion

This small select ensemble of percussionists studies and performs music composed and transcribed for both percussion and mallet ensembles. 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

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 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

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 & Notes

PSYC 100 or 105 and MUSI 236

Credits: 3

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.

Prerequisites & Notes

MUSI 230

Credits: 0/1

MUSI 330 - Clinical Integration

A supervised clinical experience allowing the music therapy student practical experience community health care agencies and educational settings.

Prerequisites & Notes

MUSI 329

Credits: 0/1

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 & Notes

MUSI 133,155 or equivalent

Credits: 1

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.

Prerequisites & Notes

MUSI 151 or equivalent

Credits: 1

MUSI 334 - Secondary School Music

The course is designed to prepare the student to teach junior and senior high school choral and general music, choose appropriate teaching materials, supervise a music program, and become aware of professional organizations, workshops, and conferences. Field Experience Required.

Prerequisites & Notes

MUSI 134, 332

Credits: 2

MUSI 335 - Elementary Music Methods

A music education course designed to prepare the music education major to teach elementary classroom/vocal music in the public schools through the study of musical literature, methodologies and materials appropriate for use with children. Field experience required.

Prerequisites & Notes

MUSI 134

Credits: 2

MUSI 336 - Instrumental Methods

Instrumental methods is a music education course designed to prepare the student for a career in public school instrumental music, including: appropriate literature, repair of instruments, public relations, and rehearsal techniques. Field Experience Required.

Prerequisites & Notes

MUSI 133, 245, 246, 247 and 333

Credits: 2

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.

Prerequisites & Notes

MUSI 135, 245, 246, 247 and 333

Credits: 1

MUSI 338 - Guitar Methods for Music Education

A music education course designed to prepare music education majors to teach guitar in the elementary, junior, and/or high school settings. It will also prepare students with the functional skills to use the guitar as an accompanying instrument.

Prerequisites & Notes

Music Education Majors only

Credits: 1

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.

Prerequisites & Notes

MUSI 255

Credits: 2

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.

Prerequisites & Notes

MUSI 255, 350

Credits: 2

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.

Prerequisites & Notes

Permission of the instructor

Credits: 3

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.

Prerequisites & Notes

MUSI 235 or applied equivalent

Credits: 1

MUSI 361 - Instrumental Improvisation

This course teaches the basic concepts of improvisation, chord notation and chord styles in popular and jazz music styles. Open to all instrumentalists. One class meeting and one laboratory session per week.

Prerequisites & Notes

MUSI 254 or permission of the instructor

Credits: 1

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 & Notes

Audition

Credits: 3

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 & Notes

Audition

Credits: 3

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 & Notes

Audition

Credits: 3

MUSI 368 - Applied Performance Woodwinds

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 & Notes

Audition

Credits: 3

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 & Notes

Audition

Credits: 3

MUSI 370 - 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.

Prerequisites & Notes

Audition

Credits: 3

MUSI 373 - History of Music II

This course examines the music and culture from the period of the Rococo through the 19th century. Lectures, readings, performances and listening sessions develop the student's musical understanding of the period. A reading knowledge of music is essential.

Prerequisites & Notes

MUSI 101 or MUSI 151

Credits: 3

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.

Credits: 1

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.

Credits: 1

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.

Credits: 1

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.

Credits: 1

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.

Credits: 1

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.

Credits: 1

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.

Prerequisites & Notes

MUSI 255

Credits: 1

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.

Prerequisites & Notes

MUSI 255

Credits: 1

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.

Prerequisites & Notes

MUSI 255 or permission of the instructor

Credits: 1

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.

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 & Notes

MUSI 255 or 352

Credits: 1

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.

MUSI 398 - Selected Topic

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

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 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

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. 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

MUSI 414 - Symphonic Wind Ensemble

A chamber ensemble composed of select musicians chosen by audition, performing contemporary literature as well as transcriptions for winds and percussion. 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.

Prerequisites & Notes

Audition with the director of the Symphonic Wind Ensemble and the instrumental faculty

Credits: 1

MUSI 415 - Concert Choir

Approximately 50 men and women, chosen by audition, to study and perform the great choral literature from the Renaissance to the present. Concerts are presented on campus and on tours. 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

MUSI 416 - Choral Ensemble

A large ensemble chosen by audition to study and perform the great choral literature. Two and one-half 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

MUSI 417 - Chamber Singers

A selected small ensemble of well-blended voices appropriate for the performance of madrigals and other chamber vocal music. 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

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 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

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. Six 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

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. Four and one-half hours of rehearsal per week. 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

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. Two and one-half 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

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 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

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. 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

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

MUSI 425 - Percussion

This small select ensemble of percussionists studies and performs music composed and transcribed for both percussion and mallet ensembles. 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

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 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

MUSI 428 - Music Therapy Advanced Topics: Supervision, Ethics, and Issues of Diversity

Seminar and practical experience in clinical supervision, professional ethics, disability studies, race theory, and feminism.

Prerequisites & Notes

MUSI 327, 330

Credits: 3

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.

Prerequisites & Notes

Four semesters of applied major lessons or the equivalent

Credits: 1

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.

Prerequisites & Notes

MUSI 330

Credits: 0/1

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.

Prerequisites & Notes

The student may enroll in this course only when five semesters of music therapy field experience have successfully been completed and with permission of the instructor

Credits: 1

MUSI 437 - Opera Performance

Performance of scenes, arias, or full operas, taking into consideration the interest and skill of each student. Two to three hours of rehearsal per week; more rehearsal as needed in weeks leading to performance. Each course number may be repeated up to four times.

Prerequisites & Notes

Declared Voice major or permission of the instructor.

Credits: 1

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 & Notes

MUSI 312, 432 or permission of the instructor and PSYC 276

Credits: 3

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 & Notes

All coursework must be completed

Credits: Up to 12

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 & Notes

All program coursework must be completed

Credits: 12

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 & Notes

Audition

Credits: 3

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 & Notes

Audition

Credits: 3

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 & Notes

Audition

Credits: 3

MUSI 468 - Applied Performance Woodwinds

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 each be taken two times for a total of 18 credits; MUSI 468 may be taken four times for a total of 12 credits.

Prerequisites & Notes

Audition

Credits: 3

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 & Notes

Audition

Credits: 3

MUSI 470 - 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.

Prerequisites & Notes

Audition

Credits: 3

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.

Prerequisites & Notes

MUSI 101 or MUSI 151

Credits: 3

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.

Credits: 1

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.

Credits: 1

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.

Credits: 1

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.

Credits: 1

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.

Credits: 1

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.

Credits: 1

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.

Prerequisites & Notes

MUSI 255

Credits: 1

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.

Prerequisites & Notes

MUSI 255

Credits: 1

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.

Prerequisites & Notes

MUSI 255 or permission of the instructor

Credits: 1

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.

Prerequisites & Notes

permission of the instructor, departmental chairperson and dean of the college where the study will be conducted

Credits: 1 to 3

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 & Notes

MUSI 255 or 352

Credits: 1

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.

MUSI 498 - Mozart and His Music

This unique course relates Mozart's life and music to the history, culture, and social conditions of the 18th century. There will be a classroom, but in reality, the entire city of Salzburg, where Mozart was born and lived, will be the true classroom. Students will explore not only the "birth house" of Mozart, but the Baroque and Rococo architecture, cathedrals, museums and ballrooms which had such profound influences on the young Wolfgang. The class will hear some of Mozart's music played on the original piano. Discussions will include what music meant in the 18th century and what it is and means today.

Prerequisites & Notes

None. Open to all, and taught in English.

Credits: 3

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

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: 3

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: 3

NURS 198 - Selected Topic

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

Credits: 3

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: 3

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: 3

NURS 298 - Selected Topic

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

Credits: 3

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

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.

Prerequisites & Notes

Admission into the BSN program

Credits: 3

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

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

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

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: 3

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 to 3

NURS 398 - Selected Topic

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

Credits: 3

NURS 408 - Delivery of Nursing Care in a Managed Cared 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.

Prerequisites & Notes

Pre/Co-requisites: NURS 313/314

Credits: 3

NURS 422 - Nursing Research

This course examines in-depth the role of research in the development and refinement of the nursing process and its relationship and contribution to the development of nursing science. The student becomes a more critical consumer of nursing research by developing beginning understanding of the principles associated with each major step of the research process and applying these to a group research exercise. Students conduct a computer-assisted search of the literature as well as to apply the concepts derived from beginning statistics.

Prerequisites & Notes

NURS 313 and senior standing

Credits: 3

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.

Credits: 3

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

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

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 individual's health within various community settings. Topics include the mode of delivery of consumer health information such as Internet-based technology; shared access to individual's 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

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

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.

Prerequisites & Notes

Cumulative and major QPA 2.500 and approval of minor or certificate advisor

Credits: Up to 12

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.

Prerequisites & Notes

Must be a registered nurse enrolled in the criminology minor with a cumulative and major Q.P.A. 2.500. Any exceptions to these prerequisites require the permission of the chairs of the social work, criminology and criminal justice department and the nursing department.

Credits: 6

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: 3

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: 3

NURS 498 - Selected Topics

Elective nursing courses whose purpose is to deepen or broaden the student's perspective on aspects of professional nursing practice. Each course includes an exploration of nursing roles and nursing research related to such topics as: Trends in Nursing Care of Children, Nursing Care of the Older Adult, Nursing and Contemporary Women's Health Issues.

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

Credits: 3

NURS 510 - Cardiovascular Function: Assessment and Treatment

Emphasis is placed upon the pathophysiological changes in coronary artery disease and the major mechanisms used to diagnose, monitor, and treat the alterations. Normal and abnormal EKG interpretation and medical and surgical management are presented. The role of a health team approach is addressed.

Prerequisites & Notes

Human Anatomy and Physiology or permission of the instructor

Credits: 3

NURS 511 - Advanced Healthcare Informatics

This course is designed to provide students with an in-depth analysis of healthcare informatics. Emphasis will be on developing a comprehensive understanding of the use of information systems in health care. Topics covered include health care data, information and knowledge, health care classifications and coding systems, and use of ethical and legal principles with information systems. In this course the focus is on applying computer, information, and health care concepts to real world problems in health care.

Prerequisites & Notes

NURS 311 or permission of the instructor

Credits: 3

NURS 512 - Nursing Process with School Populations

This elective course examines in-depth the role of the nurse with clients in the school setting. The course focuses on the student in relation to the school/family/community environment and explores the nurse's responsibility for enhancing the students' capability for learning in relation to restoration, promotion, and maintenance of health and development. There is an emphasis on enhanced critical thinking skills and assessment and evaluation of advanced clinical case studies. (3 credits theory). Must enroll in NURSS513 concurrently as 3 credit clinical experience.

Credits: 3

NURS 513 - Nursing Process with School Populations

This elective course examines in-depth the role of the nurse with clients in the school setting. The course focuses on the student in relation to the school/family/community environment and explores the nurse's responsibility for enhancing the students' capability for learning in relation to restoration, promotion, and maintenance of health and development. There is an emphasis on enhanced critical thinking skills and assessment and evaluation of advanced clinical case studies. (3 credits clinical). Must enroll in NURSS512 concurrently as 3 credit theory.

Credits: 3

NURS 515 - Management of School Health Services by School Nurses

This elective course enables school nurses to effectively work within the school environment. Content related to leadership strategies, school law, and the legal and professional responsibilities of the school nurse are emphasized.

Prerequisites & Notes

Enrollment in BSN program, school nurse certification program, or permission of the instructor

Credits: 3

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

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 only).

Prerequisites & Notes

American Red Cross Level III swimmer

Credits: 3

PE 110 - Strength/Resistance Training

Designed to provide practical knowledge to effectively design an individualized weight training and/or body building program. Specific emphasis will focus on strength training principles, safety procedures, equipment, and individualized programming. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1

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

PE 121 - Racquetball

This course provides an opportunity to acquire the basic knowledge, etiquette, skill and rules in the game of racquetball. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1

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

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

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

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

PE 152 - Practical Introduction to Teaching Physical Education

This course is an orientation to the art and the science of teaching physical education. Students will learn about the teaching styles and strategies that lead to effective organization and management in physical education classes. Required field experiences give students the opportunity to observe learner characteristics, student behavior, teaching functions, and the teaching effectiveness of professional teachers. This is a Theory and Technique Course (open to Physical Education majors only).

Credits: 3

PE 154 - Volleyball

This course is designed for students to acquire the fundamental skills of volleyball. Techniques, rules, and strategies of the game will be emphasized. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1

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.

Credits: 1

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

PE 182 - Introduction to Rock Climbing

Introduces students to the fundamental skills of rock climbing. Beginning skills in belaying, static climbing, rappelling, prussiking and artificial wall climbing safety considerations will be covered. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1

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

PE 186 - Cross Country Skiing

This course teaches the fundamental knowledge and skills of classical cross country skiing and touring, including waxing and equipment care. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1

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

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

PE 189 - Basic Canoeing

Instruction focuses on the fundamental skills and concepts needed to operate a canoe effectively and safely. Basic skills, such as how to enter and exit a canoe, canoe safety, and tandem paddling techniques, are discussed. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1

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: 3

PE 191 - Foundations of Physical Education

This course is designed to introduce the student majoring in physical education teacher education to the historical, philosophical, cultural and sociological influences that have shaped the profession of teaching physical education. A foundational perspective will be taken to clarify the related disciplines, history, and current issues of physical education and of education, from the ancient cultures to the 21st century. This is a Theory and Technique Course.

Credits: 2

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

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: 3

PE 198 - Selected Topic

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

Credits: 3

PE 202 - Technology for Physical Education Teacher Education

This purpose of this course is to familiarize and enhance physical education major’s technology skills to support instruction in a K-12 setting. The course includes personal computer use in creating materials to enhance instruction and aid in assessment. Also included are other technologies, such as personal digital assistants (PDAs), heart rate monitors and digital cameras/camcorders, in addition to various physical education software and Internet options. A portion of the course will be conducted online using Blackboard. This is a Theory and Technique Course (open to Physical Education majors only).

Credits: 3

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

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

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

PE 241 - Outdoor Pursuits

This course is designed to introduce the student majoring in physical education teacher education to the varied but interrelated topics of outdoor pursuits, adventure programming, experiential education, and new games philosophy as they relate to physical education and recreation programming. The course will provide physical activity, direct experience, and leadership techniques in adventure challenges which require self-discipline, a willingness to try, and personal commitment. A weekend overnight backpacking/camping experience is required. This is a Theory and Technique Course (open to Physical Education majors only).

Credits: 3

PE 242 - Fitness Education

This course is designed to provide practical knowledge and skills to develop, organize, and administer age appropriate health-related fitness education programs for youth and adolescents including muscular strength, endurance, flexibility, body composition and cardiovascular endurance activities. This is a Theory and Technique Course (open to Physical Education majors only).

Prerequisites & Notes

PE 141

Credits: 3

PE 243 - Movement Education

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. 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: 2

PE 246 - Intermediate Swimming

This course provides students with the opportunity to learn elements of good swimming and aquatic skills. Personal and safety skills will also be emphasized. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1

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

PE 262 - Adapted Aquatics

Develop knowledge base in the study of disability through discussion and practical experiences as it relates to aquatic programming.

Prerequisites & Notes

PE 227 or permission of instructor

Credits: 3

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 aquatic-specific first aid and cardiopulmonary resuscitation (CPR) training, Automated External Defibrillation, Oxygen Administration and training in specific water environments. Offered to all students.

Credits: 3

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

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

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.

Prerequisites & Notes

PE 152

Credits: 3

PE 287 - Adapted and Therapeutic Exercise

Practical experiences in assessment of assigned clients with disabilities, program design, and administration of exercise and physical activities performed in an aquatic and/or land-based setting.

Prerequisites & Notes

ERS 264 or permission of the instructor

Credits: 3

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

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: 3

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: 3

PE 298 - Selected Topic

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

Credits: 3

PE 301 - Sports Officiating

This course covers officiating methods and rule interpretations. Opportunities are provided for practical experience in officiating. This is a Theory and Technique Course.

Credits: 1

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.

Prerequisites & Notes

N/A

Credits: 3

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 studied. Emphasis will be placed on planning and applying developmentally appropriate activities for all learners.

Credits: 3

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.

Prerequisites & Notes

Water Safety Instructor Certification

Credits: 2

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: 1

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).

Prerequisites & Notes

PE274 and acceptance to teaching certification

Credits: 3

PE 355 - Assessment Techniques in Adapted Physical Activity

Use of formal and information (authentic) assessments to evaluate individuals with disabilities, toddler through adults, through a multidisciplinary approach in a physical activity setting.

Prerequisites & Notes

PE 227

Credits: 3

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

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

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

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

PE 360 - Anatomical and Physiological Bases of Physical Education

This course is designed to provide the basic anatomical and physiological principles that have direct application to physical activity programming in the K-12 school setting. Weekly laboratory sessions will provide practical application experiences to illustrate the theoretical knowledge base.

Credits: 3

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.

Prerequisites & Notes

Lifeguarding certification

Credits: 3

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.

Prerequisites & Notes

PE 227 or permission of instructor

Credits: 3

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

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).

Prerequisites & Notes

CDEV 248 and admission to teacher certification

Credits: 3

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: 3

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: 3

PE 398 - Selected Topic

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

Credits: 3

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).

Prerequisites & Notes

PE 107 or permission of instructor.

Credits: 3

PE 452 - Field Experience in Elementary PE Methods

This professional methods course will provide the preservice teacher candidate with knowledge and skills to effectively teach physical education in an elementary school for learners of all ability levels by differentiated instructional strategies. This advanced study of developmentally appropriate standards-based planning, teaching and assessing concepts and applications for grades K-6 includes a field experience throughout the semester. The teaching styles applied throughout this course are from Mosston's Spectrum of Teaching Styles, established in PE 61-352 the prior semester.

Prerequisites & Notes

Acceptance into the College of Education; PE152, PE274, and PE352

Credits: 3

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 full-time 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).

Prerequisites & Notes

PE 452 and admission to teacher certification

Credits: 12

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.

Prerequisites & Notes

PE 227, Corequisite of PE 355 or permission of the instructor

Credits: 3

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).

Prerequisites & Notes

PE 352 and admission to teacher certification

Credits: 2

PE 473 - Advanced Study of Disability in Physical Activity

This course is designed to actively engage the learners in discussion and dialogue of new and emerging high-incidence disabilities that are prevalent in the schools, communities, and physical activity facilities. The course will provide students with an understanding and an ability to assess, design, implement, and evaluate individualized programs of physical activity for individuals with emerging disabilities that face the community.

Prerequisites & Notes

PE 227 or permission of the instructor

Credits: 3

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.

Prerequisites & Notes

Permission of the instructor, departmental chairperson, and Dean of the college where the study will be conducted.

Credits: 1 to 3

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: 3

PE 498 - Selected Topics

The in-depth examination of a specific topic. The nature of the topic selected and its treatment determined in consultation with the instructor.

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

Credits: 1 to 3

PE 800 - Thesis

Students pursuing a thesis program should contact their academic advisor concerning research after completing about one-half of their degree coursework. The advisor will assist the student with the necessary steps (such as preliminary selection of a topic and arranging for the appointment of a committee) to proceed.

Credits: 6

PHIL 101 - Introduction to Philosophy

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.

Credits: 3

PHIL 113 - Introduction to Logic

A study of the nature of conceptual thinking, including the role of language, formal and informal fallacies, truth tables, and elementary techniques of modern logical analysis in order to improve the student's skill in reasoning.

Credits: 3

PHIL 123 - Ethics

An introduction to the study of questions concerning right action, moral obligation, and an examination of various theories of moral judgment.

Credits: 3

PHIL 140 - World Religions

An examination of the beliefs and practices of the principle religions of the world, which may include Hinduism, Buddhism, Jainism, Sikhism, Taoism, Shintoism, Confucianism, Zoroastrianism, Islam, Judaism, and Christianity, as well as some of the representative “archaic” religions of the world.

Credits: 3

PHIL 163 - Philosophy in Literature

An examination and discussion of the philosophical content of poetry and prose of outstanding literary and philosophical merit.

Credits: 3

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

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

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: 3

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: 3

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: 3

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.

Prerequisites & Notes

One course in Philosophy or permission of the instructor

Credits: 3

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: 3

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: 3

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: 3

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 & Notes

Logic or Algebra

Credits: 3

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

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.

Prerequisites & Notes

Prefer to have students with background in health care fields, social and behavioral sciences, life sciences, pre-law, pre-med and philosophy

Credits: 3

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.

Prerequisites & Notes

Prefer students with background in business, accounting, management, marketing, finance, economics, communication and pre-law

Credits: 3

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

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.

Prerequisites & Notes

Prefer students with background in communication, history, philosophy, pre-law, government and public affairs and sociology

Credits: 3

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*.

Prerequisites & Notes

One course in Philosophy or permission of the instructor

Credits: 3

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.

Prerequisites & Notes

One course in Philosophy or permission of the instructor

Credits: 3

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.

Prerequisites & Notes

Two college-level courses in Natural Sciences and Mathematics

Credits: 3

PHIL 371 - History of Western Philosophy I

A study of major Western philosophers and philosophical issues from the ancient period and extending into the medieval period, designed to show how basic questions and concepts grew and how the works of these periods continue to provide insight and inspiration.

Prerequisites & Notes

One course in Philosophy or permission of the instructor

Credits: 3

PHIL 372 - History of Western Philosophy II

A study of Western philosophy from the Renaissance through the beginning of the 19th century, tracing the basic concepts and problems of this period and showing how its thinkers continue to stimulate thought.

Prerequisites & Notes

One course in Philosophy or permission of the instructor

Credits: 3

PHIL 373 - Modern Authors and Issues

Variable content within the modern contemporary period of philosophical thinking. Repeatable to 6 credits.

Prerequisites & Notes

One course in Philosophy or permission of the instructor

Credits: 3

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."

Prerequisites & Notes

One course in Philosophy or permission of the instructor

Credits: 3

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.

Prerequisites & Notes

One course in Philosophy or permission of the instructor

Credits: 3

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: 3

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: 3

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: 3

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.

Prerequisites & Notes

15 credits in Philosophy or permission of the instructor, departmental chairperson and dean of the college where the study will be conducted

Credits: 1 to 6

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: 3

PHIL 498 - Selected Topics

The in-depth examination of a specific topic. The nature of the topic selected and its treatment determined in consultation with the instructor.

A **Selected Topics** course is a normal, departmental offering which is directly 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 & Notes

One course in Philosophy or permission of the instructor

Credits: 3 to 6

PHYS 101 - Concepts of Science I/ Lab

A descriptive and conceptual course in physics designed for the non-science 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

PHYS 102 - Concepts of Science II

A descriptive and conceptual course in physics designed for the non-science 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 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

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.

Prerequisites & Notes

PHYS 140

Credits: 1

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: 3

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: 3

PHYS 198 - Selected Topic

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

Credits: 3

PHYS 201 - Elements of Physics I/ 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. Includes a lab.

Credits: 4

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. Includes a lab.

Prerequisites & Notes

PHYS 201

Credits: 4

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/ Lab

Introduction to physics using calculus and including extensive problem solving. Topics include mechanics statics, kinematics, kinetics, work-energy, rotational motion, and impulse-momentum. Includes a lab.

Prerequisites & Notes

Co-requisite: MATH 225

Credits: 4

PHYS 212 - General Physics II/ 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 & Notes

Pre/Co-requisites: MATH 230 and PHYS 211

Credits: 4

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. Includes a lab. Offered spring term only.

Prerequisites & Notes

PHYS 211

Credits: 3

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

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: 3

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: 3

PHYS 298 - Selected Topic

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

Credits: 3

PHYS 301 - Physical Chemistry I

Thermodynamics and chemical kinetics. Cross listed as CHEM301.

Prerequisites & Notes

CHEM 108, 112, PHYS 212 or 213 and MATH 230

Credits: 3

PHYS 314 - Engineering Mechanics I: Statics

Includes the application of equilibrium conditions to structures, trusses, frames and machines, and beams with concentrated and distributed loads.

Prerequisites & Notes

PHYS 212; Co-requisite: MATH 240

Credits: 3

PHYS 315 - Engineering Mechanics II: 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 & Notes

PHYS 314, MATH 301, or consent of the instructor

Credits: 3

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.

Prerequisites & Notes

Advanced standing, completion of one course in Natural Science and Mathematics and two years of high school Algebra or its equivalent

Credits: 3

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 Kirchoff'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.

Prerequisites & Notes

PHYS 212 or permission of the instructor

Credits: 3

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 & Notes

PHYS 211 and MATH 240; Co-requisite: MATH 231

Credits: 3

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 & Notes

PHYS 212, 213

Credits: 3

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 & Notes

PHYS 211, 212, 213 and junior standing

Credits: 2

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 & Notes

PHYS, 211, 212, 213 or 201 and 202, a course in calculus and junior standing or permission of the instructor

Credits: 2

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 & Notes

PHYS 213, MATH 240, CpSc 140, or consent of the instructor.

Credits: 3

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: 3

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: 3

PHYS 398 - Selected Topic

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

Credits: 3

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 & Notes

PHYS 212, 331

Credits: 3

PHYS 411 - Modern Physics

An introductory survey into modern physics. Major topic areas include: relativity theory, old quantum theory, new quantum theory, solid state theory, nuclear physics, and particle physics.

Prerequisites & Notes

PHYS 212, 213; Co-requisites: MATH 240 and PHYS 331

Credits: 4

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, photoresists, developers, metal dielectrics and toxic, flammable, corrosive and high purity gases as well as packaging materials.

Prerequisites & Notes

Acceptance into the NMT Capstone Semester at Penn State

Credits: 3

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.

Prerequisites & Notes

Acceptance into the NMT Capstone Semester at Penn State

Credits: 3

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.

Prerequisites & Notes

Acceptance into the NMT Capstone Semester at Penn State

Credits: 3

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.

Prerequisites & Notes

Acceptance into the NMT Capstone Semester at Penn State

Credits: 3

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.

Prerequisites & Notes

Acceptance into the NMT Capstone Semester at Penn State

Credits: 3

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.

Prerequisites & Notes

Acceptance into the NMT Capstone Semester at Penn State

Credits: 3

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 & Notes

PHYS 331, 411 and MATH 240; Co-requisite: MATH 301

Credits: 3

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.

Prerequisites & Notes

permission of the instructor, departmental chairperson and dean of the college where the study will be conducted

Credits: 1 to 3

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: 3

PHYS 498 - Selected Topics

The in-depth examination of a specific topic. The nature of the topic selected and its treatment determined in consultation with the instructor.

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

Credits: 1 to 3

PHYS 590 - Experimental

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

Credits: 3

PHYS 595 - Workshop

Varies.

Credits: 3

PHYS 598 - Selected Topic

Varies.

Credits: 3

PHYS 700 - Independent Study

Varies.

Credits: 3

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

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

POLS 105 - Introduction to Political Theory

An introduction to classical and modern theories of politics, governments, and ideologies.

Credits: 3

POLS 190 - Experimental

A one-time experimental course offering.

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

Credits: 0

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: Variable

POLS 198 - Selected Topics

The in-depth examination of a specific topic to be determined by the department in consultation with the instructor.

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

Credits: 0

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

POLS 202 - Politics of Law Enforcement

The study of the courts, police, offenders, and the community in terms of the criminal justice system.

Credits: 3

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.

Prerequisites & Notes

Sophomore class standing

Credits: 3

POLS 224 - Civil Liberties

An examination of the development, nature and content of civil liberties in the United States.

Credits: 3

POLS 255 - Introduction to Public Policy

The study and evaluation of the formulation, enactment, and implementation of public policies.

Credits: 3

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

POLS 290 - Experimental

A one time experimental course offering.

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

Credits: 0

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: Variable

POLS 298 - Selected Topics

The in-depth examination of a specific topic to be determined by the department in consultation with the instructor.

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

Credits: 0

POLS 310 - Research Methods

An examination of the foundations of systematic research, techniques of data collection and methods of data analysis.

Credits: 3

POLS 321 - The Presidency

The study and evaluation of executive leadership in modern governments; the roles, functions and types of presidential leaders.

Credits: 3

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.

Prerequisites & Notes

Sophomore class standing

Credits: 3

POLS 323 - The Courts

The examination of judicial structures, functions and organizations; emphasis on judicial decision-making and policies.

Credits: 3

POLS 325 - The Congress

The study of legislative structures, functions and organizations; focus on legislative elections, committees, and decision-making.

Credits: 3

POLS 327 - Public Opinion and Political Attitudes

An examination of the nature, origins, and structures of political attitudes.

Prerequisites & Notes

3 credits of Political Science or permission of the instructor

Credits: 3

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

POLS 330 - Managing Community Resources

This course introduces students to the techniques, practices and processes of human resources and budgeting and financial management for state and local governments and non-profit community organizations.

Prerequisites & Notes

Prerequisite: POLS 151

Credits: 3

POLS 331 - Seminar in Japanese Politics

This course explores Japan's recent political history, and examines the ways that leaders and citizens interact through political institutions. We will assess policy making, political leadership, political culture, reform, social change, and Japan's foreign relations.

Prerequisites & Notes

Sophomore class standing

Credits: 3

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

POLS 340 - The Historical and Political Legacies of the Vietnam Era

Examines the roots, nature, and course of the war in Vietnam and the accompanying cultural and political developments in the U.S. with a particular concern for how the war influences our contemporary social and political context. Cross-listed as HIST 340.

Credits: 3

POLS 341 - Classical Political Thought

The examination and evaluation of political theorists to approximately the year 1500; Plato, Aristotle, Augustine, Aquinas and others.

Credits: 3

POLS 343 - Modern Political Thought

The examination and evaluation of political theories from the year 1500 to approximately 1850: Machiavelli, Hobbes, Locke, Rousseau, and others.

Credits: 3

POLS 345 - Contemporary Political Thought

The study of contemporary political theory from Marx and Mill to the present period. The course will cover such theorists as Lenin, Marcuse, Freud, Arendt, Habermas, Niebuhr, and others.

Credits: 3

POLS 348 - The Holocaust: Genocide and Political Violence

An examination of the Holocaust as the model case of genocide in the modern world. The course will examine the comparability of the Holocaust to other incidences of genocide and its applicability to contemporary political concerns.

Credits: 3

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

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

POLS 359 - Policy Analysis and Evaluation

An examination of the theoretical and practical issues associated with the application of analytic and evaluative techniques to selected public policy problems and programs.

Credits: 3

POLS 360 - Parties and Elections

An examination of the structures and functions of political parties in our electoral system.

Credits: 3

POLS 365 - International Political Economy

The in-depth analysis of the political relationships among nation-states.

Prerequisites & Notes

Sophomore class standing

Credits: 3

POLS 366 - Seminar in Chinese Politics

This course examines China's recent political history, the structures and functions of its political system, current political, social and economic developments in China, and assessments of China's place in the changing global order.

Credits: 3

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.

Prerequisites & Notes

Sophomore class standing

Credits: 3

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.

Prerequisites & Notes

Sophomore class standing

Credits: 3

POLS 371 - Politics in Asia

This course examines the diverse people, politics, development strategies and national security dynamics of Asian countries.

Prerequisites & Notes

Sophomore class standing

Credits: 3

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

POLS 383 - Challenges of the American Experience I (to 1865)

An interdisciplinary course including American literature, history, philosophy, and politics examining the roots of American institutions, values and cultures and their significance for the challenges confronting contemporary society.

Credits: 3

POLS 384 - Challenges of the American Experience II (1865 to the Present)

An interdisciplinary course including American literature, history, philosophy, and politics examining the roots of American institutions, values and cultures and their significance for the challenges confronting contemporary society.

Credits: 3

POLS 390 - Experimental

A one time experimental course offering.

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

Credits: 0

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: Variable

POLS 398 - Selected Topics

The in-depth examination of a specific topic to be determined by the department in consultation with the instructor.

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

Credits: 0

POLS 403 - Constitutional Law

The case study and analysis of the development and growth of constitutions through judicial interpretation.

Credits: 3

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.

Prerequisites & Notes

Students must have completed POLS 310- Research Methods

Credits: 3

POLS 450 - Internship

Varies

Credits: 12

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.

Prerequisites & Notes

Selection by competitive process

Credits: 12

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.

Prerequisites & Notes

Selection for the Harrisburg Internship Program

Credits: 3

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.

Prerequisites & Notes

Selection as intern in the Harrisburg Internship Program

Credits: 3

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 to 3

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: Variable

POLS 498 - Selected Topics

The in-depth examination of a specific topic to be determined by the department in consultation with the instructor. A **Selected Topics** course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 0

PREE 110 - Foundations of Parks and Recreation

The historical and philosophical background of the leisure movement, recreation organizations and professional development.

Credits: 3

PREE 120 - Inclusive Leisure Services

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

PREE 170 - Fundamentals of Park and Resource Management

The use of outdoor resources for recreation, the roles of the public and private sectors in outdoor recreation, and outdoor recreation planning.

Credits: 3

PREE 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: 3

PREE 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.

Prerequisites & Notes

Varies

Credits: 3

PREE 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.

Prerequisites & Notes

Varies

Credits: 3

PREE 207 - Computer Aided Planning and Management

Computer applications in planning and management of parks and recreation facilities and personnel.

Credits: 3

PREE 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

PREE 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

PREE 213 - Environmental Resource Analysis

A study of the principles and techniques of environmental resource analysis, landscape and scenery classification and procedures for environmental quality and impact analyses.

Prerequisites & Notes

PREE 170

Credits: 3

PREE 215 - Park and Recreation Public Relations

The theory, principles and practices of public relations of value to parks and recreation personnel including oral, written and graphic presentations useful in public relations and interpretive efforts.

Prerequisites & Notes

PREE 110

Credits: 3

PREE 220 - Therapeutic Recreation Services

Introduces students to the general field of therapeutic recreation and provides an introduction to various disabilities and how the TR process applies.

Prerequisites & Notes

PREE 120

Credits: 3

PREE 230 - Recreation Leadership/Facilitation

The theory, principles and practices of recreation leadership including planning, organizing, activity values, evaluation, sequencing activities, processing experiences, and facilitating of groups.

Prerequisites & Notes

PREE 110

Credits: 3

PREE 232 - Therapeutic Recreation for People with Physical Disabilities

This course will provide information on various physical disabilities and the potential application of TR services with individuals with physical disabilities. The incidence, prevalence, etiology and treatment for each disability will be presented along with implications for TR practice.

Prerequisites & Notes

PREE 120

Credits: 3

PREE 233 - Therapeutic Recreation for People with Mental Health and Psychosocial 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 TR practice.

Prerequisites & Notes

PREE 120

Credits: 3

PREE 234 - Leisure Services Programming

This course focuses on recreation program planning, implementation, and evaluation.

Prerequisites & Notes

PREE 110

Credits: 3

PREE 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

PREE 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: 3

PREE 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: 3

PREE 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: 3

PREE 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

PREE 311 - Principles of Commercial Recreation/Tourism

A study of the various forms of commercial recreation, business and facilities providing recreational opportunities.

Credits: 3

PREE 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

PREE 313 - Recreation Area Design

A study of the fundamentals of site planning for recreation areas and facilities.

Prerequisites & Notes

A basic planning and design course or permission of the instructor

Credits: 3

PREE 314 - Clinical Aspects of Therapeutic Recreation

This course provides a more in-depth look at TR including professional standards of practice, health care accreditation, documentation methods, application of activity analysis in treatment planning.

Prerequisites & Notes

PREE 220

Credits: 3

PREE 316 - Management of Leisure Services and Commercial Facilities

A study of the design, operation and maintenance of selected park and recreation facilities.

Credits: 3

PREE 318 - Park and Recreation Administration

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

PREE 319 - Client Assessment in Therapeutic Recreation

Course designed to familiarize the student with the overall concept of assessment within the field of therapeutic recreation. Interviewing skills, analyzing assessment procedures, source and processes will be studied. The relationship between assessment as a component of treatment program planning will be explored.

Prerequisites & Notes

PREE 220, 229

Credits: 3

PREE 320 - Therapeutic Recreation Program Design

This course focuses on techniques of therapeutic recreational program planning interventions and leadership strategies to meet the needs of persons with disabilities and disorders.

Prerequisites & Notes

PREE 220, 229 and 319 or permission of the instructor

Credits: 3

PREE 341 - Challenges to a Sustainable Future

This course explores the broad concept of "sustainability." We will explore our own thinking on sustainability, mainstream opinions, as well as some alternative voices. The many facets of sustainability are recognized, and certain aspects are selected for more in-depth analysis.

Credits: 3

PREE 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

PREE 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

PREE 348 - Natural History of Ecosystems I

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 then applied to relevant ecological problems and management objectives for the purpose of environmental decision making.

Prerequisites & Notes

PREE 160 or 170

Credits: 3

PREE 349 - Natural History of Ecosystems II

This course provides basic natural history information and skills for environmental education and interpretative programming/fundamentals of birding, plant and animal identification, as well as sky and landscape interpretation are among the topics covered. Field collection, specimen preservation, and state and federal laws regulating field studies

and possession of flora and fauna will be discussed.

Prerequisites & Notes

PREE 348

Credits: 3

PREE 351 - Practicum

Observation and participation in parks and recreation or environmental education activities. Cross listed as PREE352.

Prerequisites & Notes

Permission of the instructor

Credits: 3

PREE 352 - Practicum

Observation and participation in parks and recreation or environmental education activities. Cross listed as PREE351.

Prerequisites & Notes

Permission of the instructor

Credits: 3

PREE 361 - Environmental Teaching

This course is a study of educational methodology using a total environmental perspective. Field trips required.

Credits: 3

PREE 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

PREE 372 - Visitor Services Management

A study of visitor services including information, safety, rescue and law enforcement services.

Credits: 3

PREE 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

PREE 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

PREE 378 - Parks, Wildlife and Wildlife Management

Course will cover basic concepts related to wildlife management and wild land management practices for terrestrial and aquatic systems. Fire management as it relates to wildlife and wild lands will also be examined.

Credits: 3

PREE 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: 3

PREE 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: 3

PREE 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: 3

PREE 412 - Open Space Planning

Fundamentals of open space planning including feasibility studies, resource analysis, site analysis and planning and design fundamentals. Field trips required.

Credits: 3

PREE 413 - Site and Building Feasibility Studies

This course is designed to develop a comprehensive feasibility study for selected land-based sustainable enterprises. The course will include an on-site inventory and analysis, market evaluation, preliminary planning and cost-return analysis. Three project tracks recreation resource management, community development and sustainable agriculture.

Credits: 3

PREE 415 - Issues in Parks and Recreation

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

PREE 416 - Group Recreation Programming

This course examines the planning, organization, pricing, and evaluation of recreation programs, activities, and special events at various four season resorts, state and national parks, 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

PREE 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

PREE 420 - Recreation and the Aging Process

The course will provide an overview of the aging process as it relates to therapeutic recreation service provision and leisure participation. It will focus on developmental issues, including psychosocial, biological and economic issues in later life. The course addresses these issues as they occur across the lifespan, from mid-adulthood to senescence.

Prerequisites & Notes

PREE 220 or permission of the instructor

Credits: 3

PREE 422 - Leisure Education Strategies

An investigation of the historical, philosophical, psychological and educational foundations of leisure education. The functions of leisure counseling, including a variety of instruments and techniques appropriate for a variety of publics, is examined.

Prerequisites & Notes

PREE 220, 229, 319 and 320

Credits: 3

PREE 423 - Therapeutic Recreation Interventions

This course will offer an overview of several different Therapeutic Recreation interventions and techniques, including leisure education strategies. The primary focus of this course will be on the application and implementation of therapeutic recreation interventions.

Prerequisites & Notes

PREE 220, 229, 232, 233, 320 and 319 or permission of the instructor

Credits: 3

PREE 436 - Event Planning & Tournament Structure

A study of the organization, administration and supervision of special events, business/organization meetings, conferences, and tournaments held in hotels, resorts, athletic clubs, and communities.

Credits: 3

PREE 450 - Internship

A supervised off-campus work experience in an appropriate aspect of parks and recreation or environmental education work. Open only to PREE majors with advanced standing.

Credits: 12

PREE 455 - Student Teaching - Environmental 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: 12, 6, 3

PREE 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

PREE 472 - Park Law Enforcement

This course provides basic law enforcement skills essential for the park law enforcement ranger.

Credits: 3

PREE 475 - Park and Resource Management

The principles and practices of recreational land and water management. Field trips required.

Prerequisites & Notes

PREE 170

Credits: 3

PREE 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.

Prerequisites & Notes

Permission of the instructor, departmental chairperson and dean of the college where the study will be conducted

Credits: 1 to 3

PREE 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: 3

PREE 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: 3

PROF 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

PROF 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

PROF 103 - Contemporary Social Problems

An analysis of major social problems confronting modern society.

Credits: 3

PROF 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

PROF 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. Also listed as SASW 106

Credits: 3

PROF 120 - Civic Engagement and Community Decision-Making

An introduction to the policy making process at the community level and the role each citizen plays in the formation and modification of those policies. Students will gain introductory skills in policy analysis, street level politics, and community organizing for social change.

Credits: 3

PROF 130 - Dynamics of Global Commerce

Exploration of the challenges involved in international business including discussion of cultural, political, social, and economic aspects of doing business abroad. Theories of international business management and international trade.

Credits: 3

PROF 190 - Experimental

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

Credits: 3

PROF 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: 3

PROF 198 - Selected Topic

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

Credits: 3

PROF 201 - Principles of Sociology

Basic concepts of social behavior, group structure and group processes.

Credits: 3

PROF 202 - Introduction to Anthropology

Human beings as cultural and biological entities. Emphasis is on primitive and peasant societies.

Credits: 3

PROF 205 - Accounting 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

PROF 211 - Physical 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

PROF 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

PROF 220 - Introduction to Nonprofit Leadership

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

PROF 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

PROF 250 - Introduction to Institutions and Leadership

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

PROF 290 - Experimental

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

Credits: 3

PROF 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: 3

PROF 298 - Selected Topic

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

Credits: 3

PROF 304 - Urban Sociology

Sociological aspects of urban life. Includes metropolitan areas and small cities.

Prerequisites & Notes

PROF 201 or 202

Credits: 3

PROF 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.

Prerequisites & Notes

PROF 201 or 202 or permission of the instructor

Credits: 3

PROF 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.

Prerequisites & Notes

PROF 201 or 202

Credits: 3

PROF 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.

Prerequisites & Notes

PROF 202 or permission of the instructor

Credits: 3

PROF 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.

Prerequisites & Notes

PROF 201 or 202

Credits: 3

PROF 318 - Research Methods

Major methods and procedures used in sociological research. Also listed as SASW 318

Prerequisites & Notes

PROF 317

Credits: 3

PROF 319 - Anthropology Methods

Data gathering techniques and evaluation of anthropological phenomena from tribal, peasant and industrial societies.

Prerequisites & Notes

PROF 202 and PROF 317 or permission of the instructor

Credits: 3

PROF 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

PROF 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.

Prerequisites & Notes

PROF 201 or 202

Credits: 3

PROF 322 - Aztecs, Incas and Maya

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

PROF 323 - Deviant Behavior

The subject and nature of deviance with particular emphasis on its relativity and its relationship to social control and social change.

Prerequisites & Notes

PROF 201 or 202

Credits: 3

PROF 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.

Prerequisites & Notes

PROF 201 or 202

Credits: 3

PROF 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

PROF 326 - Society, Culture and Self

An examination of the relationship between personal characteristics and social environment.

Prerequisites & Notes

PROF 201 or 202

Credits: 3

PROF 327 - Religion and Society

Explores the relationship between religion and society and some of the key issues confronting religion today.

Prerequisites & Notes

None

Credits: 3

PROF 330 - Collective Behavior

An analysis of social movements, publics, crowds, mobs and similar social phenomena.

Prerequisites & Notes

PROF 201 or 202

Credits: 3

PROF 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.

Prerequisites & Notes

PROF 201 or 202

Credits: 3

PROF 340 - Social Inequality

Examination of the theoretical and practical implications of economic disparity across diverse populations: class, race, ethnicity and gender.

Prerequisites & Notes

PROF 201 or 202

Credits: 3

PROF 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.

Prerequisites & Notes

PROF 201 or 202 or GERO 265

Credits: 3

PROF 348 - Sociology of Organizations

Approaches to the study of the structure and functions of large-scale social organizations.

Prerequisites & Notes

PROF 201 or 202

Credits: 3

PROF 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

PROF 352 - Law and 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 the importance of diversity in order to provide maximum growth for society and all individuals.

Credits: 3

PROF 353 - Legal Relationships in the 21st Century

This course will provide the student with a legal foundation for their private lives. It will provide them with a general knowledge base of what one's legal right and obligations are in various relationships in society. It will further challenge them to analyze both the law and ethics surrounding normal everyday transactions and personal life issues. Coverage will include legal relationships with spouses/domestic partners, sellers of houses, landlords, creditors, investment advisors/brokers, nonprofits, sellers of products either face-to-face or on the Internet and other legal relationships. This course will prepare the student to identify legal issues and analyze alternatives to solve them.

Credits: 3

PROF 360 - 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.

Prerequisites & Notes

Junior or Senior standing.

Credits: 3

PROF 390 - Experiment

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

Credits: 3

PROF 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: 3

PROF 398 - Selected Topic

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

Credits: 3

PROF 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.

Prerequisites & Notes

PROF 202 and 319 or permission of the instructor

Credits: 3

PROF 412 - Basic Sociological Theory

Historical and modern development of basic concepts of sociology and cultural anthropology.

Prerequisites & Notes

PROF 201 or 202, 318 or 319, or permission of the instructor

Credits: 3

PROF 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.

Prerequisites & Notes

Junior/Senior Standing

Credits: 3

PROF 442 - Healthcare Law

This course will provide students with an appreciation of the role law plays in the regulation and operation of the access to, and the quality and financing of healthcare. It addresses how healthcare law evolves to accommodate societal needs and concerns of diverse groups. This course will explore the structure of the healthcare system, and the economic and legal implications of healthcare which is important to all students as consumers of healthcare. Therefore, this course is open to all majors. Topics include: an overview of the legal system, civil, and criminal aspects of healthcare, patient rights, fraud and abuse, antitrust, information management, informed consent, current healthcare law developments and ethical considerations.

Credits: 3

PROF 450 - Internship

Supervised placement in selected professional agencies.

Prerequisites & Notes

For Professional Studies: permission of the instructor.

Credits: Up to 12

PROF 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 & Notes

Permission of the instructor

Credits: 3

PROF 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: 3

PROF 498 - Selected Topics

The in-depth examination of a specific topic. The nature of the topic selected and its treatment determined in consultation with the instructor. Also listed as SASW 498

A **Selected Topics** course is a normal, departmental offering which is directly 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 & Notes

Introductory course in the student's major, e.g. PROF 201, 202

Credits: 1 to 3

PSYC 105 - Introduction to Psychology

Psychology as a natural science covering the goals and principles of a science of behavior.

Credits: 3

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: 3

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: 3

PSYC 198 - Selected Topic

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

Credits: 3

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.

Prerequisites & Notes

A grade of C or higher in PSYC 105

Credits: 3

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.

Prerequisites & Notes

A grade of C or higher in PSYC 105

Credits: 3

PSYC 221 - Introduction to Behavioral Statistics

Introduction to descriptive and inferential statistics used in evaluation and reporting of behavioral research.

Prerequisites & Notes

A grade of C or higher in PSYC 105

Credits: 3

PSYC 233 - Sensation & Perception

Basic anatomy, physiology and role of sensory systems in perception and sensation.

Prerequisites & Notes

A grade of C or higher in PSYC 105

Credits: 3

PSYC 240 - Human Sexual Behavior

Examines personal sociocultural factors in sexual functioning. Motivational, developmental, personality and clinical implications are explored.

Prerequisites & Notes

A grade of C or higher in PSYC 105

Credits: 3

PSYC 276 - Introduction to Abnormal Psychology

Introduction to the field of abnormal behavior, including DSM classification and examination of major categories of mental disorders.

Prerequisites & Notes

A grade of C or higher in PSYC 105

Credits: 3

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: 3

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: 3

PSYC 298 - Selected Topic

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

Credits: 3

PSYC 300 - Psychology of Gender

A survey of the psychological aspects of gender. 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.

Prerequisites & Notes

A grade of C or higher in PSYC 105 or any Women's Studies course, or permission from the instructor.

Credits: 3

PSYC 302 - Psychology of Criminal Behavior

The study of how individual criminal behavior is acquired, evoked, maintained and modified.

Prerequisites & Notes

A grade of C or higher in PSYC 105

Credits: 3

PSYC 303 - Learning

Classical and instrumental conditioning, verbal learning, problem solving, habit formation and retention.

Prerequisites & Notes

A grade of C or higher in PSYC 105, PSYC 221, and PSYC 325/326

Credits: 3

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 & Notes

PSYC 208, PSYC 276, and a grade of C or higher in PSYC 105.

Credits: 3

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 & Notes

A grade of C or higher in PSYC 105 and PSYC 221

Credits: 3

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.

Prerequisites & Notes

A grade of C or higher in PSYC 105

Credits: 3

PSYC 311 - Introduction to Behavioral Neuroscience

How physiological processes and nervous system activity mediate all normal and abnormal behavior. In addition to basic neuroanatomy and psychopharmacology, topics covered may include sensory systems, genetics, evolution, development, motivation, motor systems, sexual behavior, states of consciousness, learning and memory, language, emotion, and neurological and psychological disorders.

Prerequisites & Notes

A grade of C or higher in PSYC 105, PSYC 221, and PSYC 325/326.

Credits: 3

PSYC 315 - Psychology of Lesbian and Gay Identities

Overview of psychological perspectives and current research concerning lesbian, gay, and bisexual identities.

Prerequisites & Notes

A grade of C or higher in PSYC 105, or any Women's Studies course, or permission of the instructor

Credits: 3

PSYC 318 - Clinical Child Psychology

An overview of clinical practice with children. Includes theories of normal and abnormal child development, and an overview of assessment and intervention methods relevant to children.

Prerequisites & Notes

Grade of C or higher in PSY105, plus PSYC208, 276, 344

Credits: 3

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 & Notes

A grade of C or higher in PSYC 105 and PSYC 325/326, plus PSYC 276

Credits: 3

PSYC 321 - Drugs and Behavior

Psychoactive drugs and their action on the human nervous system; legal and sociocultural aspects of drug abuse.

Prerequisites & Notes

A grade of C or higher in PSYC 105

Credits: 3

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 & Notes

A grade of C or higher in PSYC 105 and PSYC 221; Co-requisite: PSYC 326.

Credits: 3

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 & Notes

Prerequisite: A grade of C or higher in PSYC 105 and PSYC 221; Co-requisite: PSYC 325

Credits: 1

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.

Prerequisites & Notes

A grade of C or higher in PSYC105, PSYC221, and PSYC325/326, or permission of the instructor

Credits: 3

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.

Prerequisites & Notes

A grade of C or higher in PSYC 105, PSYC 221, and PSYC 325/326

Credits: 3

PSYC 344 - Developmental Psychology

Human development from conception to senescence with emphasis on the theoretical and practical implications.

Prerequisites & Notes

A grade of C or higher in PSYC 105

Credits: 3

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.

Prerequisites & Notes

A grade of C or higher in PSYC 105; Jr/Sr Standing

Credits: 3

PSYC 364 - Child and Adolescent Development

Intensive study of the biosocial, cognitive, and psychosocial aspects of development of children and adolescents.

Prerequisites & Notes

A grade of C or higher in PSYC 105 and PSYC 325/326, plus PSYC 344

Credits: 3

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 & Notes

A grade of C or higher in PSYC 105 and PSYC 325/326, plus PSYC 344

Credits: 3

PSYC 375 - Psychopathology

Advanced study of mental disorders, including symptoms, phenomenological aspects, diagnosis, and treatment. Students will examine psychological disorders in depth and begin to understand what people with the disorders experience. Psychological theory and research findings will guide the student in gaining an understanding of mental illness.

Prerequisites & Notes

Psychology majors only. A grade of C or higher in PSYC 105, 221, and 325/326, plus PSYC 208 and 276.

Credits: 3

PSYC 377 - Social Psychology

The psychological implications of our social existence; a study of the social forces affecting human behavior.

Prerequisites & Notes

A grade of C or higher in PSYC 105

Credits: 3

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: 3

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 & Notes

Grade of C or higher in PSYC 105, 221, and 325/326, plus PSYC377

Credits: 3

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: 3

PSYC 398 - Selected Topic

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

Credits: 3

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. Course grading: Pass/No Credit

Prerequisites & Notes

Declared major, Jr/Sr standing, minimum 2.5 QPA in major, 2.0 QPA overall; a grade of C or higher in PSYC 105, PSYC 221 and PSYC 325/326; at least 5 core electives, written application and departmental permission.

Credits: 3

PSYC 421 - Advanced Behavioral Statistics

Intermediate forms of statistical analysis of behavioral research, their rationale, and computer applications are introduced.

Prerequisites & Notes

A grade of C or higher in PSYC 105, PSYC 221, and PSYC 325/326

Credits: 3

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. Course grading: Pass/No Credit

Prerequisites & Notes

Declared major, Jr/Sr standing, minimum overall and Psych QPA of 3.0, a grade of C or higher in PSYC 105, PSYC 221 and 325/326; at least 5 core electives, written application and departmental permission.

Credits: 3

PSYC 449 - Seminar in Psychology

Advanced topics will be announced in the schedule.

Prerequisites & Notes

9 credits of Psychology or permission of the instructor

Credits: 3

PSYC 450 - Psychology Internship

Supervised placement in selected public and private agencies at appropriate institutions. Regular meetings with the internship supervisor, along with requirements to complete an APA style paper and an oral presentation, assist the student with integrating the intensive experience in applied psychology. Course grading: Pass/No Credit.

Prerequisites & Notes

Prerequisites: Declared major, Jr/Sr standing, minimum overall and Psych QPA of 3.0, a grade of C or higher in PSYC 105, PSYC 221 and PSYC 325/326, at least 5 core electives, written application and departmental permission.

Credits: Up to 12

PSYC 475 - Behavior Modification

Application of learning and other psychological principles in behavior therapy.

Prerequisites & Notes

A grade of C or higher in PSYC 105, plus PSYC 303, or permission of the instructor

Credits: 3

PSYC 480 - Behavior Management

Principles, methods and ethics of behavior management in community, industrial and/or congregate facilities.

Prerequisites & Notes

A grade of C or higher in PSYC 105, plus PSYC 303

Credits: 3

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.

Prerequisites & Notes

Permission of the instructor, departmental chairperson and dean of the college where the study will be conducted

Credits: 1 to 3

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: 3

PSYC 498 - Selected Topic

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

Credits: 3

PSYC 590 - Experimental

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

Credits: 3

PSYC 595 - Workshop

Varies.

Credits: 3

PSYC 598 - Selected Topic

Varies.

Credits: 3

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

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.

Prerequisites & Notes

RUSS 101 or the equivalent

Credits: 3

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.

Prerequisites & Notes

RUSS 102 or equivalent

Credits: 3

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: 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: 3

RUSS 198 - Selected Topic

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

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.

Prerequisites & Notes

RUSS 103

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.

Prerequisites & Notes

ENGL 103 or equivalent

Credits: 1 to 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: 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: 3

RUSS 298 - Selected Topic

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

Credits: 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.

Prerequisites & Notes

RUSS202 or equivalent

Credits: 3

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.

Prerequisites & Notes

RUSS301

Credits: 3

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

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

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: 3

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: 3

RUSS 398 - Selected Topic

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

Credits: 3

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.

Prerequisites & Notes

Permission of the instructor, departmental chairperson and dean of the college where the study will be conducted

Credits: 1 to 3

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: 3

RUSS 498 - Selected Topic

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

Credits: 3

SAFE 118 - Introduction to Safety

Examines basic safety practices, incident causal factors, and preventative measures.

Credits: 3

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

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.

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.

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

SAFE 218 - Hazard Analysis and Legislative Compliance

Examines workplace hazards as they relate to the Occupational Safety and Health Act and promulgated standards (Labor and Construction).

Credits: 3

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.

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 Topic

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

SAFE 318 - Principles of Industrial Hygiene

Concentrates upon the recognition, evaluation and control of employee-related workplace health hazards. Course includes an instrumentation component.

Prerequisites & Notes

Co-requisite: CHEM 104 or 107 or permission of the instructor

Credits: 3

SAFE 319 - Principles of Industrial Hygiene II

Concentrates upon the recognition, evaluation and control of employee-related workplace hazards. Course includes an instrumentation component. Course is a continuation of HSAF 318.

Prerequisites & Notes

Co-requisite: CHEM 104 or 107 or permission of the instructor

Credits: 3

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

SAFE 338 - Ergonomics and Human Factors

Examines workplace design adversities as well as their remediation by the safety function.

Credits: 3

SAFE 348 - Hazardous Materials and Waste Management

Examines the recognition, evaluation, control, and legislative compliance of hazardous materials and waste through effective safety management.

Prerequisites & Notes

Co-requisite: CHEM 104 or 107 or permission of the instructor

Credits: 3

SAFE 358 - Construction Safety

Safety requirements and responsibilities for the construction industry.

Credits: 3

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

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.

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.

SAFE 398 - Selectic Topics

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

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

SAFE 418 - Security in the Workplace

Examines security in relation to protecting assets and resources within an enterprise.

Credits: 3

SAFE 428 - 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

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

SAFE 450 - Internship

Provides opportunity to apply theory and develop competencies through a work-related experience in an appropriate cooperating enterprise. Summers only.

Prerequisites & Notes

Program/major specified requirements and/or approval of instructor

Credits: Up to 12

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

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.

Prerequisites & Notes

Permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted.

Credits: 1-6

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.

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.

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.

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.

SEFE 198 - Selected Topic

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

SEFE 200 - Introduction to Education

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.

Prerequisites & Notes

Sophomore class standing. Note: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 3

SEFE 230 - Production and Utilization of Instructional Technology

Selection, utilization and production of instructional materials. Equipment operation via self-instruction in the Media Lab.

Prerequisites & Notes

Sophomore class standing. Note: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 3

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.

Prerequisites & Notes

Admission to the College of Education

Credits: 3

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.

Prerequisites & Notes

Admission to the College of Education

Credits: 3

SEFE 270 - 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.

Prerequisites & Notes

SEFE 200, CDEV 248. Note: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or

from the student's advisor.

Credits: 3

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.

Prerequisites & Notes

Note: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 3

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.

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.

SEFE 298 - Selected Topic

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

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.

Prerequisites & Notes

Admission to the College of Education

Credits: 3

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.

Prerequisites & Notes

Admission to College of Education

Credits: 3

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 (past 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.

Prerequisites & Notes

24 credits in area of specialization. Note: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 3

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.

Prerequisites & Notes

24 credits in area of specialization. Note: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 3

SEFE 323 - Teaching World Languages

Theory and methodology for teaching world languages throughout the K-12 curriculum.

Prerequisites & Notes

SEFE 200, 24 credits in area of specialization. Note: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 3

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.

Prerequisites & Notes

One year of college language study or placement in 201. Note: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 3

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

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

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.

Prerequisites & Notes

Note: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 3

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.

Prerequisites & Notes

Acceptance in College of Education, SEFE200, 270, and CDEV248

Credits: 3

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.

Prerequisites & Notes

Admission to the College of Education; and SEFE270

Credits: 3

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

SEFE 342 - Educational Psychology

Application of psychological learning theories to the educational process.

Credits: 3

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.

Prerequisites & Notes

Admission to College of Education

Credits: 3

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.

Prerequisites & Notes

Admission to Teacher Education. Note: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 2

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.

Prerequisites & Notes

SEFE 200, 270, 342; CDEV 248 Junior Standing. Note: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 3

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.

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.

SEFE 398 - Selected Topic

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

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.

Prerequisites & Notes

Note: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 3

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.

Prerequisites & Notes

Admission to and retention in the teacher education program. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the "Teacher Education Policy Manual."

Credits: 1

SEFE 426 - Practicum in 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.

Prerequisites & Notes

Note: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 1

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.

Prerequisites & Notes

Note: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 3

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.

Prerequisites & Notes

Note: Admission to and retention in the teacher education program are prerequisites for teacher education coursework; professional conduct standards, minimum overall QPA, and major QPA prerequisites also apply as specified in the Teacher Education Policy. Prerequisites: SEFE 200,230,270,311 or 319 or 320 or 323 or 324 or 349,329,426, & CEDP 248 and 342

Credits: 12, 9, 6,3

SEFE 456 - Student Teaching - Middle Level Grades

Under the guidance of a cooperating teacher and university supervisor, teacher candidates engage in two eight-week assignments on a full-time basis in specified school districts at the middle level and attend scheduled seminars.

University supervisors assign additional requirements.

Prerequisites & Notes

Admission to and retention in the teacher education program are prerequisites for teacher education coursework; professional conduct standards, minimum overall QPA, and major QPA prerequisites also apply as specified in the Teacher Education Policy Handbook. Coursework prerequisites: SEFE 200, 230, 270, 311 or 319 or 320 or 323 or 324 or 349, 329, 426, & CDEV 248 and SEFE 342.

Credits: 12

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.

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.

SEFE 498 - Selected Topic

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

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

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

SOWK 190 - Experimental

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

Credits: 3

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: 3

SOWK 198 - Selected Topic

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

Credits: 3

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

SOWK 251 - Introduction to Social Work

An orientation to the field of social work and social work activities in the community. Includes agency lab.

Credits: 3

SOWK 290 - Experimental

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

Credits: 3

SOWK 290 - Experimental

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

Credits: 3

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: 3

SOWK 298 - Selected Topic

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

Credits: 3

SOWK 317 - Statistical Methods

Introduction to basic statistical concepts and research techniques used in social research. Also listed as PROF 317

Prerequisites & Notes

PROF 201 or 202

Credits: 3

SOWK 318 - Research Methods

Major methods and procedures used in sociological research. Also listed as PROF 318

Prerequisites & Notes

SOWK 317

Credits: 3

SOWK 328 - Human Behavior and the Social Environment I

Covers the biophysical, psychological, and social dimensions assessing social functioning during pregnancy, birth, newborn, infancy, and early childhood.

Prerequisites & Notes

Admission to the Social Work Program

Credits: 3

SOWK 329 - Human Behavior and the Social Environment II

Covers the biophysical, psychological, and social dimensions assessing social functioning during middle childhood, adolescence, young adulthood, and late adulthood.

Prerequisites & Notes

Admission to the Social Work Program

Credits: 3

SOWK 334 - Theoretical Perspectives on Mental Dysfunctioning

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.

Prerequisites & Notes

Admission to the Social Work Program

Credits: 3

SOWK 340 - Social Welfare Institutions

An introductory analysis of social welfare policies, issues, and institutions.

Prerequisites & Notes

POLS101

Credits: 3

SOWK 355 - Social Work Methods I

Principles and practice of interviewing processes as applied to casework methods.

Prerequisites & Notes

Admission to the Social Work Program

Credits: 3

SOWK 356 - Social Work Methods II

Expands knowledge and skills base to include social work practice with family and group systems.

Prerequisites & Notes

SOWK 355 or permission of the instructor

Credits: 3

SOWK 357 - Social Work Methods III

Expands knowledge and skills base to include social work practice in communities and larger social systems.

Prerequisites & Notes

SOWK 250/340 and 356 or permission of the instructor

Credits: 3

SOWK 390 - Experimental

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

Credits: 3

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: 3

SOWK 398 - Selected Topic

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

Credits: 3

SOWK 407 - Social Policy Issues

Problems and issues associated with social policy including the politics of welfare policy.

Prerequisites & Notes

POLS 101, SOWK 250; Co-requisite: SOWK 357

Credits: 3

SOWK 450 - SOWK Internship

A Social Work Internship.

Prerequisites & Notes

Completion of Pre-Admission, Methods, Research , Development and Policy Sequences

Credits: Up to 12

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)

Prerequisites & Notes

Completion of Human Diversity (SOWK 105), Introduction to Social Work (SOWK 251), Methods I (SOWK 355), Methods II (SOWK 356), Methods III (SOWK 357), Statistics (SOWK 317), Research (SOWK 318), Human Behavior and the Social Environment I (SOWK 328), Human Behavior and the Social Environment (SOWK 329), Social Welfare Institutions (SOWK 340), Social Policy Issues (SOWK 407) and corequisite with the Internship (SOWK 450).

Credits: 3

SOWK 490 - Selected Topic

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

Credits: 3

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: 3

SOWK 498 - Selected Topics

The in-depth examination of a specific topic. The nature of the topic selected and its treatment determined in consultation with the instructor.

A **Selected Topics** course is a normal, departmental offering which is directly 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 & Notes

Introductory course in the student's major, e.g. CRIM 205 or SOWK 251

Credits: 1 to 3

SPAN 101 - Spanish Language & Culture I

This course is the first in a three course series which will provide an introduction to the Spanish language.

Credits: 3

SPAN 102 - Spanish Language & Culture II

This course is the second in a three course series which will provide an introduction to the Spanish language.

Prerequisites & Notes

SPAN 101 or the equivalent.

Credits: 3

SPAN 103 - Spanish Language & Culture III

This course is the third in a three course series which will provide an introduction to the Spanish language.

Prerequisites & Notes

SPAN 102 or the equivalent.

Credits: 3

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: 3

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: 3

SPAN 198 - Selected Topic

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

Credits: 3

SPAN 200 - Spanish Grammar and Composition I

A course designed to provide a review of basic Spanish grammar, emphasizing areas of difficulty in learning Spanish as a foreign language, and to introduce grammatical concepts not covered in previous studies.

Prerequisites & Notes

SPAN 103 or equivalent

Credits: 3

SPAN 201 - Spanish Conversation I

A functional course in speaking and writing Spanish, stressing everyday vocabulary and sentence structure. Some grammar review.

Prerequisites & Notes

SPAN 103 or the equivalent

Credits: 3

SPAN 220 - Reading in Spanish

An introduction to reading in Spanish at the intermediate level.

Prerequisites & Notes

Spanish 103 or equivalent

Credits: 3

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: 3

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: 3

SPAN 298 - Selected Topic

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

Credits: 3

SPAN 300 - Spanish Grammar and Composition II

An intermediate grammar review and composition course emphasizing the basic structures of Spanish.

Prerequisites & Notes

SPAN 200 and 201 or 220

Credits: 3

SPAN 301 - Spanish Conversation II

Development of communication skills through a variety of activities in contexts likely to be encountered in the target culture.

Prerequisites & Notes

SPAN 201 and 200 or 220

Credits: 3

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 & Notes

SPAN 201

Credits: 3

SPAN 303 - Business Spanish

Designed to acquaint the student with the necessary vocabulary, linguistic knowledge, and language skills related to Hispanic foreign trade, commerce, and office procedures.

Prerequisites & Notes

SPAN 200, 201 and SPAN 300 or 301

Credits: 3

SPAN 305 - Spanish Civilization

A study of the history of Spain and of important components of its culture, such as art, architecture, and daily life.

Prerequisites & Notes

SPAN 220 and 200 or 201

Credits: 3

SPAN 307 - U.S. Latino Cultures

A study of the cultural background of the members of the Spanish-speaking minorities in the United States, especially the Chicanos, Puerto Ricans and Cubans.

Prerequisites & Notes

SPAN 220 and 200 or 201

Credits: 3

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 & Notes

SPAN 220 and 200 or 201

Credits: 3

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.

Prerequisites & Notes

6 Spanish credits at the 200 level

Credits: 3

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 & Notes

SPAN 220 and 200 or 201

Credits: 3

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 & Notes

SPAN 220 and 200 or 201

Credits: 3

SPAN 328 - The Civilization of Spanish America: 19th Century to Present

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 & Notes

SPAN 220 and 200 or 201

Credits: 3

SPAN 330 - Spanish Literature 1800 to Present

A study of major writers genres and literary movements of Spain in this period.

Prerequisites & Notes

220 and 200 or 201

Credits: 3

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 & Notes

220, 200 or 201

Credits: 3

SPAN 335 - Women in Hispanic Literature

A study of Hispanic women authors and of Hispanic women as literary characters in Hispanic literature.

Prerequisites & Notes

For Spanish credit, SPAN 220 and 200 or 201 or the equivalent. For non-Spanish credit, no prerequisite

Credits: 3

SPAN 340 - Introduction to Translation I

Introduction to the techniques of translating varied material from Spanish to English and vice versa with attention to cultural forces affecting translation.

Prerequisites & Notes

SPAN 300

Credits: 3

SPAN 350 - Spanish Linguistics and Phonetics

An introduction to general linguistics and the practical application of linguistics to the study of Spanish. Analysis and practice of the sound system of the foreign language.

Prerequisites & Notes

6 Spanish credits at the 200 or above level

Credits: 3

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: 3

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: 3

SPAN 398 - Selected Topic

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

Credits: 3

SPAN 400 - Spanish Grammar and Composition III

An advanced course in the study of Spanish grammar and usage.

Prerequisites & Notes

9 Spanish credits at the 300-level including SPAN 300

Credits: 3

SPAN 401 - Spanish Conversation III

This course will provide the opportunity for advanced students to improve their aural comprehension and their conversational abilities in Spanish.

Prerequisites & Notes

9 Spanish credits at the 300-level including SPAN 301

Credits: 3

SPAN 431 - Spanish Literature - Medieval to 18th Century

A study and analysis of the most important works of representative Spanish authors of this period.

Prerequisites & Notes

9 hours at the 300-level including 300 and 305 or 307 or 326, or 328 and 330 or 332 or 318

Credits: 3

SPAN 432 - Spanish-American Literature: Precolumbian to 19th Century

A study and analysis of the most important works of representative Spanish-American authors of this period.

Prerequisites & Notes

9 hours at the 300 level including 300 and 305 or 307 or 326 or 328 and 330 or 332 or 318

Credits: 3

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.

Prerequisites & Notes

Permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted

Credits: 1 to 3

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: 3

SPAN 498 - Selected Topic

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

Credits: 3

SPED 100 - Overview of Special Education

This course is designed to meet the needs of pre-service teachers who seek teacher certification in elementary education, secondary education, physical education, health education, music education, or environmental education. The course is required for the minor in exceptionalities.

Prerequisites & Notes

NOTE: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 3

SPED 121 - High Incidence Disabilities

This course will examine best practice and policies relating to the educational consequences of high-incidence disabilities with an emphasis on learning disabilities, mental retardation, emotional disturbance, speech/ language, and other health impairment.

Prerequisites & Notes

SPED 100.

NOTE: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 3

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.

Prerequisites & Notes

SPED 121.

NOTE: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 3

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: 3

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: 3

SPED 198 - Selected Topic

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

Credits: 3

SPED 230 - Developmental Disorders

Students will identify the critical components of an educational program for learners with developmental disabilities including: curricular areas, effective teaching techniques, use of appropriate materials, co-teaching and team teaching, ancillary services and personnel, parental involvement and inclusionary practices.

Prerequisites & Notes

SPED 100.

NOTE: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 3

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: 3

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: 3

SPED 298 - Selected Topic

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

Credits: 3

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 & Notes

SPED 100, 202, 203, 204. NOTE: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 3

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.

Prerequisites & Notes

Corequisite SPED 455

Credits: 3

SPED 325 - Interventions in the Inclusive Classroom

This course in Special Education is designed for the teacher candidate seeking certification in Special Education, Early Childhood, Middle School, and / or other areas. It is designed to prepare future teachers with interventions in the inclusive classroom. Course content will include current effective instructional practices and delivery methods for all levels of special education to ensure for success of all students in the inclusive school setting. Due to recent changes in federal regulations beginning with "No Child Left Behind," more students with disabilities are being taught in the regular education classroom. This course will examine effective instructional practices and delivery methods for all

levels of special education support (PK-8) to employ for an inclusive classroom setting.

Prerequisites & Notes

SPED 230

Credits: 3

SPED 326 - Special Education Law and Procedures

This course will review the special education process and procedures that are concerned with screening, assessment, IEP development, evaluation, and law.

Credits: 3

SPED 341 - Life Management for Persons with Disabilities

Preparation of the teacher to plan for meeting the major developmental needs of disabled persons from infancy to adulthood; emphasis on early childhood education, career education to include: preparation for occupation, homemaking, social leisure skills, parent involvement and use of community resources to accomplish these objectives.

Prerequisites & Notes

NOTE: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 3

SPED 342 - Seminar in CPAD

This course focuses on the multi-dimensional role of service provider to individuals with exceptionalities. In addition to hand-on experience with service agencies, CPAD students enrolled in this course will interact with service providers, supervisors, related service personnel, parents, and care takers.

Prerequisites & Notes

NOTE: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 3

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.

Prerequisites & Notes

NOTE: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 3

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: 3

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: 3

SPED 398 - Selected Topic

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

Credits: 3

SPED 410 - CPAD Practicum

Experience in field.

Credits: 3

SPED 430 - Positive Behavior Strategies

This course is designed to familiarize students with various strategies, interventions and preventative measures to deal with behavioral issues in the self-contained and inclusion classroom.

Prerequisites & Notes

SPED 121, 122, 230, 325, 326; Admission to Teacher Candidacy

Credits: 3

SPED 431 - Behavior Disorders and Autism

Techniques and educational strategies for teaching disturbed persons and juvenile delinquents for preparation for teaching in public residential institutions, as well as in special classes, resource rooms or home-bound instruction. This course is also designated an intensive writing course by the university.

Prerequisites & Notes

Prerequisites: SPED 121, 122, 230, 325, 326; Corequisites: SPED 430, 432, 433, 434

Credits: 3

SPED 432 - Intervention in the Content Areas

This course in Special Education is designed for the teacher candidate seeking certification in Special Education, Early Childhood, Middle School, and / or other areas. This course will focus on reading, writing, and mathematics 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. Due to recent changes in federal regulations beginning with "No Child Left Behind," more students with disabilities are being taught in the regular education classroom. This course will examine effective instructional practices and delivery methods for all levels of special education support (PK-8) to employ for an inclusive classroom setting.

Prerequisites & Notes

SPED 121, 122, 230, 325, 326

Credits: 3

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 eligibility and develop an individualized education program).

Prerequisites & Notes

Prerequisites: SPED 121, 122, 230, 325, 326; Corequisites: SPED 400, 432, 433, 434

Credits: 3

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 & Notes

Prerequisites: SPED121, 122, 230, 325, 326; Corequisites: SPED 430, 431, 432, 433

Credits: 3

SPED 450 - Internship

Varies

Prerequisites & Notes

SPED 100, 202, 203, 204, 212, 311 or 313, 400

Credits: 12

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 & Notes

NOTE: Admission to and retention in the teacher education program are prerequisites for teacher education coursework. Minimum overall QPA, professional conduct standards, and major QPA prerequisites also apply; these are specified in the Teacher Education Policy Manual. Details are available in the departmental office or from the student's advisor.

Credits: 12, 6, 3

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: 3

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: 3

SPED 498 - Selected Topic

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

Credits: 3

SPED 530 - Nursing Issues in Special Education

This course examines the roles of the school nurse as they pertain to the student with disabilities. Various exceptionalities are explored and activities provided to the school nurse candidate to learn about the student with disabilities and how to meet his/her needs in and out of the classroom.

Credits: 3

SPED 590 - Experimental

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

Credits: 3

SPED 595 - Workshop

Varies.

Credits: 3

SPED 598 - Selected Topic

Varies.

Credits: 3

SPMT 150 - Practical Application

Provides students with early-on structured observations, micro-teaching experiences and seminars to enhance their awareness, understanding and comprehension about persons of all ages in public and private schools, sport facilities, sport and fitness agencies. SPMT 150 may be repeated to a maximum of 4 credits in different experiences. This is a Theory and Technique Course.

Prerequisites & Notes

SPMT 194

Credits: 1

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. This is a Theory and Technique Course.

Prerequisites & Notes

(Must achieve at least a C grade before progressing to other SPMT courses.)

Credits: 3

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.

Prerequisites & Notes

Declared Sport Management major.

Credits: 3

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. This is a Theory and Technique Course (open to Sport Management majors only).

Credits: 3

SPMT 286 - Sport Communication

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. This is a Theory and Technique Course (open to Sport Management majors only).

Prerequisites & Notes

SPMT 194, 196, or permission by instructor

Credits: 3

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. This is a Theory and Technique Course (open to Sport Management majors only).

Prerequisites & Notes

SPMT 194, 196 or permission by instructor

Credits: 3

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. This is a Theory and Technique Course (open to Sport Management majors only).

Prerequisites & Notes

SPMT 194, 196, 269 or permission by instructor

Credits: 3

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. This is a Theory and Technique Course (open to Sport Management majors only).

Prerequisites & Notes

SPMT 150-01, 194, 196, 286, 294, MRKT 330 or permission by instructor

Credits: 3

SPMT 396 - Sport Enterprise

The sport industry requires students who are trained in all aspects of sport business. This course develops a framework for understanding the business aspects of sport management. It provides future sport managers with a broad view of the factors underlying sport economics, sales and sales management strategies, budgeting, financing strategies, and economic impact. This course is designed to familiarize students with: the economics of sport, interscholastic sports budget and finance, intercollegiate athletics budget and finance, professional sport budget and finance, sales techniques, and sales management.

Prerequisites & Notes

SPMT 150-01, 194, 196, 286, 294 *or* permission by instructor.

Credits: 3

SPMT 406 - Sport Facility and Event Management

This course is designed to assist the sport management student in acquiring the necessary knowledge and skills needed to manage a sport facility and to plan a complete sporting event. This is a Theory and Technique Course (open to Sport Management majors only).

Prerequisites & Notes

SPMT 150-01, 150-02, 194, 196, 269, 286, 294, 315, 394, 396 or permission by instructor

Credits: 3

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 (open to Sport Management majors only).

Prerequisites & Notes

ALL SPMT classes or permission by instructor

Credits: 12

SPMT 486 - Sport Law

The course will demonstrate how constitutional law, contract law, tort law, labor and anti-trust law, apply to the sport industry. In addition the course will provide a fundamental understanding of the court system and how legal issues are decided. This is a Theory and Technique Course (open to Sport Management majors only).

Prerequisites & Notes

SPMT 150-01, 150-02, 194, 196, 269, 286, 294, 315, 394, 396, or permission by instructor

Credits: 3

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 is a Theory and Technique Course (open to Sport Management majors only).

Prerequisites & Notes

SPMT 150-01, 150-02, 150-03, 194, 196, 269, 286, 294, 315, 394, 396, or permission by instructor

Credits: 3

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. This is a Theory and Technique Course (open to Sport Management majors only).

Prerequisites & Notes

SPMT 150-01, 150-02, 194, 196, 269, 286, 294, 394, or permission by instructor

Credits: 3

THEA 131 - Fundamentals of Acting

An introduction to the theory and practice of acting.

Credits: 3

THEA 132 - Stagecraft

Fundamentals of modern set construction, stage lighting, properties, and costume practice. Students assist with current productions in laboratory sessions.

Credits: 3

THEA 141 - Introduction to 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

THEA 151 - Rehearsal and Production

Supervised experience in theatre performance and stagecraft by acting or crew participation in one Department of Theatre production. May be taken for credit four times. Prospective actors will have to participate in a competitive audition.

Prerequisites & Notes

Permission of the instructor

Credits: 1

THEA 159 - Introduction to Arts Administration

This course covers the basic principles, theories, concepts, processes and practices relating to organizations in the arts industry, including structure of the arts industry, organization structures, leadership, staffing, volunteerism, fundraising, intellectual property, grants writing, advocacy, etc.

Credits: 3

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: 3

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: 3

THEA 198 - Selected Topic

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

Credits: 3

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.

Prerequisites & Notes

Permission of the instructor

Credits: 3

THEA 222 - Acting II

Intermediate-level course designed to continue the actor training begun in THEA 131. Emphasis on realistic acting techniques.

Prerequisites & Notes

THEA 131

Credits: 3

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

THEA 249 - Asian Theatre and Dance

An introduction to the dance and theatre of Asian cultures, with a focus on India, China, and Japan. Through a combination of lecture, discussion and/or performance projects, the course examines these art forms in relation to Asian culture and aesthetics and investigates the influence of Asian dance and theatre of Western dance and theatre traditions.

Credits: 3

THEA 259 - Studies in Audience Development

An intermediate-level course focusing on audience development strategies for arts institutions.

Prerequisites & Notes

THEA159

Credits: 3

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

THEA 281 - Survey of Dramatic Literature I

Analysis and discussion of some of history's most celebrated works of dramatic literature, ranging from the drama of the eighteenth to contemporary works. 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

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

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: 3

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: 3

THEA 298 - Selected Topic

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

Credits: 3

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.

Prerequisites & Notes

THEA 222 and permission of the instructor

Credits: 3

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 & Notes

THEA 131,151

Credits: 3

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.

Prerequisites & Notes

THEA 222 and permission of the instructor

Credits: 3

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.

Prerequisites & Notes

Prerequisites: THEA 328 or permission of instructor.

Credits: 3

THEA 330 - Voice and Movement for the Actor

Introduction to disciplines of voice and movement essential for the well-prepared actor. Emphasis will be on performance rather than theory.

Prerequisites & Notes

Prerequisite: THEA 131

Credits: 3

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.

Prerequisites & Notes

THEA 132

Credits: 3

THEA 333 - Scene Design

The principles and application of design for stage, emphasizing sketches, diagrams, drafting, and model making.

Prerequisites & Notes

THEA 215 or permission of the instructor

Credits: 3

THEA 334 - Stage Lighting

The theory and practice of stage lighting as practiced in modern theatre.

Prerequisites & Notes

THEA 215 or permission of the instructor

Credits: 3

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.

Prerequisites & Notes

THEA 215 or permission of instructor.

Credits: 3

THEA 337 - Directing

The theory and practice of directing for the modern theatre.

Prerequisites & Notes

THEA 131, 132, 281, and one section of 151

Credits: 3

THEA 339 - New Play Development

This course is designed for actors, directors, designers and playwrights 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.

Prerequisites & Notes

Student should be a theatre major. Permission of instructor via audition or portfolio review.

Credits: 3

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.

Prerequisites & Notes

Permission of instructor via audition or portfolio review.

Credits: 3

THEA 345 - Stage Management and Safety

Safe and effective production management on the modern stage. Safety education in shop, performance, and public spaces.

Prerequisites & Notes

THEA 132

Credits: 3

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.

Prerequisites & Notes

Junior standing and permission of the instructor

Credits: 1 to 2

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.

Prerequisites & Notes

THEA 269 - Playwriting

Credits: 3

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.

Prerequisites & Notes

THEA 369 or permission of the instructor.

Credits: 3

THEA 372 - Senior Seminar in Playwriting

An advanced-level seminar for senior playwriting majors, in which major playwriting projects are shared and developed.

Prerequisites & Notes

THEA369

Credits: 3

THEA 390 - 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.

A unique and specifically focused course within the general purview of 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 & Notes

Permission of instructor via audition or portfolio review.

Credits: 3

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.

Prerequisites & Notes

THEA 281

Credits: 3

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 & Notes

THEA 281 or permission of instructor

Credits: 3

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: 3

THEA 398 - Selected Topic

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

Credits: 3

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.

Prerequisites & Notes

Junior standing

Credits: 3

THEA 450 - Internship

Supervised placement in a working theatre situation off campus.

Prerequisites & Notes

Extensive and successful experience in theatre performance on campus, 2.000 QPA overall and in all theatre courses attempted, and permission of the department's curriculum committee.

Credits: Up to 12

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 to 3

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: 3

THEA 498 - Selected Topics

The in-depth examination of a specific topic. The nature of the topic selected and its treatment determined in consultation with the instructor. May be repeated for credit provided the topic varies substantially from all previous registrations.

A **Selected Topics** course is a normal, departmental offering which is directly 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 & Notes

permission of the instructor

Credits: 1 to 3

WMST 115 - Introduction to Women's Studies

Introduction to Women's Studies is an interdisciplinary course that offers a foundation for understanding the diverse strands of the female experience, focusing on the strengths and conditions which simultaneously unite and divide women.

Credits: 3

WMST 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.

WMST 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.

WMST 198 - Selected Topic

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

WMST 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.

WMST 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.

WMST 298 - Selected Topic

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

WMST 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.

WMST 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.

WMST 398 - Selected Topic

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

WMST 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.

Prerequisites & Notes

Prefer to have students with some background in women’s studies)

Credits: 3

WMST 450 - 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.

Prerequisites & Notes

Completion of at least six credits of coursework approved for the women’s studies minor

Credits: Up to 12

WMST 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.

WMST 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.

WMST 498 - Selected Topic

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

Faculty & Administration

Click on a link to be taken to the entry below.

- State System of Higher Education
- Board of Governors
- Council of Trustees
- Slippery Rock University Administration
 - Academic Affairs
 - Finance and Administration
 - Student Life
 - University Advancement
- Slippery Rock University Faculty
- Slippery Rock University Faculty Emeriti

State System of Higher Education

Dr. John C. Cavanaugh,	Chancellor
Dr. Peter Garland	Executive Vice Chancellor for Academic and Student Affairs
Dr. James Dillon	Vice Chancellor for Administration and Finance
Vacant	Vice Chancellor for Information Technology and System Research
Mr. Thomas Krapsho	Vice Chancellor for Human Resources & Labor Relations
Jacqueline Conforti Barnett	Acting Chief Legal Counsel

Board of Governors

Mr. Kenneth M. Jarin

Chairperson

Mr. C.R. "Chuck" Pennoni	Vice Chairperson
Mr. Aaron A. Walton	Vice Chairperson
Rep. Matthew E. Baker	Member
Ms. Marie Conley Lammando	Member
Mr. Paul S. Dlugolecki	Member
Mr. Thomas L. Gluck	Member
Rep. Michael K. Hanna	Member
Sen. Vincent J. Hughes	Member
Ms. Jamie Lutz	Member
Mr. Jonathan B. Mack	Member
Mr. Joseph F. McGinn	Member
Sen. Jeffrey E. Piccola	Member
Gov. Edward G. Rendell	Member
Mr. Harold C. Shields	Member
Mr. Thomas M. Sweitzer	Member
Ms. Christine J. Toretti	Member
Ms. Mackenzie Marie Wrobel	Member

Council of Trustees

Mr. Robert S. Taylor, Chairperson	Solebury
Ms. Grace O. Hawkins, Vice Chairperson	Cranberry
Mr. Joshua B. Young, Secretary	Coatesville
Mr. Nicholas DeRosa	New Castle
Dr. John A. Hicks	Slippery Rock
Mr. Eric L. Holmes	Pittsburgh
Mr. Brandon A. Maharaj, Student Representative	Indiana, PA
Dr. Robert Marcus	Harrisburg
Dr. Dennis E. Murray	Hollidaysburg
Mr. John K. Thornburgh	Wexford

Ms. Suzanne A. Vessella

Ellwood City

Dr. John C. Cavanaugh, Chancellor (ex-officio)

Chancellor, State System of Higher Education

Slippery Rock University Administration

President

Robert M. Smith, Ph.D.

Assistant to the President

Tina L. Moser, B.S.

Executive Director of University Public Relations

Rita Abent, M.A.

Director of Internal Audit

Kimberly Greco, M.S.

Academic Affairs

Provost and Vice President for Academic Affairs

William F. Williams, Ph.D.

Assistant to the Provost for Academic Policies and Programs

Cynthia A. Dillon, M.A.

Dean, College of Business, Information and Social Sciences (Interim)

David Valentine, Ph.D.

Dean, College of Education (Interim)

Kathleen Strickland, Ed.D.

Dean, College of Health, Environment and Science

Susan Hannam, Ph.D.

Dean, College of Humanities, Fine and Performing Arts

Eva Tsuquiashi-Daddesio, Ph.D.

Associate Provost for Enrollment Services

Amanda Yale, Ed.D.

Associate Provost for Information & Administrative Tech Services

Simeon Ananou, M.B.A.

Director of Retention Services

Carla Hradisky-Coffelt, M.Ed.

Director (Executive) of Academic Records/Summer School and Graduate Studies

Elliott G. Baker, M.Ed.

Director of Academic Resources

Mary Ann King, B.A.

Directors (Associate) of Admissions Freshmen Services, Transfer Services

Mimi Campbell, M.Ed.
Elizabeth Stevens, M.A.

Director of Alumni Affairs

Michael Saraka, M.S.

Directors (Associate) of Career Services

Anthony C. Linnan, M.Ed.
John F. Snyder, M.Ed.

Director of Financial Aid

Patricia A. Hladio, M.S.

Director of Graduate Admissions	Angela Piverotto, M.Ed.
Director of Grants and Sponsored Research	Nancy L. Cruikshank, M.S.
Director of Honors Program	April Longwell, M.S.
Director for Information Technology	Dean W. Lindey
Director of Institutional Research	Carrie Birckbichler, M.S.
Director of International Services	Pamela Frigot, B.A.
Director of Library Services	Philip Tramdack, M.L.S.
Director of McKeever Environmental Learning Center	Francis N. Bires, M.S.
Director of Center for Student Involvement & Leadership	Brad Kovalski, M.A.

Finance and Administration

Vice President for Finance and Administrative Affairs	Charles T. Curry, Ed.D.
Executive Staff Assistant	Tina Proper, B.S.
Assistant Vice President for Diversity and Equal Opportunity	Holly McCoy, J.D.
Assistant Vice President for Construction Design and Management	Herb Carlson, M.S.
Assistant Vice President for Finance	Edward P. Hess, M.B.A.
Assistant Vice President for Human Resources	Lynne M. Motyl, B.S.
Director of Accounting Services	Timothy L. Harlan, M.S.
Director of Budget & Fiscal Planning	Linda Moore, B.S.
Director of Contracts Management	James Revesz, M.A.
Director of Environmental Health and Safety	
Director of Facilities	Scott Albert, M.B.A.
Director of Maintenance Services	Timothy Carney, B.S.
Director of Purchasing	Mark S. Combine, B.S.

Student Life

Vice President for Student Life	Constance Foley, D. Ed.
Executive Staff Assistant	Claudia C. Fischer

Assistant Vice President for Student Services	John Bonando, Ed.D.
Assistant Vice President for Student Development	Paula Olivero, Ph.D.
Assistant to the Vice President for Student Life Administration	Debra L. Pincek, M.A.
Business Manager, SGA Cooperative Activities	Cathy George, M.B.A.
Director of Athletics	Paul Lueken, M.S.
Director of Campus Recreation	Gregory Sferra, M.S.
Director of Counseling Center	Carol Holland, D.P.H.
Director of Health Services	Kristina Chiprean, M.S.N.
Director of Multicultural Development	Corinne Gibson, M.Ed.
Director of University Union/Center for Student Involvement and Leadership	Christopher Cole, Ph.D.
Director of University Police (Interim)	Windy Stafford

University Advancement

Vice President for University Advancement	Barbara A. Ender, M.S.Ed.
Executive Staff Assistant	Kathleen Jack, B.A.
Executive Director, Slippery Rock University Foundation	Edward R. Bucha, Ph.D.
Director of Development	
Director of Alumni Relations	Michael Saraka, M.A.
Director of Advancement Services	Kelli McKee, B.A.

[TOP](#)

Slippery Rock University Faculty

Abney, Robertha, Associate Professor, Sport Management, South Carolina State College, B.S.; University of Pittsburgh, M.Ed.; University of Iowa, Ph.D.

Altenbaugh, Richard J., Professor, Secondary Education/Foundations of Education, University of Pittsburgh, B.A., M.Ed., Ph.D.

Amatucci, Frances, Associate Professor, School of Business, University of Massachusetts, B.S.; University of Pittsburgh, M.B.A., Ph.D.

Ambrosio, Nora, Professor, Dance, University of Maryland, B.A.; Smith College, M.F.A.

Ampaugh, Michael, Associate Professor, School of Business, Ohio University, B.A., University of Michigan, M.B.A, Western Michigan University, D.P.A.

Anand, Padma, Professor, Secondary Education/Foundations of Education, Bangalore University (India), B.A.; Mysore University (India), M.A.; Memphis State University, Ed.D.

Anning, Jonathan H., Assistant Professor, Exercise and Rehabilitative Sciences, Central Michigan University, B.A., M.A.; University of Toledo, Ph.D.

Argyle, Susan, Associate Professor, Elementary Education/Early Childhood, Idaho State University, B.A.; Kent State University, M.Ed., Ph.D.

Arnhold, Pamela, Assistant Professor, Physical Education, University of Wisconsin at La Crosse, B.S.; Slippery Rock University, M.S.

Arnhold, Robert W., Professor, Physical Education, Temple University, B.S.; University of Wisconsin at La Crosse, M.S.; Texas Woman's University, Ph.D.

B

Badgett, John L., Jr., Professor, Secondary Education/Foundations of Education, Lamar State College, B.S., M.Ed.; Texas A and M University, Ph.D.

Badgett, M. Rebecca, Assistant Professor, Special Education, Slippery Rock University, B.S.Ed.; University of Pittsburgh, M.Ed.

Balok, Mrya, Assistant Professor, English Edinboro University, B.S.; University of Pittsburgh, M.Ed., Ph.D.

Barger-Anderson, Richael, Assistant Professor, Special Education, Clarion University of PA, B.S., M.S.; Indiana University of PA, Ed.D.

Barnett, Brett, Associate Professor, Communication, Ohio State University, B.A.; University of Akron, M.A.; Bowling Green State University, Ph.D.

Barr, Stephen, Assistant Professor, Music, Westminster College, B.M.; University of South Florida, M.M.; West Virginia University, D.M.A.

Barta-Smith, Nancy, Professor, English, Creighton University, B.A.; Iowa State University, M.A.; University of Iowa, Ph.D.

Bavaro, John, Associate Professor, Professional Studies Cornell University, BSN; California State University, M.A.; University of San Francisco, M.S.; University of Pittsburgh, Ed.D.

Bayer, Trudy, Assistant Professor, Communication Mercyhurst College, University of Louvaine, BA; University of Louvaine, M.A.; University of Pittsburgh, Ph.D.

Bechard, Thomas J., Assistant Professor, Public Health and Social Work Hubertus College, B.A.; University of Maine, B.A.; Barry University, M.S.W.; Adelphia University, D.S.W.

Beeching, Simon C., Professor, Biology University of Maine, B.A.; Indiana University, Ph.D.

Bernardo, Angela, Assistant Professor, Safety Management Slippery Rock University, B.S.; West Virginia University, M.S., Indiana University of Pennsylvania, Ph.D.

Berry, James, Assistant Professor, Music Indiana University of Pennsylvania, B.S.; Duquesne University, M.M.

Bhatia, Kundan Lal, Professor, Professional Studies University of Rajasthan (India), B.A.; Agra University (India), M.A.; Indiana University, Ph.D.

Bian, Wei, Assistant Professor, Physical Education Beijing Institute of PE, B.Ed., M.Ed.; University of Northern Iowa, M.A.; University of Georgia, Ph.D.

Billek-Sawhney, Barbara, Associate Professor, School of Physical Therapy University of Pittsburgh, B.S., M.S.; Duquesne University, Ed.D.

Birckbichler, Paul J., Associate Professor, Chemistry, Duquesne University, B.S., Ph.D.

Boggs, William O., Professor, English, Edinboro University of Pennsylvania, B.S., M.A.; Carnegie Mellon University, D.A.

Boliver, Bruce G., Assistant Professor, Parks and Recreation/Environmental Education, Slippery Rock University, B.S., M.S.

Bost, Robert F., Jr., Associate Professor, Special Education, Slippery Rock University, B.S., M.Ed.; Duquesne University, Ed.D.

Bouchat, Rachelle, Assistant Professor, Mathematics, University of Pittsburgh at Johnstown, B.A., University of Kentucky, M.A., Ph.D.

Braun, Jason, Assistant Professor, Counseling Center, Penn State University, B.S.; Wright State University, Pys.D.

Brinjak, Cathy E., Assistant Professor, Academic Services, Grove City College, B.A.; Indiana University of Pennsylvania, M.A.

Brown, George P., Professor, Political Science, University of California at Santa Cruz, B.A.; University of California at Santa Barbara, M.A.; University of Washington, Ph.D.

Buck, Robert E., Professor, Mathematics, Georgetown University, B.S.; University of Dayton, M.S.; University of Pittsburgh, Ph.D.

Burkhart, Patrick A., Professor, Geography, Geology and the Environment, Case Western Reserve, B.A.; Wright State University, M.S.; Lehigh University, Ph.D.

Buttermore, John, Assistant Professor, School of Business, West Virginia University, B.S.; Seton Hall University, M.B.A. Indiana University of Pennsylvania, Ph.D.

C

Cain, Vernice, Associate Professor, English, North Carolina A & T State University, B.S., M.A.; Bowling Green State University, Ph.D.

Cali, Joseph, Professor, Safety Management, Indiana University of Pennsylvania, B.A., M.A.; West Virginia University, Ed.D.

Campbell, Mark, Assistant Professor, Academic Services, Slippery Rock University, B.S., M.Ed.; University of Pittsburgh, B.A., Ed.D.

Campbell, Patricia A., Associate Professor, Geography, Geology and the Environment, University of Pittsburgh, B.S., M.S., Ph.D.

Carben, Jennifer, Assistant Professor, Parks & Recreation/Environmental Education, Slippery Rock University, B.A., M.S.

Caula, Ana M., Associate Professor, Modern Languages and Cultures, Universidad Central de Venezuela, B.A.; University of Pittsburgh, M.A., Ph.D.

Cavill, Wilma J., Assistant Professor, Safety Management, Slippery Rock University, B.S.; Westminster College, M.S.Ed.

Chai, Sangmi, Assistant Professor, Computer Science, Ewha Woman's University, B.S.; Seoul National University, M.B.A.

Champion, David, Associate Professor, Criminology and Criminal Justice, State University of New York at Buffalo, B.A.; Ball State University, M.A.; Indiana University of Pennsylvania, Ph.D.

Chase, Mark E., Associate Professor, Communication, Indiana University of Pennsylvania, B.S.; Slippery Rock University, M.S.; University of Pittsburgh, Ed.D.

Chatterjee, Anindya, Professor, School of Business, Birla Institute of Technology and Science (India), M.M.S.; Temple University, Ph.D.

Chen, Xianfeng, Associate Professor, Geography, Geology and the Environment, Xinjian University (China), B.S.; Institute of Geography, Chinese Academy of Sciences, M.S.; West Virginia University, Ph.D.

Chen-Gaffey, Aiping, Assistant Professor, Library, Peking University B.A., M.A.; University of Pittsburgh, M.A., M.L.S.

Chmielewski, Jerry G., Professor, Biology, University of Waterloo (Canada), B.Sc., M.Sc., Ph.D.

Chovanes, John, Instructor, Physics, Slippery Rock University, B.A., M.Ed.

Christmann, Edwin P., Professor, Secondary Education/Foundations of Education, California University of Pennsylvania, B.S.Ed., Pennsylvania State University, M.Ed.; Old Dominion University, Ph.D.

Clark, Gary, Assistant Professor, Physical Education, Lock Haven University, B.S.; Western Kentucky University, M.S.; University of Pittsburgh, Ph.D.

Cleary, Michael, Professor, Public Health and Social Work, Indiana University, B.S., M.S.; Ball State University, Ed.D.

Cobb, Thom L., Associate Professor, Dance, Illinois State University, B.S., M.S.

Cohen, Deborah J., Professor, Modern Languages and Cultures, Colby College, B.A.; University of Kansas, M.A., Ph.D.

Colbert-Lewis, Sean, Assistant Professor, Elementary Education/Early Childhood, Virginia Tech, B.A., M.A.; University of Virginia, M.Ed, Ph.D.

Colvin, Andrew, Assistant Professor, Philosophy, Ohio State University, B.A., M.A.; University of Hawaii, Ph.D.

Como, Thomas J., Associate Professor, Art, Indiana University of Pennsylvania, B.F.A.; Kent State University, M.F.A.

Condrary, Joan C., Professor, English; Gettysburg College, B.A., Shippensburg University, M.S.; Indiana University of Pennsylvania, Ph.D.

Conlon, Michael P., Associate Professor, Computer Science, State University of New York at Stony Brook, B.S., M.A.; New York Institute of Technology, M.S.; Clarkson University, Ph.D.

Cooke, Colleen A., Associate Professor, Parks and Recreation/Environmental Education Slippery Rock University, B.S.; University of Pittsburgh, M.Ed., Nova Southeastern University, Ed.D.

Cooklin, Katherine L., Assistant Professor, Philosophy, University of Southern Maine, B.A.; Lewis and Clark College, M.S.; University of Texas at Austin, Ph.D.

Cortijo, Maria, Assistant Professor, Modern Languages & Cultures, Universidad Complutense de Madrid, B.A.; Universidad San Pablo-Madrid, M.A.; Texas Tech University, M.A.; University of California-Berkley, Ph.D.

Cosgrove, Cornelius, Professor, English, Le Moyne College, B.A.; Pennsylvania State University, M.A.; State University of New York at Buffalo, Ph.D.

Covey, William B., Associate Professor, English, Northern Illinois University, B.A., M.A.; Purdue University, Ph.D.

Cowan, Aaron, Assistant Professor, History, Kings College, B.A., M.A.; University of Cincinnati, M.A., Ph.D.

Crafton, Robert E., Associate Professor, English, University of Delaware, B.A.; University of Virginia, M.A.; Washington University, M.A., Ph. D.

Craig, John M., Professor, History, State University of New York at Albany, B.A., M.A.; College of William and Mary, Ph.D.

Creasy, Kim, Associate Professor, Elementary Education/Early Childhood, Ashland University, B.S., Westminster College, M.Ed., University of Akron, Ph.D.

Crow, Brian, Associate Professor, Sport Management, West Liberty State College, B.S.; West Virginia University, M.B.A., Ed.D.

Cubero, Chris, Assistant Professor, Counseling Center, Penn State University, B.S.; East Carolina University, M.S.; East Carolina University, Ph.D.

Culp, David B., Professor, School of Business, Southern Illinois University, B.A.; Central Michigan University, M.A.; Southern Illinois University, Ph.D.

Cummins, Karen A., Instructor, Nursing, LaRoche College, B.S.; University of Pittsburgh, M.S.

D

Daddesio, Thomas C., Associate Professor, Modern Languages & Cultures, Syracuse University, B.A.; Universit J de la Sorbonne Nouvelle, ma T trise, docteur P s lettres.

Dailey, David P., Professor, Computer Science, University of New Mexico, B.S.; University of Colorado, Ph.D.

Daniels, Mark R., Professor, Political Science, Valparaiso University, B.A.; Southern Illinois University, M.A.; University of Georgia, Ph.D.

Danielson, Stentor, Assistant Professor, Geography, Geology, and the Environment Colgate University, B.A.; Clark University, Ph.D.

Davidson, Warren, Assistant Professor, Music, Duquesne University B.S., M.M.; University of Pittsburgh, M.A. ; West Virginia University, D.M.A.

DeCarlo, Carmine, Professor, Elementary Education/Early Childhood, Mercyhurst College, B.A., Edinboro University, M.S.; Pennsylvania State University, Ph.D.

Del Vecchio, Alice, Assistant Professor, Professional Studies, Lakeland College, B.A.; Sangamon State University, M.P.A.

DeNicola, Dean M., Professor, Biology, University of Vermont, B.A.; University of Maine, M.S.; Oregon State University, Ph.D.

Denning, Margaret B., Professor, History, University of Florida, B.S.; University of Zurich (Switzerland), Lizentiat, Ph.D.

DePalma, Judith A., Professor, Nursing, University of Pittsburgh, B.S.N., M.S.N.; Duquesne University, Ph.D.

Detlefsen, Michael E., Professor, Mathematics, University of Oregon, B.A.; State University of Iowa, M.S., Ph.D.

DiMarco, Danette, Professor, English, Duquesne University, B.A., M.A., Ph.D.

Donahue, Martin, Assistant Professor, Physical Education, Castleton State College, B.S.; Indiana State University, M.S.; New Mexico State University, Ph.D.

DuPont, Sherry, Associate Professor, Elementary Education/Early Childhood, Liberty University, B.S.; Indiana University of Pennsylvania, M.Ed.; Pennsylvania State University, Ph.D.

Dziubek, Daniel R., Associate Professor, Parks and Recreation/ Environmental Education, West Virginia University, B.S.; Pennsylvania State University, M.S.; University of Pittsburgh, Ed.D.

E

Edwards, June, C., Associate Professor, Art, Mansfield University, B.S.; Brooklyn College, M.F.A.

F

Fagan, Wendy, Instructor, Physical Education, Indiana University, B.S.; Texas Woman's University, M.S.

Fair, Dennis T., Professor, Special Education, Slippery Rock University, B.S.Ed.; University of Pittsburgh, M.Ed., Ph.D.

Fergany, Adel A., Associate Professor, Computer Science, Cairo University, B.S.; Illinois Institute of Technology, M.S., Ph.D.

Findlan, Cinda, Assistant Professor, Elementary Education/Early Childhood, Clarion University, B.S.; Edinboro University, M.Ed.; Indiana University, Ed.D.

Findler, Richard S., Professor, Philosophy, Slippery Rock University, B.A.; Duquesne University, M.A.; Loyola University of Chicago, Ph.D.

Flynn, Thomas R., Professor, Communication, University of Toledo, B.A.; Ohio University, M.A.; University of Nebraska, Ph.D.

Forbes, Wayne, M., Assistant Professor, Biology, University of West Indies, B.S., Ph.D.

Forrest, Jeffrey, Professor, Mathematics, Northwestern University (China), B.S., M.S.; Auburn University, Ph.D.

Forrest, Kimberly, Professor, Public Health and Social Work, Medical School of Shanghai, B.P.N.; Slippery Rock University, M.S.; University of Pittsburgh, M.P.H., Ph.D.

Foster, Jennifer, A., Assistant Professor, Communication, Chatham College, B.A.; University of Pittsburgh, M.Ed.; Ed.D.

Frederick, Heather, Assistant Professor, Political Science, Hollins College, B.A.; West Virginia University, M.A., Ph.D.

Frohnappel, David, Instructor, Chemistry, University of Pittsburgh, B.S.; University of North Carolina at Chapel Hill, Ph.D.

G

Galbraith, Diane, Assistant Professor, School of Business, Indiana University of Pennsylvania, B.S.; LaRoche College, M.S.; Indiana University of Pennsylvania, Ed.D.

Gibala, Donald, Assistant Professor, Public Health and Social Work, Slippery Rock University, B.S.; University of Pittsburgh, M.P.H., D.P.H.

Glover, David, F., Associate Professor, Music, University of North Florida, B.M.; Florida State University, M.M.; University of Texas (Austin) D.M.A.

Gocal, Beverly, Assistant Professor, Computer Science, Pennsylvania State University, B.S.; Cleveland State University, M.S.; Kent State University, Ph.D.

Gonul, Fusun, Associate Professor, School of Business, Middle East Tech University, B.S.; Case West. Res. University, M.A.; Ohio State University, Ph.D.

Gordon, Thomas, Professor, Elementary Education/ Early Childhood, Duquesne University, B.A., University of North Carolina, M.S., Ph.D.

Grabner, Elise M., Professor, Mathematics, Ohio University, B.S., M.S., Ph.D.

Grabner, Gary C., Associate Professor, Mathematics, Ohio University, B.S., M.S., Ph.D.

Grant, Patrick, Professor, Special Education, Lincoln University, B.S., M.A.; University of Oregon, Ed.D.

Gray, Colleen G., Associate Professor, Music, West Chester University, B.S.Mu.Ed.; Duquesne University, M.M.; West Virginia University, D.M.A.

Grimm, Richard, Associate Professor, School of Business, Youngstown State University, BSBA, M.B.A.; Kent State University, Ph.D.

H

Hadley, Susan J., Professor, Music, University of Melbourne (Australia), B.M.; University of Western Australia, Dip. Ed.; Temple University, M.M.T., Ph.D.

Haines, Martina, L., Assistant Professor, Library, Catholic University of America, B.A.; Kent State University, M.L.S.; Youngstown State University, M.H.H.S.

Hardesty, Katherine N., Assistant Professor, Criminology and Criminal Justice, California University of Pennsylvania, B.S.; West Virginia University, M.S.; Indiana University of Pennsylvania, Ph.D.

Harry, Joseph C., Associate Professor, Communication, University of North Florida, B.A.; Ohio State University, M.A.; Michigan State University, Ph.D.

Hartmann, Heike, Assistant Professor, Geography, Geology and the Environment, University of Wurzburg-Germany, B.S.; Justus Liebig University-Germany, M.S., Ph.D.

Harvey, Patrick, Assistant Professor, Criminology and Criminal Justice, University of Michigan, B.S., M.S.; Indiana University of Pennsylvania, Ph.D.

Hathaway, James, Professor, Geography, Geology and the Environment, University of Minnesota, B.A., M.A., Ph.D.

Hawk, Stephen L., Professor, Music, Western Illinois University, B.A., University of Texas, M.M., D.M.A.

Heilman-Houser, Rose, Associate Professor, Elementary Education/Early Childhood, Indiana University of Pennsylvania, B.A., M.A., Ed.D

Herat, Athula, Assistant Professor, Physics, University of Colombo (Sri Lanka), B.S.; University of Cincinnati, MS, Ph.D.

Herman, Susan L., Assistant Professor, Exercise and Rehabilitative Sciences, Lock Haven University, B.S.; Slippery Rock University, M.Ed.

Hertel, Heather, Assistant Professor, Art, Syracuse University, B.F.A., M.S.; Edinboro University, M.F.A.

Hicks, John, Assistant Professor, Secondary Education/Foundations of Education, Slippery Rock University, B.A.; University of Notre Dame, M.A.; Indiana University of Pennsylvania, Ph.D.

Higgs, Catriona, Professor, Sport Management, Dunfermline College (Scotland), B.Ed.; University of Stirling (Scotland), M.S.; Texas Woman's University, Ph.D.

Hoffmann, Lynn, Assistant Professor, Library, Kent State University, M.L.S.; University of Wisconsin-Oshkosh, B.A.E.; Cooperstown Graduate Programs, M.A.

Holbein-Jenny, Mary Ann, Professor, School of Physical Therapy, University of Pittsburgh, B.S., M.S., Ph.D.

Holland, Carol, Associate Professor, Counseling Center, Seton Hall, B.A.; Clarion University, B.S.; Slippery Rock University, M.A.; University of Pittsburgh, D.P.H.

Hzizo, Stacy, Assistant Professor, Biology, West Chester University, B.S.; University of Pittsburgh, Ph.D.

Hughes, Christopher J., Professor, School of Physical Therapy, Springfield College, B.S., M.S.; University of Virginia, Ph.D.

Hulick, Frank W., Assistant Professor, Computer Science, Clarion University, B.S.; Johns Hopkins University, M.S.

Hull, Ethan, Assistant Professor, Physical Education, University of Pittsburgh, B.S.; East Stroudsburg University, M. Ed., University of Pittsburgh, M.S., Ph.D.

Hunt, Herbert, Assistant to the Dean and Assistant Professor, Elementary Education/Early Childhood, Slippery Rock University, B.S., M.S., University of Akron, Ph.D.

Hutchins, Deborah, Assistant Professor, Parks and Recreation/Environmental Education, Pennsylvania State University, B.S.; University of North Carolina, M.S.; Nova Southeastern University, Ed. D.

I

Ignelzi, Michael G., Associate Professor, Counseling and Development, University of California at Riverside, B.A.; Ohio State University, M.A.; Harvard University, Ed.D.

Iossifova, Albena, Assistant Professor, School of Business, University of Economics (Bulgaria), B.S., M.S.; University of Minnesota, Ph.D.

Isherwood, Robert, Assistant Professor, Special Education, Slippery Rock University, B.S.; University of Pittsburgh, M.Ed., Ed.D.

Ishimaru, Yukako, Instructor, Modern Languages and Cultures, Saga University, B.A.

Ismail, Mohammad, Professor, Mathematics, University of Punjab, B.S.; University of Istambad, M.S.; University of Pittsburgh, Ph.D.

J

Jackson, Dallas, Assistant Professor, Physical Education, University of North Texas, B.S.; Texas Woman's University, M.S., Ph.D.

Jenny, Geraldine, Assistant Professor, Elementary Education/Early Childhood, Taylor University, B.S.; Shippensburg, M.Ed.; Duquesne University, Ed.D.

Jirasakuldech, Benjamas, Associate Professor, School of Business, Assumption University, Thailand B.A.; Texas Tech University, M.S.; University of Nebraska-Lincoln, Ph.D.

Jones, Diana, Assistant Professor, Nursing, Indiana University Northwest, BSN; Purdue University, M.S.; Northern Illinois University, Ed.D.

Jones, Herman A., Associate Professor, Public Health and Social Work, Wilberforce University, B.A.; University of Pittsburgh, M.S.W., Ph.D.

Joseph, Patricia A., Assistant Professor, Computer Science, Clarion University, B.S.Ed.; California University, M.A.; University of Pittsburgh, M.S.I.S.

Joshi, Sharadchandra W., Professor, Computer Science, University of Poons (India), M.S.; Pennsylvania State University, Ph.D.

K

Katsafanas, Jodi, Assistant Professor, Special Education, Duquesne University, B.S.; University of Pittsburgh, M.Ed., Ed.D

Kazar, Sheila, Assistant Professor, Geography, Geology and the Environment, University of South Florida, B.A., B.S., M. Ed; West Virginia University, M.A., Ph.D.

Keller, Jennifer, Professor, Dance, Connecticut College, B.A.; Arizona State University, M.F.A.

Kerchis, Donald, Assistant Professor, Political Science, Georgetown University, B.S.; University of Pittsburgh, M.S., Ph.D.

Khalili, Ahmad, Associate Professor, Professional Studies, Tehran School of Social Work (Iran), B.A.; Michigan State University, M.A., Ph.D.

Knaub, Maribeth J., Associate Professor, Music, Lawrence University, B.M.; Peabody Conservatory of Music, M.M., University of Pittsburgh, Ed.D.

Kolbert, Jered B., Professor, Counseling and Development, Rutgers College, B.A.; Keen University, M.A.; College of William and Mary, Ph.D.

Kovacs, Istvan, Assistant Professor, Physical Education, Hungarian University of Physical Education, B.S., M.S.; Eotvos Lorand University (Budapest), Ph.D.

Krayesky, David, Assistant Professor, Biology, Johnson State College, B.S.; Southern Illinois University, M.S.; University of Louisiana, Ph.D.

Kreiser, Christopher, J., Assistant Professor, English, Tulane University, B.A.; Texas A & M University, M.A., Ph.D.

Kushner, Susan R., Associate Professor, School of Physical Therapy, University of Pittsburgh, B.S.; Columbia University, M.S.

L

LaCom, Cindy, Professor, English, California State University, Chico, B.A., M.A.; University of Oregon, Ph.D.

Langis, Unhae, Assistant Professor, English, Yale, B.A.; University of California-LA, M.Ed.; University of California-Irvine M.A.; University of Southern California, Ph.D.

Larouere, Beth, Assistant Professor, Exercise & Rehabilitative Sciences, Slippery Rock University, B.S., M.S.; University of Pittsburgh, Ph.D.

Lasarenko, Jane, Assistant Professor, English, State University of New York at Binghamton, B.A., M.A.; Ohio State University, Ph.D.

Laux, James L., Associate Professor, Communication, Bowling Green State University, B.S., M.A., Ph.D.

Layne, Jack R., Professor, Biology, University of Evansville, B.S.; Miami University, M.S., Ph.D.

Leeds, Marcy J., Professor, Public Health and Social Work, Montclair State University, B.S.; American Dietetic Association, R.D.; Case Western Reserve University, M.S.; Rutgers University, Ph.D.

Lehman, Jeffrey R., Professor, Secondary Education/Foundations of Education, University of Delaware, B.S.; Pennsylvania State University, M.S.; University of Florida, Ph.D.

Leight, Joanne M., Associate Professor, Physical Education, Slippery Rock University, B.S., M.S.; Duquesne University, Ed.D.

Leininger, Christopher P., Instructor, Parks and Recreation/Environmental Education, Iowa State University, B.A.

Levy, Alan H., Professor, History, Washington and Jefferson College, B.A.; University of Wisconsin at Madison, M.A., Ph.D.

Lim, Min, Assistant Professor, Chemistry, Chungnam National University, B.S.; University of Houston, Ph.D.

Lindenberg, Kelly, Associate Professor, School of Physical Therapy, College Misericordia, B.S., M.S.; Duquesne University, Ph.D.

Lindgren, William F., Professor, Mathematics, South Dakota School of Mines and Technology, B.S., M.S.; Southern Illinois University, Ph.D.

Lisciandro, Joseph A., Assistant Professor, Professional Studies, Slippery Rock University, B.A.; Clarion University, M.B.A.; C.P.A.

Lisco, John F., Associate Professor, Parks and Recreation/Environmental Education, Mesa State College, B.S.; University of Memphis, M.S., Ed.D.

Liu, Wenhao, Associate Professor, Physical Education, Wuhan Institute of Physical Education (China) B.Ed.; University of Northern Iowa, M.A.; University of Georgia, Ph.D.

Livingston, Jack, Associate Professor, Geography, Geology and the Environment, Augusta College, B.A.; University of Kansas, M.A., Ph.D.

Longwell, April, Assistant Professor, Honors Program, University of Maryland, B.A.; Edinboro University, M.S.

Love, Gerard, Associate Professor, Counseling and Development, St. Norbert College, B.A.; University Missouri, M.A.; Vanderbilt University, Ed.D.

Love, Heather, Instructor, Library, Westminster College, B.A., University of Pittsburgh, M.L.I.S.

Lubinski, Susan L., Associate Professor, Professional Studies, Youngstown State University, B.S.B.A.; CPA; Grove City College, M.S.; Duquesne University, J.D.

Lueken, Paul, Assistant Professor, Physical Education; Director of Athletics, Earlham College, B.A.; St. Thomas University, M.S.

Lusher, Anna, Associate Professor, School of Business, Marshall University, B.A., M.B.A.; West Virginia University, Ed.D.

Lynn, Jeffrey, S., Associate Professor, Exercise and Rehabilitative Sciences, Kent State University, B.A.; M.A.; Ph.D.

M

Macmillan, Sean, Assistant Professor, Art, Edinboro University, B.F.A.; University of Kansas, M.F.A.

Mahmood, Rizwan, Professor, Physics, University of Karachi (Pakistan), B.Sc., M.Sc.; University of Texas at Arlington, M.A.; Kent State University, M.A., Ph.D.

Mani, Jaya, Instructor, Dance, University of Madras, B.A.; Slippery Rock University, M.S.

Mani, S. B., Professor, Professional Studies, Delhi University (India), B.Sc., M.Sc.; Cornell University, M.A.; Syracuse University, Ph.D.

Marchand, Richard, Associate Professor, Mathematics, Clarion University, B.S.; University of Virginia, Ph.D.

Marshall, Jessica A., Assistant Professor, Library, Grove City College, B.S.; University of Pittsburgh, M.L.S.

Martin, Richard T., Professor, Political Science, Ohio State University, B.A.; Kent State University, M.A., Ph.D.

Martin-Elkins, Carol, Professor, School of Physical Therapy, University of Wyoming, B.S.; State University of New York at Syracuse, Ph.D.

Massey, Catherine, Associate Professor, Psychology, University of Central Florida in Orlando, B.S.; West Virginia University, M.A., Ph.D.

Matambanadzo, Michael A., Assistant Professor, History, Fordham University, B.A., M.A.

McCarren III, Joseph, Associate Professor, English, Alfred University, B.A.; Slippery Rock University, M.A.; Indiana University of Pennsylvania, Ph.D.

McCarthy, Larry J., Assistant Professor, Professional Studies and Assistant to the Dean, College of Business, Information and Social Sciences Slippery Rock University, B.S.; University of Pittsburgh, M.B.A.; C.P.A.

McCollin, Michelle, Associate Professor, Special Education, Syracuse University, B.A.; Long Island University, M.S.; Southern University and A & M College, Ph.D.

McIntosh, Daniel, Associate Professor, Political Science, University of Missouri at Columbia, B.A.; University of Denver, M.A., Ph.D.

McKinley, Betsy A., Associate Professor, Physical Education, Lock Haven University, B.S.; Slippery Rock University, M.S.; Temple University, Ph.D.

Meixner, Brian., Assistant Professor, Music, University of Kentucky, B.M.; West Illinois University, B.A.; University of Northern Texas, M.M., D.M.A..

Merhaut, Joseph, Assistant Professor, Special Education, Slippery Rock University, B.Ed.; California University of PA, M.Ed.; Duquesne University, Ed.D.

Mezli, I. T., Assistant Professor, English, University of Texas (Austin), B.A.; M.A.; Ohio State University, Ph.D.

Michaels, Margaret, Associate Professor, School of Physical Therapy, MacMurray College, B.A.; Old Dominion University, M.S.; University of Pittsburgh, Ph.D.

Mickle, Katherine, L., Assistant Professor, Art, Slippery Rock University, B.F.A.; Stephen Austin State University, M.A.; Ohio State University, M.F.A.

Mihalik, George J., Professor, Safety Management, Slippery Rock University, B.S., M.Ed.; West Virginia University, Ed.D.

Miller, J. Lyn, Assistant Professor, Mathematics, Slippery Rock University, B.S.; University of Maryland, Ph.D.

Miller, MaryBeth, Associate Professor, Physical Education, Western Michigan University, B.S.; University of Pittsburgh, M.Ed., Ph.D.

Monfore, Dorothea (Mike), Assistant Professor, Special Education, University of North Texas, B.S., M.Ed., Ph.D.

Mong, Donald, Assistant Professor, School of Business, Haverford College, B.A.; University of Pittsburgh, M.B.A., J.D.

Montero, Jessamine, Assistant Professor, Academic Services, Marshall University, B.A., M.A.; Point Park College, M.B.A.; Indiana University of Pennsylvania, Ed.D.

Morrice, Rebecca R., Assistant Professor, Theatre, University of Illinois, B.A., M.F.A.

Mraz, Mark, Assistant Professor, Secondary Education/Foundations of Education, Indiana University of Pennsylvania, B.S., M.A.; Pennsylvania State University, Ph.D.

Mukherjee, Krishna, Assistant Professor, Physics, University of Calcutta (India), B.Sc., M.Sc.; University of Kansas, M.S.; University of Pittsburgh Ph.D.

Mullins, Paul, Professor, Computer Science, Youngstown State University, B.E., M.S.; University of Pittsburgh, Ph.D.

N

Nard, Melissa, Assistant Professor, Counseling Center, Washington and Jefferson College, B.A.; Nova Southeastern University M.S., D. Psy.

Nichols, Randall A., Associate Professor, Physical Education, Slippery Rock University, B.S.; M.Ed.; West Virginia University Ed.D.

Niebauer, Christopher, L., Associate Professor, Psychology, Kent State University, B.A.; University of Toledo, M.A., Ph.D.

Nolen-Holland, Nola, Assistant Professor, Dance, University of Oklahoma, B.F.A., M.F.A.

Noorbakhsh, Abbas, Professor, School of Business, University of Tehran (Iran), B.A.; University of Kansas, M.S.; Kansas State University, Ph.D.

Nugent, David, Associate Professor, School of Business, Duquesne University, B.S., M.B.A.; University of Pittsburgh, Ph.D.

O

O'Connor, Mark, Associate Professor, English, Georgetown University, B.A.; University of Houston, M.A., Ph.D.

Ogoreuc, Robert E., Assistant Professor, Physical Education, Indiana University of Pennsylvania, B.S.; Slippery Rock University, M.Ed.

Orvis, Bruce T., Associate Professor, School of Business, University of Nebraska, B.S.; University of Oklahoma, M.B.A.; University of Oklahoma, Ph.D.

P

Paradis, Lia, Assistant Professor, History, Hunter College of the City-University of New York, B.S.; State University of New Jersey-Rutgers, Ph.D.

Parsons, Susan, Assistant Professor, Academic Services, Pennsylvania State University, B.A.; Slippery Rock University, M.A.

Payne, Ursula O., Professor, Dance, Slippery Rock University, B.A.; Ohio State University, M.F.A.

Peacock, J. Sunita, Associate Professor, English, University of Madras (India), B.A.; University of North Texas, M.A.; Southern Illinois University, Ph.D.

Pearcy, Thomas L., Professor, History, Purdue University, B.A., M.A.; University of Miami, Ph.D.

Pease-Hernandez, Christine, Assistant Professor, Communication, Saginaw Valley State University, B.A.; Central Michigan University, M.A.; Bowling Green University M.A., Ph.D.

Permenter, Rachela R., Professor, English, Kent State University, B.S., M.A.; Northern Illinois University, Ph.D.

Pchetteplace, Gordon R., Associate Professor, Theatre, Lawrence University, B.A.; University of Montana, M.F.A.

Pierce, Patricia, Professor, Exercise and Rehabilitative Sciences, Slippery Rock University, B.S., University of Pittsburgh, M.S., Ph.D.

Pitard, Derrick, G., Associate Professor, English
Washington and Lee University, B.A.; University of Oxford (England), M.Phil.; University of Rochester, M.A., Ph.D.

Pitluga, Kurt W., Assistant Professor, Art
Edinboro University, B.A.; Pennsylvania State University, M.A., Ph.D.

Pitstick, Randall, Assistant Professor, Parks and Recreation/Environmental Education, Sonoma State University, B.A., M.A.; University of Idaho, Ph.D.

Policicchio, Armand, Associate Professor, Professional Studies, St. Vincent College, B.A.; Seton Hall University, M.A.; University of Pittsburgh, Ph.D.

Port, Richard L., Professor, Psychology, Pennsylvania State University, B.S.; Ohio University, Ph.D.

Preston, James, Assistant Professor, Elementary Education/Early Childhood, Indiana University of Pennsylvania, B.Ed., M.Ed., Ed.D.

Pu, Li, Assistant Professor, Communication, Sichuan International Studies University, B.A.; Southern Illinois University, M.S.; University of Oregon, Ph.D.

Q

Quinn, Katrina, Assistant Professor, Communication, University of Notre Dame, B.A.; Indiana University of Pennsylvania, M.A., Ph.D.

R

Rehorek, Susan S., Associate Professor, Biology, University of Adelaide, Australia, B.S., Ph.D.

Reilly, Colleen, Assistant Professor, Theatre, College of Charleston, B.A.; University of South Carolina, M.A.; University of Pittsburgh M.L.I.S., Ph.D.

Rieder, Paula, Assistant Professor, History, Our Lady of Cincinnati College, B.A.; University of Illinois at Urbana, M.A., Ph.D.

Risco, Kerry S., Assistant Professor, Nursing, Sharon General Hospital School of Nursing, R.N.; Slippery Rock University, B.S.N.; University of Pittsburgh, M.S.N.; Duquesne University, Ph.D.

Roberts, Gary B., Associate Professor, Mathematics, Arkansas State University, B.S.; Purdue University, M.S., Ph.D.

Romanczyk, Ann, Assistant Professor, Psychology, State University of New York at Oswego, B.S.; De Paul University, M.A., Ph.D.

Rose, Suzanne, Associate Professor, Elementary Education/Early Childhood, Bloomsburg University, B.A.; Bucknell University, M.Ed., Pennsylvania State University, Ph.D.

Rudowsky, Catherine, Assistant Professor, Library, Ashland University, B.A.; University of Pittsburgh, M.L.S.

Russo, Mary Frances, Professor, Counseling and Development, Mary Washington College, B.S.; University of Georgia, M.S., Ph.D.

Ryan, William J., Associate Professor, Exercise and Rehabilitative Sciences, St. Louis University, B.S.N., M.S.N.; University of Pittsburgh, M.P.H.; University of Wisconsin, Ph.D.

S

Salsovic, Annette, Assistant Professor, Academic Services, Slippery Rock University, B.S.; Indiana University of Pennsylvania, M.S.

Sanftner, Jennifer L., Associate Professor, Psychology, George Mason University, B.A.; Kent State University, M.A., Ph.D.

Schiappa, Tamra, Associate Professor, Geography, Geology and the Environment, State University of New York at Plattsburgh, B.S.; University of Idaho, Ph.D.

Schnupp, Rebecca, Assistant Professor, Criminology and Criminal Justice, Emory University, B.A.; University of Cincinnati, M.S., Ph.D.

Schublova, Marketa, Assistant Professor, Exercise and Rehabilitative Sciences, Slippery Rock University, B.S.; Ohio University, M.S., Ph.D.

Scott, Erica L., Associate Professor, English, Pennsylvania State University, B.A.; Gannon University, M.A.; Miami University (Oxford, Ohio), M.A., Ph.D.

Shaevitz, Ben A., Professor, Physics, Purdue University, B.S.; Pennsylvania State University, Ph.D.

Shahidi, Ahmad, Associate Professor, School of Business, Sharif University of Technology, B.S., M.S.; University of Pittsburgh, M.A., Ph.D.

Sherwin, Daniel M., Instructor, Safety Management, Indiana University of Pennsylvania, B.S.Ed.; Slippery Rock University, M.S.Ed.; West Virginia University, M.S.

Shields, Darla, Assistant Professor, Elementary Education/Early Childhood, University of Pittsburgh, B.S.; Duquesne University, M.S.; Indiana University of Pa., Ed.D.

Shipe, Nancy, Assistant Professor, School of Physical Therapy, University of Pittsburgh, B.S., M.S.; MGH Institution of Health Professionals, D.P.T.

Shotwell, Mark A., Associate Professor, Biology, Ohio University, B.S.; University of Michigan, Ph.D.

Shumway, Jon R., Associate Professor, Art, Luther College, B.A.; University of Iowa, M.A., M.F.A.

Sigmund, William R., Professor, Biology, Kent State University, B.A.; Indiana University, Ph.D.

Silva, Judith, Assistant Professor, Library, University of California at Santa Cruz, B.A.; University of Pittsburgh, M.L.S.

Siple, Bonnie J., Assistant Professor, Exercise and Rehabilitative Sciences, Slippery Rock University, B.S.; Indiana University, M.S. ; Duquesne University, Ed. D.

Sisak, Mary E., Assistant Professor, Chemistry, County College of Morris, A.A.; Lynchburg College, B.S.; University of Virginia, Ph.D.

Skeele, David B., Professor, Theatre, Marlboro College, B.A.; Smith College, M.A.; University of New Orleans, M.F.A.; University of Pittsburgh, Ph.D.

Slanina, Anne, Associate Professor, Elementary Education/Early Childhood, Youngstown State University, B.S., M.S.; Kent State University, Ph.D.

Slaughterback, Louis, Instructor, Physical Education, Slippery Rock University, B.S., M.Ed.

Smiley, Laura, Associate Professor, Theatre, Catholic University of America, B.F.A.; University of Pittsburgh, M.F.A.

Smith, Jane M., Assistant Professor, Library, Grove City College, B.A.; Clarion University, M.S.

Smith, Jeffrey, Instructor, Physical Education, Slippery Rock University, B.S., M.S.

Smith, Kimberly, Assistant Professor, Exercise and Rehabilitative Sciences, Slippery Rock University, B.S.; University of Pittsburgh, M.S., Ph.D.

Smith, Langdon, Associate Professor, Geography, Geology and the Environment, University of Wyoming, B.S.; University of Kansas, Ph.D.

Smith, Timothy D., Professor, School of Physical Therapy, Carnegie-Mellon University, B.F.A.; University of Pittsburgh, M.A., Ph.D.

Snow, Julie, Associate Professor, Geography, Geology and the Environment, Wittenberg University, B.S.; University of Rhode Island, M.S., Ph.D.

Snyder, Robert C., Associate Professor, Elementary Education/Early Childhood, Slippery Rock University, B.S.; Slippery Rock University, M.Ed.; University of Pittsburgh, Ph.D.

Soeder, Pamela J., Professor, Elementary Education/Early Childhood, Mount Senario College, B.S.; University of Wisconsin at Madison, M.A., Ph.D.

Solano, Roger, Associate Professor, School of Business, Universidad Del Zulia, B.S.; New Jersey Institute of Technology, M.S., Ph.D.

Solomon, Nanette K., Professor, Music, Yale College, B.A.; Yale School of Music, M.M.; Boston University, D.M.A.

Spadine Taylor, Lynn M., Assistant Professor, Physical Education, State University of New York at Cortland, B.S.E., M.S.

Stapleton, Michael G., Associate Professor, Geography, Geology and the Environment, Wilkes College, B.S.; University of Delaware, Ph.D.

Steele, Stacey G., Assistant Professor, Music, Wichita State University, B.M.E.; North Texas State University, M.M.

Steglich, Carolyn S., Professor, Biology, University of Texas, B.A.; University of Wisconsin at Madison, Ph.D.

Stewart, Thomas D., Associate Professor, Communication, Slippery Rock University, B.A.; University of Iowa, M.A., Ph.D.

Strain, Steven, Associate Professor, Biology, Memphis State University, B.S.; Oregon State University, Ph.D.

Strano, Donald, Professor, Counseling and Development, Pennsylvania State University, B.A., Texas Tech University, M.Ed., Ed.D.

Strickland, K. James, Professor, English, Le Moyne College, B.A.; Kent State University, M.A.; Indiana University of Pennsylvania, Ph.D.

Strickland, Kathleen M., Professor, English and Interim Dean College of Education, State University of New York College at Buffalo, B.S.Ed., M.Ed.; Indiana University of Pennsylvania, Ph.D.

Stromp, LaLanda M., Assistant Professor, Parks and Recreation/Environmental Education, Kent State University, B.S.; Indiana University, M.S.

Stuart, Jason, Assistant Professor, English, Immaculata University, B.A.; Slippery Rock University, M.A.; Case Western Reserve University, Ph.D.

Stuhldreher, Wendy L., Professor, Health and Safety; Assistant to the Dean, College of Health, Environment, and Science Kent State University, B.S., M.S.; University of Pittsburgh, Ph.D.

Swarts, Valerie, Professor, Communication, Wichita State University, B.A.; Colorado State University, M.A.; University of Iowa, Ph.D.

Sykora, Sharon A., Associate Professor, Political Science, Cleveland State University, B.A.; University of Maryland, M.A., Ph.D.

Szymanski, Andrzej, Professor, Mathematics, Jagiellonian University (Poland), B.S.; Silesian University (Poland), M.S., Ph.D.

T

Tallapally, Pavani., Associate Professor, School of Business, Osmania University, B.A.; Indiana University, M.B.A.; Louisiana Tech University, Ph.D.

Tannery, Frederick J., Associate Professor, School of Business, Pennsylvania State University, B.S.; University of Pittsburgh, Ph.D.

Teodoro, Melissa, Assistant Professor, Dance, Pontificia Universidad Javeriana, B.A.; University of California, M.A.; University of Hawaii, M.F.A.

Thangiah, Sam R., Professor, Computer Science, Slippery Rock University, B.S.; North Dakota State University, M.S., Ph.D.

Thurkettle, Mary Ann, Associate Professor, Nursing, Case Western Reserve University, B.S.N.; Ohio State University, M.S.; Case Western Reserve University Ph.D.

Tichy, Charles, Professor, Modern Languages and Cultures, Arizona State University, B.A., M.A.; Ohio State University, M.A.; University of Pittsburgh, Ph.D.

Tomasic, Diane, Associate Professor, Nursing, Point Park College, B.S.; Duquesne University, M.S.Ed.; University of Pittsburgh, M.N.; West Virginia University, Ed.D.

Trapp, Caryn, Assistant Professor, Secondary Education/Foundations of Education, Michigan State University, B.A.; Georgia SW College, M.Ed.; University of Phoenix, Ph.D.

Tuten, Eric, Assistant Professor, History, Brigham Young University, B.A.; University of Utah, M.A., Ph.D.

U

Utsch, Glenn, Assistant Professor, Music, West Chester University, B.M.; Manhattan School of Music, M.M., Teachers College, Columbia University, M.M.Ed., Ed.D.

V

Valencia, Jesus M., Associate Professor, School of Business, University of Pittsburgh, B.A., M.A., Ph.D.

Valentine, David W., Professor, Computer Science and Interim Dean College of Business, Information and Social Sciences
Clarkson University, B.S.; Trinity Evangelical Divinity School, M.D.; State University New York-Buffalo, Ph.D.

Valera, Manuel, Assistant Professor, Physics, Universidad Simon Boliver, Venezuela, B.S.; University of Cincinnati, M.S., Ph.D.

Vallin, Robert W., Professor, Mathematics, University of Maryland, B.S.; North Carolina State University, M.S., Ph.D.

Veronie, Linda., Assistant Professor, Psychology, University of Toledo, B.A.; Oklahoma City University, M.A.; Kent State
University, Ph.D.

Vetere, Mary T., Associate Professor, Elementary Education/Early Childhood, Indiana University of Pennsylvania, B.S.; Ball State
University, M.A., Indiana University of Pennsylvania, Ed.D

Viola, Paulette, Professor, Parks and Recreation/Environmental Education, Edinboro University, B.S.Ed.; Slippery Rock University,
M.S.Ed.; University of Pittsburgh, Ph.D.

Vogel, Matthew, Assistant Professor, Special Education, St. Bonaventure University, B.S.; Slippery Rock University, M.A.; Robert
Morris University, Ph.D.

W

Wajda, Theresa A., Associate Professor, School of Business, University of Pittsburgh, B.A.; M.Ed.; Ph.D.

Walker, Christophas H., Assistant Professor, Academic Services, University of Pittsburgh, B.A.; M.Ed.; Ph.D.

Walsh, M. Christine, Assistant Professor, Elementary Education/Early Childhood, University of Pittsburgh, B.A.; M.Ed.; Ph.D.

Walters, Amy R., Assistant Professor, Communication, West Virginia University, B.A.; M.S.; University of Pittsburgh, Ph.D.

Wang, Jialing, Associate Professor, Geography, Geology and The Environment, Nanjing University (China), B.S., M.M.S.; Florida
State University, Ph.D.

Webb, Fred, Associate Professor, School of Business, Ball State University, B.S.; Massachusetts Institute Of Technology, M.S.;
Duquesne University, Ed.D.

Wells, Deborah, Professor, Elementary Education/Early Childhood, Auburn University, B.A., B.S., M.Ed.; Arizona State University,
Ph.D.

Werner, Judy A., Associate Professor, Elementary Education/Early Childhood, Michigan State University, B.A.; Queens College,
M.Ed.; University of South Carolina, Ph.D.

Westman, Barbara, Assistant Professor, Art, Schola Posnaniensis, School of Applied Art, B.A.; Academy of Fine Arts-Poland, M.F.A.

White, Carlis C., Assistant Professor, History, Johnson Bible College, B.A.; Southern Baptist Theological Seminary, M.D.; University
of Illinois, M.A., Ph.D.

White, Frederick, Associate Professor, English, Azusa Pacific University, B.A., M.A., University of California at Los Angeles, Ph.D.

Whitfield, Deborah L., Professor, Computer Science, Youngstown State University, B.S.; University of Pittsburgh, M.S., Ph.D.

Williams, A. Lee, Professor, Elementary Education/Early Childhood, Grove City College, B.A.; Slippery Rock University, M.Ed.;
Kent State University, Ph.D.

Williams, Adelle M., Professor, Safety Management, University of Pittsburgh, B.A., M.Ed., Ph.D.

Williams, Jacqueline., Assistant Professor, Exercise and Rehabilitative Sciences, Minnesota State University, B.S.; Central
Washington University, M.S.; University of Idaho, Ph.D.

Wilson, Bradley E., Associate Professor, Philosophy, Purdue University, B.A.; University of North Carolina at Chapel Hill, M.A.,
Ph.D.

Winters, Carena, Assistant Professor, Exercise and Rehabilitative Sciences, Eastern Kentucky University, B.S.; University of Pittsburgh, M.S., M.P.H., Ph.D.

Wolf, Debra, Associate Professor, Nursing, LaRoche College, B.S.N., M.S.N.; University of Pittsburgh, Ph.D.

Wukich, Richard M., Professor, Art, Edinboro University, B.S.; New York State College of Ceramics, M.F.A.

Y

Yamamoto, Junko, Assistant Professor, Secondary Education/Foundations of Education, University of Japan, B.A.; University of Pittsburgh, M.P.A.; Duquesne University, Ed.D.

Yensick, Marilyn, Assistant Professor, Elementary Education/Early Childhood, Youngstown State University, B.S., M.A., Kent State University, Ph.D.

Yim Schanz, Youngyo, Associate Professor, Criminology and Criminal Justice, Dankook University(Korea), B.S.; Wichita State University, M.A.; Indiana University of Pennsylvania, Ph.D.

Z

Zane, Linda, Assistant Professor, Elementary Education/Early Childhood, University of Pittsburgh, B.S., M.A.; Duquesne University, Ed.D.

Zapien, Donald, Professor, Chemistry, University of Santa Clara, B.S.; University of California at Santa Barbara, Ph.D.

Zeiger, William, Associate Professor, English, Oberlin College, A.B.; Northern Illinois, M.A.; University of Southern California, Ph.D.

Zeltner, Mark, Associate Professor, Communication, Northwest Missouri State University, B.S.; University of Tulsa, M.A.; University of Missouri at Columbia, Ph.D.

Zema, M. Scott, Assistant Professor, Exercise and Rehabilitative Sciences, Slippery Rock University, B.S., M. Ed.

Zhou, Hongbo, Assistant Professor, Computer Science, Xi'an Jiaotong University (China), B.S., M.S.; Michigan State University, Ph.D.

Zieg, Michael J., Associate Professor, Geography, Geology and the Environment, Michigan State University, B.S.; John Hopkins University, M.A., Ph.D.

Zillifro, Traci, Assistant Professor, Physical Education, Kent State University, B.S.; Edinboro State University, M.A.; Pennsylvania State University, Ph.D.

Zirpoli, Susan R., Assistant Professor, Chemistry, Franklin and Marshall College, B.A.; Pennsylvania State University, Ph.D.

Zulauf, Lori S., Assistant Professor, Professional Studies, Grove City College, B.A.; Youngstown State University, M.B.A.

TOP

Faculty Emeriti

Dr. Mary Adair, Special Education

Dr. J. William McKay, Secondary Education

Dr. Robert Aebersold, President & Physical Education

Dr. Joanne L. McKeag, Physical Education

Dr. Henry J. Anna, Government & Public Affairs

Dr. Richard Medve, Biology

Dr. Patricia Archibald, Biology	Dr. Donald F. Megnin, Government & Public Affairs
Dr. David Auxter, Physical Education	Dr. James Mennell, History
Mr. Andrew Back, Curriculum/Instruction	Dr. Kenneth E. Michel, Biology
Mr. Stephen Banjak, Physical Education/ Sport Management	Dr. Catherine Morsink, Dean, College of Education
Dr. A. Paul Baroutsis, Economics/ Finance	Dr. Richard K. Myers, Special Education
Dr. Robert A. Berner, Special Education	Dr. Karin Myers-Tillotson, Secondary Education
Dr. Paul Black, Sec Education/Foundations of Education	Mr. James C. Myford, Art
Dr. Barbara Blackstone, Communication	Dr. Ramona Nelson, Nursing
Dr. Kathleen G. Boykin, Modern Languages & Culture	Dr. Diana F. Ney, Nursing
Dr. Roberta Braden, Physical Education	Dr. John Nichols, History
Dr. Frances Brannon, Physical Education	Mr. Joseph Normand, Communication
Ms. M. Kate Brennan, Music	Dr. Chester O'Bannon, Music
Mr. Charles Brochetti, Counseling & Educational Psychology	Mr. Rod Oberlin, Physical Education
Dr. Bernice Brown, Elementary Education/Early Childhood	Dr. Jerome O'Malley, English
Mrs. Leah Brown, Library	Dr. William Oman, Philosophy
Mr. Paul Bruno, Physical Education	Dr. Monica Ondrusho, Special Education
Dr. Beverly Buchert, Geography, Geology/Environment	Dr. Anthony Pagano, Mathematics
Dr. Edwin Buchert, Elementary Education/Early Childhood	Dr. Nicholas Papanikolaou, Chemistry
Dr. John L. Burtch, Elementary Education/Early Childhood	Dr. Leona Parascenzo, Nursing
Dr. Kent O. Bushnell, Environmental Geoscience	Dr. Mary Alice Paul, Elementary Education/Early Childhood
Dr. Hannah K. Case, Modern Languages & Culture	Dr. Gary Pechar, Exercise & Rehabilitative Sciences
Dr. William F. Chapman, Geography, Geology/Environment	Dr. Joyce Penrose, Nursing
Dr. Craig C. Chase, Parks & Recreation	Dr. William Polk, Elementary Education/Early Childhood
Dr. S. Andrew Chen, Counseling & Educational Psychology	Dr. Mack Porter, Counseling & Educational Psychology
Dr. Gerald Chesin, Curriculum/Instruction	Mr. Fred Powell, Physical Education/ Sport Management
Dr. Larry Cobb, Government & Public Affairs	Dr. Walter V. Powell, Political Science
Mr. Louis Como, Library	Dr. W. Gary Quast, Elementary Education
Mr. J. Robert Crayne, Art	Dr. Robert Raymond, Physical Education
Dr. Norris Crook, Counseling & Educational Psychology	Dr. Louis Razzano, Associate Provost, AVP Academic Affairs

Mr. Robert Davis, Geography/ Environment Studies	Dr. Herb Reinhard, President
Mr. Robert DiSpirito, Parks & Recreation	Dr. Anne Liedel-Rice, Elementary Education/Early Childhood
Dr. Diana Dreyer, English	Dr. Charles Rice, Elementary Education/Early Childhood
Mr. James Engli, Physical Education	Dr. Joseph H. Riggs, Communication
Mr. William Elliott, AVP Finance/Administration	Dr. Carolyn Rizza, Sociology/Anthropology/Social Work
Dr. Robert Farls, Student Teaching	Dr. Paul Rizza, Geography
Ms. Susan Ferrandiz, Library	Dr. James N. Roberts, Sec Education/Foundations of Education
Dr. Hans Fellner, Physics	Mr. F. Duane Rose, History
Dr. George T. Force, Political Science	Mr. Wallace Rose, Physical Education
Mr. Richard Freeman, Sec Education/Foundations of Education	Dr. Larry R. Rotge, History
Dr. Bernard Freyberg, Philosophy	Mrs. Lucy A. Sack, Dance
Dr. Thomas W. Gaither, Biology	Dr. John A. Sample, Psychology
Dr. Stephen Glinsky, Jr., Modern Languages & Culture	Dr. Robert O. Sattler, Special Education
Dr. Anita Gorman, English	Dr. W.G. Sayre, Chemistry & Physics
Dr. Anne M. Griffiths, Dean, College HHS & PE	Mrs. Claire Schmieler, AVP Student Affairs
Dr. Andreas Grotewold, Geography/ Environment Studies	Dr. Albert Schmittlein, English
Ms. Jean Hamilton, Physical Education	Ms. Jane Scott-Cleary, Library
Dr. Barry Hammond, Political Science	Dr. Clara C. Settlemire, History
Dr. William Herman, Physical Education	Dr. Mohan Sharma, English
Dr. C. Jay Hertzog, Dean, College of Education	Mr. Charles Shaw, Mathematics
Dr. John Hicks, Elementary Education/Early Childhood	Dr. David O. Shaw, Psychology
Dr. George Highland, Chemistry/Physics	Dr. J. William Shiner, Parks & Recreation
Dr. Judson W. Hill, Sociology/Anthropology/Social Work	Mr. Robert Schrader, Physical Education
Dr. Robert Hinds, Geography, Geology/Environment	Dr. Charles H. Schultz, Geography, Geology/Environment
Dr. Frank Hoffman, Biology	Dr. Edward Sims, Music
Dr. William Hotchkiss, Physical Education	Dr. Esther Skirboll, Sociology/Anthropology/Social Work
M. Jan Hudak, Physical Education	Dr. Hassell B. Sledd, English
Dr. James Hughes, Geography, Geology/Environment	Dr. R. Robert Stackman, History
Dr. Richard Hunkler, Computer Science	Dr. Donald Stauffer, Special Education

Mr. Stanley Johnson, Parks & Recreation	Mr. Terry Steele, Music
Dr. Thomas Kandler, Elementary Education/Early Childhood	Dr. Laurie A. Stepanian, Theatre
Mr. Elwood Karwand, Communication	Dr. Champ Storch, Academic Support Services
Dr. Brian J. Kearney, Physics	Dr. Michael L. Stowe, Social Work, Criminology & CJ
Dr. Bradley Keith, Physical Education	Dr. Constantine Stroumbakis, Sec Education/Foundations of Education
Dr. Donald Kelly, History	Dr. David C. Taylor, Chemistry & Physics
Mr. Stanley Kendzierski, Allied Health	Dr. Rhoda Taylor, Biology
Miss Edna King, Library	Dr. William Taylor, Sociology/Anthropology/Social Work
Dr. Theodore Kneupper, Philosophy	Mr. Martin Thompson, Curriculum/Instruction
Dr. Patricia M. Koehler, Special Education	Ms. Melba Tomeo, Library
Dr. Edward Kopper, English	Dr. Frank Treccase, Modern Languages & Culture
Ms. Akiko Kotani, Art	Dr. Genevieve M. Tvrdik, Biology
Dr. Parameswar Krishnakumar, Business	Dr. Lawrence Upton, Counseling & Educational Psychology
Dr. John Landrum, Counseling & Educational Psychology	Mr. Hubert Voltz, Mathematics
Dr. Allan W. Larsen, Philosophy	Dr. Donald H. Voss, Psychology
Mr. Carl Laughner, Speech/Theatre	Dr. B. Wayne Walker, Dean, College Education/Human Service Prof.
Dr. Henry Lenz, Secondary Education	Dr. Raymond V. Wallace, Theatre
Mrs. Ruth Leo, Nursing	Mr. Edward Walsh, English
Mrs. Beverly Lewis, Sec Education/Foundations of Education	Dr. Frances Walsh, Elementary Education/Early Childhood
Mr. Fred Livingston, Special Education	Dr. Albert Ward, Environmental Geosciences
Mr. Robert M. Love, Library	Dr. Donald Watson, Geology
Dr. Lawrence F. Lowing, Jr., Allied Health	Dr. Robert J. Watson, Student Life
Mr. Francis A. Manfredi, Special Education	Dr. Marie Wheaton, Physical Education
Mr. Joseph Marks, Developmental Programs	Ms. Ruth Wilhelm, Curriculum/Instruction
Dr. Frank Mastrianna, Dean College of BISS	Ms. Carolyn Williams, Physical Education
Mr. Richard D. Maxwell, Physical Education	Dr. Patricia Zimmerman, Physical Education
Dr. Clair W. McClure, Mathematics	Dr. Charles Zuzak, Dean, College of Arts & Sciences
Dr. Mary Agnes McKay, Elementary Education	

Financial Aid

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. Both state and federal 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.

Click a link to be taken to the entry below.

- How Do I Apply For Financial Aid?
 - Financial Aid Programs
 - How is Eligibility Determined?
 - What Can Financial Aid Cover?
 - What Is An Expected Family Contribution (EFC)?
 - What Is My Eligibility For Financial Aid?
 - How Do I Receive Financial Aid Funds?
- Academic Progress for Financial Aid
 - Appeal Process
 - Enrollment Status Definitions
 - Satisfactory Progress
 - Maximum Time Frame for Federal Financial Aid
 - Policy on the Return of Title IV Aid
 - Special Grades and their use in Academic Progress Determination
 - Regaining Eligibility
 - Repeat of Course
 - Summer School

- PHEAA Grant
- Financial Aid for the Summer Term
- Study Abroad Programs
- Statement of Rights and Responsibilities
 - Rights
 - Responsibilities
 - Additional Eligibility Criteria
- General Comments
- University Scholarships
- Veterans Affairs

How Do I Apply For Financial Aid?

The Free Application for Federal Student Aid (FAFSA) must be completed in order to apply for financial aid available for attendance at Slippery Rock University in addition to institutional scholarships that are based in part on financial need. Students are able to complete the FAFSA beginning January 1 of the year preceding the next academic year. It is recommended that the application be completed before May 1. The federal school code for Slippery Rock University is 003327; this code is required on the FAFSA. When completing the FAFSA, students interested in being considered for student employment and/or federal student loans must indicate interest in these aid programs when answering the work and loan-related questions.

In addition, students interested in receiving assistance from either the Federal Stafford Loan or PLUS program must submit the appropriate loan promissory note at least six to eight weeks in advance of their first date of attendance at SRU.

Financial Aid Programs

Financial aid at Slippery Rock University includes grant, scholarship, loan, and employment programs. A detailed list of scholarship opportunities for students is found in the "University Scholarships" section of this catalog and also on the SRU Financial Aid Office webpage. In addition to the brief descriptions of federal financial aid programs below; additional details can be found at www.studentaid.ed.gov

Federal Pell Grant - Pell Grants are federal funds available to undergraduates with exceptional financial need; the amount of the grant is based on a student's enrollment, cost and financial need. Eligibility is determined based on the results of the Free Application for Federal Student Aid.

Federal Supplemental Educational Opportunity Grant (FSEOG) - FSEOG funds are grant funds available to undergraduate students with a high degree of financial need. Students may be eligible for this grant if they already qualify for the Federal Pell Grant.

Federal Academic Competitiveness Grant (ACG) - These grant funds are available to eligible freshmen and sophomores who receive Pell Grants and who have also completed a rigorous high school program of study as outlined on the U.S. Department of Education website for students. (This program is currently funded only through 2010-2011.)

National Science & Mathematics Access to Retain Talent (SMART) Grants - SMART funds are awarded to eligible juniors and seniors who receive Pell Grants, are enrolled in an eligible major, and who maintain a cumulative QPA of at least a 3.0.

The Teacher Education Assistance for College and Higher Education (TEACH) Grant - These grants are designated for academically-eligible students enrolled in specific bachelor's and master's degree programs in SRU's

College of Education who intend to teach in a public or private elementary or secondary school that serves students from low-income families. This program requires a service obligation.

Pennsylvania State Grant - The Pennsylvania Higher Education Assistance Agency (PHEAA) provides grant assistance to eligible Pennsylvania residents. PHEAA Grant funds are awarded to undergraduate students on the basis of financial need. Additional details are available at www.pheaa.org

PHEAA-Administered Scholarships - PHEAA makes available a number of scholarships to Pennsylvania residents. Details about such scholarships are available at www.pheaa.org

Other State Grants - Several states allow their students to use state grant funds to attend colleges outside of their home states. Out-of-state students should contact their state grant agency in their home state for more information on eligibility guidelines.

Student Employment - Part-time student employment at SRU is available through a variety of funding sources. Students employed on campus are paid on a bi-weekly basis and are paid at least minimum wage. Job opportunities are located throughout the campus. Available positions are publicized through the Office of Career Services.

- Federal Work Study (FWS) is based on financial need and may be available to eligible students.
- Community Service Work Study is available to a limited number of FWS-eligible students. Several areas on campus offer Community Service positions including the SGA Child Care Center, the Institute for Community Service and Learning, the Macoskey Center, the Aebersold Recreation Center and the Women's Center. Additional information is available from the SRU Financial Aid Office.
- State Student Employment is available to students who do not demonstrate financial need as determined by the FAFSA and is funded by institutional funds.

Federal Perkins Loan - This is a low interest (5%) loan that is offered by SRU through the use of federal funds. Typically, this loan is awarded to undergraduate students who demonstrate financial need; these do not require repayment of principal or interest while the student remains enrolled at least half-time.

Federal Stafford Loan - This is a long-term, low interest loan that students may elect to use to assist them with their educational expenses. The amount of loan and type of loan available is dependent upon the individual student's costs, resources, year in school, and financial need. A student may qualify for Subsidized or Unsubsidized Stafford Loans, or both.

- Subsidized loans are offered to students who demonstrate financial need; these do not require repayment of principal or interest while the student remains enrolled at least half-time.
- In contrast, unsubsidized loans require either the repayment of interest only (on a quarterly basis) or the capitalization of interest during periods of enrollment.
- The student officially enters repayment of an Unsubsidized or Subsidized Federal Stafford Loan following a grace period after graduation or cessation of at least half-time enrollment. Contact the Office of Financial Aid for further information regarding repayment of Federal Stafford Loans.

Federal PLUS Loans - The PLUS Loan is available to parents of dependent students and to graduate students. Borrowers may access funds up to the cost of education minus any other financial aid.

SRU Scholarships - Institutional scholarships are awarded based upon a variety of criteria. Detailed information about institutional scholarships can be found on the SRU Financial Aid Office webpage.

Private Sources of Funding - The SRU Financial Aid Office encourages students to seek out assistance from private organizations and agencies. Links to private scholarship database searches can be found on the SRU Financial Aid Office webpage.

How is Eligibility Determined?

Students qualify for most financial aid based on their financial need. A student's financial need is based on a simple formula:

$$\begin{array}{r} \text{Cost of Attendance} \\ - \text{Expected Family Contribution} \\ = \text{Financial Need} \end{array}$$

What Can Financial Aid Cover?

The Office of Financial Aid calculates an average cost of attendance for each student based on their program of study and their in-state or out-of-state status. Typically, the cost of attendance consists of costs for tuition, fees, room, board, books, travel and other associated educational costs.

What Is An Expected Family Contribution (EFC)?

The EFC is calculated through the completion of the Free Application for Federal Student Aid. This figure reflects the Federal estimate of what a family and/or student can afford to contribute toward a year of college. Students and families are able to calculate an estimated EFC through the FAFSA4caster available at www.fafsa.ed.gov

What Is My Eligibility For Financial Aid?

The level of financial need determines the amount of eligibility that a student has for financial aid. It is used by the Office of Financial Aid to determine eligibility for specific programs. An award letter listing eligibility for financial aid is sent to each student after the determination of financial need.

Students or families who experience hardship due to disability, death, decrease in income, loss of benefits, etc., should contact the Office of Financial Aid. A review of their eligibility for financial aid may be performed based on their change in status.

Financial aid applicants may contact the Office of Financial Aid for specific program eligibility criteria.

How Do I Receive Financial Aid Funds?

The Office of Student Accounts is responsible for disbursing all financial aid with the exception of the Federal Work Study Program under which students are paid on a bi-weekly basis. A student's financial aid, excluding Federal Work Study, is applied directly to contracted university charges (tuition, fees, room and board). Any excess funds will be refunded to the student according to the refund policies set forth by the Office of Student Accounts.

Academic Progress for Financial Aid

The Higher Education Act of 1965 as amended by Congress mandates institutions of higher education to establish minimum standards of "satisfactory progress" for students receiving Federal financial aid. These standards apply to all Federal Title IV aid programs including the Federal Pell Grant, Federal Supplemental Educational Opportunity Grant, Federal Perkins Loan, Federal ACG Grant, National SMART Grant, Federal TEACH Grant, Federal Stafford Loans, Federal PLUS Loans and Federal Work-Study.

Regardless of whether the student had previously received Title IV financial aid, the minimum requirements for students to meet the University's definition of academic progress for Federal financial aid purposes are as follows:

Enrollment Status Definitions for Purposes of Determining Satisfactory Progress

Full Time: Undergraduate students enrolled for at least 12 credits per semester and graduate students enrolled for at least 9 credits per semester are considered to be full-time.

Three-Quarter Time: Undergraduate students enrolled for at least 9 but less than 12 credits per semester are considered to be three-quarter time.

Half Time: Undergraduate and graduate students enrolled for at least 6 but less than 9 credits per semester are considered to be half-time.

Process of Determining Satisfactory Progress

Each student will be measured for sufficient progress annually in May after spring grade processing. This evaluation will determine if the student has sufficient progress to be eligible for Title IV funding for the next financial aid award year. Students who have not met the minimum requirements will receive a letter informing them that they are not eligible for continued financial aid.

The standards of satisfactory progress have both a quantitative and qualitative measure that must be met. Slippery Rock University has established the following quantitative and qualitative standards that must be met:

Quantitative Measure (credits earned):

- Full time students must complete a minimum of 24 (18 if a graduate student) new credits by the end of each academic year.
- Three quarter time students must complete a minimum of 18 new credits by the end of each academic year.
- Half time students must complete a minimum of 12 new credits by the end of each academic year.
- Students enrolled less than half time must complete the number of credits for which enrolled by the end of each academic year.

Qualitative Measure (QPA):

- Students who have completed 2 academic years or its equivalent must have at least a 2.0 SRU cumulative quality point average (QPA) at the end of each academic year.
- Students who have not completed 2 academic years or its equivalent must have at least a 1.5 SRU cumulative quality point average (QPA) at the end of each academic year.
- Graduate students must have at least a 3.0 SRU cumulative quality point average (QPA) at the end of each academic year.

January Admits : If an undergraduate student is admitted in January, that student must complete at least 12 credits for full time study (9 credits for three quarter time study, 6 credits for half time study and all credits for less than half time) and meet the minimum quality point average requirement to have continued financial aid eligibility. If the student is deficient in credits or quality point average, the student will receive a warning letter. Aid will be continued for the Fall Semester, however, at the end of the Fall Semester, the student will be checked for the completion of the appropriate number of credits based upon the enrollment status and appropriate quality point average. Federal financial aid will be continued for those students who have met both requirements. Students who have not met both requirements will be notified of their ineligibility for Federal financial aid and informed of the options to regain eligibility.

Graduate students admitted in January who fail to meet QPA or credit requirements by the end of the Spring Semester will receive the same warning letter as listed above. Aid will be continued for the Fall Semester, however, progress will be evaluated again at the end of the Fall Semester.

Readmitted Students : If a student is readmitted to the University, satisfactory academic progress will be based on the student's previous attendance at SRU. Students who have not met the minimum requirements will be notified of their ineligibility for Federal financial aid and informed of the options to regain eligibility.

Maximum Time Frame

Undergraduate students may receive Federal financial assistance for no more than 150% of the established length of their program of study. SRU has defined this maximum time frame as 6 years for full time students, 9 years for three-quarter time students and 12 years for half-time students. A year consists of fall, spring and summer. The maximum time frame will be adjusted based on the student's enrollment status. Credits transferred from other institutions to SRU count toward the maximum time frame. A year for maximum time frame and credits transferred is defined as thirty-six credits. Students changing majors, pursuing a double major or pursuing a second undergraduate degree may be eligible for an extension of time on an individual review basis.

Special Grades and their use in Academic Progress Determination

I - Incomplete - Student will receive no credit for an "I" grade. If, however, the incomplete grade is resolved by the close of the following semester and a passing grade is received, the credits will be counted.

NC - No Credit - No credits received. **W - Withdrawal** - No credits received.

AU - Audit - No credits received. **P - Pass** - Student receives credits, but QPA is not affected.

X - No grade given - No credits received.

Repeat of Course

The last grade earned is always used in calculating the QPA. If the student failed the course the first time but passes it the second time, the appropriate number of credits will be received after the second attempt. If, however, the student passed the course the first time, repeats it an attempt to improve the QPA but receives a failing grade, the appropriate number of credits will be deducted from the cumulative credits earned total. Maximum hours earned for any course cannot exceed the number of credits listed for that course in the catalog. If a student is repeating a course that they previously received a passing grade in, the completion of that course cannot be used in making up the academic progress deficiency.

Summer School

If a student is deficient in credits and/or QPA at the end of the academic year, the student may use the following summer to eliminate the deficiency. Summer work need not be completed at Slippery Rock; but students should be aware that:

1. **Transient clearance** must be obtained **prior** to taking any courses elsewhere if the credits are to be transferred back to SRU.

2. **Only credits transfer** back to Slippery Rock, **grades do not**. If the student's deficiency is in QPA, taking courses at another institution **will not** make up a QPA deficiency. The Office of Academic Records and Summer School must accept the credits in order to be counted towards satisfactory progress.

If the student chooses not to attend summer school to make up the deficiency, but opts instead to make up the deficiency during a subsequent semester, only credits successfully completed **over and above the required minimum number of credits based on enrollment status** will work toward eliminating the deficiency, however, financial aid will not be processed for that semester.

Appeal Process

A student with mitigating circumstances may submit an appeal in regard to an adverse satisfactory academic progress determination. In general, mitigating circumstances can include, but are not limited to, illness, injury, death of relative or friend, difficulties with accommodations for students with disabilities, and adversity due to unforeseen events. The academic progress appeal form is available to print from the SRU Financial Aid website and can be submitted to the Academic Progress Committee c/o SRU Financial Aid Office. Please include all relevant documentation with your appeal and submit this prior to August 1st for the fall semester or before November 1st for the spring semester. You will receive a written response to your appeal. Appeals denied by the Academic Progress Committee may be reviewed upon request by the student by the Associate Provost for Enrollment Services

Regaining Eligibility

If a student does not meet the satisfactory academic progress standards at the beginning of the academic year but later meets the standards at some point during the academic year, the student can be eligible to receive the Federal Pell Grant, FFEL funds, and if available, campus-based program funds beginning with the academic term during which the student first meets the academic progress standards. It is the student's responsibility to contact the Office of Financial Aid after they complete course work if it will allow them to regain eligibility for financial aid.

Academic Progress for the PHEAA Grant

Academic progress requirements for the Pennsylvania State Grant are communicated directly to recipients with their state grant notification by PHEAA (Pennsylvania Higher Education Assistance Agency).

Financial Aid for the Summer Term

Students may be able to qualify for financial aid for the summer term dependent upon their enrollment status, eligibility for aid, and the availability of financial aid funds. The following sources of financial aid may be available for the summer term: Federal Pell Grant, Pennsylvania State Grant, Federal Work Study, Federal Stafford Loans and Federal PLUS loans. Students are encouraged to contact the Office of Financial Aid in the early spring regarding application procedures for financial aid for the summer term.

Study Abroad Programs

SRU students may be eligible for financial aid funds to attend a study abroad program that is approved by SRU. Financial aid eligibility for study abroad programs is reviewed by individual request. The terms and conditions of the study abroad program have a direct impact upon the student's eligibility for financial aid. Students interested in financial aid for a study abroad program should contact the Office of Financial Aid.

Policy on the Return of Title IV Aid

The University is required by federal statute to recalculate federal financial aid eligibility for students who withdraw, drop out, are dismissed, or take a leave of absence prior to completing 60% of a payment period or term. The federal Title IV financial aid programs must be recalculated in these situations.

If a student leaves the institution prior to completing 60% of a payment period or term, the office of student accounts recalculates eligibility for Title IV funds. Recalculation is based on the percentage of earned aid using the following Federal Return of Title IV funds formula:

Percentage of payment period or term completed = the number of days completed up to the withdrawal date divided by the total days in the payment period or term. (Any break of five days or more is not counted as part of the days in the term.) This percentage is also the percentage of earned aid.

Funds are returned to the appropriate federal program based on the percentage of unearned aid using the following formula:

Aid to be returned = (100% of the aid that could be disbursed minus the percentage of earned aid) multiplied by the total amount of aid that could have been disbursed during the payment period or term.

If a student earned less aid than was disbursed, the institution would be required to return a portion of the funds and the student would be required to return a portion of the funds. Keep in mind that when Title IV funds are returned, the student borrower may owe a debit balance to the institution.

If a student earned more aid than was disbursed to him/her, the institution would owe the student a post-withdrawal disbursement which must be paid within 120 days of the student's withdrawal.

The institution must return the amount of Title IV funds for which it is responsible no later than 45 days after the date of the determination of the date of the student's withdrawal.

Refunds are allocated in the following order:

- Unsubsidized Federal Stafford Loans
- Subsidized Federal Stafford Loans
- Unsubsidized Direct Stafford Loans (other than PLUS loans)
- Subsidized Direct Stafford Loans
- Federal Perkins Loans
- Federal Parent (PLUS) Loans
- Direct PLUS Loans
- Federal Pell Grants for which a Return of funds is required
- Academic Competitiveness Grants for which a Return of funds is required
- National SMART Grants for which a Return of funds is required
- Federal Supplemental Opportunity Grants for which a Return of funds is required
- Federal TEACH Grants for which a Return of funds is required

Statement of Rights and Responsibilities

Rights

The student has the right to:

- Be considered for financial aid assistance; be notified of the financial aid decision; and if not awarded financial assistance, to be informed as to the reason for denial.
- Appeal financial aid decisions to the Associate Provost for Enrollment Services.
- Be informed of the financial aid programs available and the required application materials.

Responsibilities

The student is responsible for:

- Submitting the appropriate application forms within published deadline dates.
- Using all refunds of financial aid funds for expenses related to the student's education.
- Following the requirements and repayment schedules of educational loan programs.
- Informing the Office of Financial Aid of all grants, scholarships, or other funds received for their educational costs from outside organizations.

Additional Eligibility Criteria

In order to be considered for financial aid, student applicants must:

- Be a U.S. citizen or eligible non-citizen.
- Be registered with Selective Service (if required).
- Be working toward a degree or teacher certification at SRU.
- Not owe a refund on a federal grant or be in default on a federal educational loan.

General Comments

- All aid programs require that the student make satisfactory academic progress as detailed in the financial aid section of the catalog.
- The financial aid office should be contacted for instructions when a major change in the family's financial condition occurs such as death, disability, retirement, or loss of job.)
- Students and families are encouraged to contact the financial aid office at 724-738-2044 or via e-mail at financial.aid@sru.edu with any questions they have about the financial aid information provided in this catalog.
- The information provided in this section was accurate at the time of publication. Fees, regulations, eligibility requirements, etc. are subject to change.

University Scholarships

Athletic Scholarships are administered by the Intercollegiate Athletic Department and awarded by the coaches of each particular sport. Contact the specific coach at the Intercollegiate Athletic Office, 102 Morrow Field House, 724-738-2021.

Army ROTC scholarships are available at Slippery Rock University that cover tuition, fees, books, and a monthly cash allowance. Contact the SRU Military Science Department at 724-738-2019 for details.

Veterans Affairs

The financial aid office coordinates all paperwork for veterans or dependents of veterans who are eligible for Department of Veterans Affairs educational benefits. Qualified individuals should apply at least eight weeks prior to the first day of classes. An original application for benefits and certified copy of DD214 (discharge paper), or VA form 2384 (Notice of Basic Eligibility), or copy of Kicker contract may be required. The Office of Financial Aid should be contacted for additional information regarding DVA educational benefits, financial aid, tutorial assistance, and specific forms. General information is available at the Office of Financial Aid/Veterans Information

[^ TOP](#)

Tuition, Fees, & Financial Policies

Note: *These policies are effective for Fall 2010. The most current information on graduate tuition and fees may be found online at the Office of 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).

- [Tuition Fees & Financial Policies](#)

Student Life

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 the student life staff is to assist in the total development of each student by providing appropriate, life-centered educational programs and services. Primary concerns of the staff 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.

Click on a link to be taken to the entry below.

- [Academic Honor Societies](#)
- [Aebersold Student Recreation Center](#)
- [Athletic Programs](#)
- [Counseling Center](#)
- [Dining Accommodations](#)
- [Fraternities and Sororities](#)
- [Health Services](#)
- [ID Cards](#)
- [Multicultural Development](#)
- [Musical Organizations](#)
- [Outdoor Adventures](#)
- [Preschool Child Care Center](#)
- [Publications](#)
- [Radio and Television](#)
- [Residence Life](#)
- [Student Government Association](#)
- [Student Organizations](#)
- [Judicial Programs](#)

- Leadership - Student
 - Center for Student Leadership
 - First Year Leader Scholar Program
- Theatre Productions
- University Police
- University Program Board
- University Union
- Women's Center

Academic Honor Societies

Blue Key Honor Society recognizes primarily juniors and seniors for scholarship, leadership and service to their campus and community. Students may be in any major course of study to be invited to join, but must have a 3.0 or higher QPA.

Delta Alpha Chi is an academic/professional organization dedicated to the support and enhancement of the Student Personnel Master's Degree program. Membership is open to graduate students in the Student Personnel program.

Gamma Sigma Alpha exists to recognize the academic achievement of fraternity and sorority members at Slippery Rock University. Members of social fraternities and sororities who are juniors or seniors with a 3.5 or higher QPA may become initiated members.

Golden Key is an internationally recognized academic honor society dedicated to excellence. The society's goals are to recognize and encourage scholastic achievement and excellence in all undergraduate fields of study, to unite faculty and administrators in developing and maintaining high standards of education, to provide economic assistance to outstanding members by means of both undergraduate and graduate scholarships and to promote scholastic achievement and voluntary service. Membership is by invitation to juniors and seniors (in all fields) who have achieved a minimum 3.40 QPA.

Lambda Epsilon Delta recognizes outstanding elementary education majors. Students are required to have a 3.000 overall QPA after completing 60 semester credits in order to be eligible for membership.

Lambda Pi Eta recognizes currently enrolled full-time students in good standing majoring in communications. Students are required to have completed 45 credits with a QPA of 3.000 and nine credits in communication courses with a 3.250 QPA.

Lambda Sigma honors sophomore students who have enriched campus life. The honorary is dedicated to the ideals of scholarship, leadership, fellowship, and service. Active members are chosen according to an election system approved by the national board and are initiated in the spring.

Mu Phi Epsilon is an international, professional music fraternity whose purpose is scholarship, musicianship and the promotion of friendship. The fraternity is open to music majors who have a minimum QPA of 2.500 with a minimum QPA of 3.000 in music subjects. Members serve the department by ushering, sponsoring concerts, and participating in community outreach programs.

Order of Omega recognizes students who have attained a high standard of leadership in InterGreek activities. It strives to bring together the most representative fraternity and sorority members with faculty, staff and alumni of the institution.

Omicron Delta Epsilon is the international honor society in economics and is a member of the Association of College Honor Societies. ODE promotes excellence in academic study by restriction of membership to upper division undergraduates who have a B average and at least 12 credit hours of economics with an average grade of at least a B. ODE also publishes The American Economist, a journal that accepts manuscripts from graduate and undergraduate students majoring in economics.

Phi Alpha Theta is dedicated to promotion of research, instruction, publication, and exchange of experiences among historians. Students maintaining high academic standards in history and general studies are eligible to become members. The RHO IOTA Slippery Rock Chapter has been selected best chapter in Division III for 1989-90 and 1990-91 school years.

Phi Epsilon Kappa recognizes outstanding health and physical education majors. Fraternity objectives are to elevate the standards, ideals, and ethics of those engaged in the teaching of physical education. Membership requirements include a minimum overall QPA of 2.750 and a 3.000 QPA in all major courses.

Phi Kappa Phi, the nation's oldest and most selective all-discipline collegiate honor society, recently extended an invitation of membership to Slippery Rock University following a yearlong evaluation. SRU accepted and will initiate a chapter in the fall of 2004.

Founded in 1897, the Phi Kappa Phi society stresses academic excellence and strength of character. Membership in the society is by invitation. Invitations are extended to the top 7.5% of juniors and the top 10% of seniors, as well as outstanding members of the university's faculty, staff and administration.

Phi Sigma Pi is a national, coeducational honor society for all majors. Slippery rock University's Mu chapter was established in 1930, on the three ideals of scholarship, leadership, and fellowship. With this tripod the society strives to make all three ideals dynamic in the lives of its members. Consideration for membership requires the maintenance of a 3.000 QPA, and completion of twelve credits.

Phi Sigma Tau, the Pennsylvania Upsilon chapter of the philosophy honorary was established at Slippery Rock University in February 1984. The aims are expressed in the Greek motto "Philounton Sophian Time," meaning the "honor of those who love wisdom." The goals are to honor academic excellence and philosophical concern. Any student with a cumulative average of 3.000 in at least nine credits of philosophy courses and an overall cumulative average of 3.000 or better is eligible for membership.

Pi Delta Phi aims to recognize excellence in French studies. Members communicate French language and culture to others by tutoring and sponsoring French cultural presentations. To be eligible to join, students must have completed one French course at the 300 level, have a B average in all French courses taken and a 2.900 overall QPA.

Psi Chi aims to provide academic prestige to members by high standards for eligibility, to offer a congenial climate for professional growth, and to make active attempts at nourishing and stimulating that growth. Basis for membership: (1) completion of twelve or more credits in psychology; (2) registration for major or minor standing in psychology or related program; (3) high standards in psychology or related program; (4) good academic standing; and (5) three-fourths vote of approval for membership at a regular meeting of the chapter.

Psi Chi (Graduate Division) Graduate students are eligible to join Psi Chi after completing 18 semester credits in the counseling program, achieving degree candidacy, and obtaining a QPA of not less than 3.500.

Rho Phi Lambda honors students who have made outstanding contributions to the field of parks and recreation. Initiates must have completed 45 credits with a 3.000 QPA and nine credits of parks and recreation courses with a 3.200 QPA.

Sigma Delta Pi honors those who seek excellence in the study of Spanish language and literature. To become an active member, a student must have completed at least two Spanish courses at the 300 level and have a 3.000 QPA in Spanish and a 2.750 QPA overall.

Sigma Gamma Epsilon is an honorary scientific society devoted to the earth sciences. Delta Tau Chapter holds regular meetings, sponsors field trips, lectures and community service in the earth sciences.

Sigma Rho Delta, the dance honorary, was founded in 1967 and established at SRU in 1998. The goals are to offer service to the department, university, and community; promote unity within the department and between departments; and to further dance and art awareness.

Sigma Sigma Kappa was established in 1981 to foster academic excellence in sociology, anthropology, and social work and to encourage community service. To be eligible for membership, students must have completed nine hours in SASW courses and have achieved a 3.000 QPA. In addition, students must complete ten hours of volunteer service in the community.

Aebersold Student Recreation Center

The Office of Campus Recreation is responsible for the programming and operation of the Aebersold Student Recreation center (nicknamed the ARC), Intramural Recreational Sports Complex, Ski Lodge, Campground, ARC Outfitter and ropes course. The programs and facility have been designed to promote positive physical, mental and spiritual health.

The ARC is an 82,000 square foot, state of the art recreation facility that includes an aquatic center, 45 foot climbing wall, indoor track, five multipurpose sport courts, Rock Pride Mezzanine (RPM) multipurpose room and a lounge area complete with a computer, vending machines and TV. The ARC's Russell Wright Fitness Center (RWFC) is equipped with cardiovascular, free weight and selectorized equipment as well as a fitness lab.

Campus Recreation offers a variety of lifetime sports and fitness activities that provide exciting opportunities to "Rock'n Recreate." Within each of the program areas there Perk Programs which are provided free of charge to SRU students and ARC card holders and Pay to Play Programs requiring a program fee. Program areas consist of:

Aquatics: A variety of Perk and Pay to Play Programs offer education and fun activities. Primary programs offered include swim instructions, aquatic fun nights, aquacise, arthritic stretch and water polo.

Climbing Wall Programs: Introductory and advanced climbing clinics are offered as well as intramural and extramural bouldering competitions.

Cycle Aerobics: Students and ARC Members are invited to bring their bikes to the ARC RPM room where they can enjoy cycling year round. Bikes are hooked up to a cat-eye system and participants follow a videotape for a fun and enjoyable workout at your own pace in a group setting. This is a seasonal program.

Group Exercise: Throughout the academic year, these classes are conducted by nationally certified instructors. Classes include Zumba, Step, Boot Camp and more.

Informal Recreation: Opportunities for pick up games of basketball, volleyball, soccer, deck hockey or badminton as well as lap swimming, running/walking on the indoor track, fitness workouts or scaling the ROCK wall offer unstructured recreation at one's own convenience and leisure.

Intramural Sports: Team, individual and dual Intramural Sport leagues are offered throughout the academic year. Participants organize their own teams and compete for the coveted Intramural Championship Mugs. There are no prerequisites for experience; so all skill levels are encouraged to participate. In addition, intramural sports participation affords a fine opportunity to develop the essential qualities of leadership, cooperation, self-reliance, and sense of fair play and to form warm friendships that will endure throughout the years. Each and every SRU student is invited to participate in as many activities as he/she desires.

Kayak Roll Clinics: Offered throughout the academic year, in the Aquatic Center.

Outdoor Adventures: This program is designed to provide outdoor recreation services and educational experiences to the Slippery Rock University campus and community. The Outdoor Program trips and clinics offer opportunities to increase outdoor recreation skills, leadership development and environmental awareness.

Safety Certifications: Certification programs are offered throughout the year. Earn a certificate for life guarding, CPR, first aid or Water Safety Instruction (WSI) and increase your employment opportunities and earning power!

RWFC Programs: A number of programs aimed at preparing and enhancing participant's use of the fitness center. Included in these offerings are fitness assessments, equipment orientations, personal training, cross training classes, Rock personal training and Wright personal training.

Sport Clubs: These clubs provide opportunities for students with similar interests to participate in various sport and recreational activities. Sport Clubs bridge the gap between intramural and intercollegiate athletics by providing competition at specialized levels, participation in tournaments and opportunities to practice. New clubs can follow the

procedure to become a recognized Slippery Rock University organization registering with the Center for Student Leadership, located in the University Union.

Athletic Programs

Always a strength at Slippery Rock University, intercollegiate athletics include a varied array of sports and make an important and meaningful contribution to the total educational objectives of the university. The strength of the SRU intercollegiate athletic program is its academic accountability, as well as its desire for excellence in all 15 of the university's varsity teams. The list of competitive, intercollegiate teams for women includes cross country, tennis, volleyball, soccer, and field hockey in the fall; basketball and indoor track in the winter; lacrosse, softball and track & field in the spring. The men's sports include football, soccer, and cross country in the fall; basketball and indoor track in the winter; and baseball and track & field in the spring. Slippery Rock University is a member of the Pennsylvania State Athletic Conference (PSAC) and the National Collegiate Athletic Association (NCAA), Division II.

Counseling Center

724-738-2034

Counseling is a collaborative learning experience between the counselor and the student. It encourages students to utilize the processes of self-exploration and problem-solving to identify their strengths and challenges, prioritize challenges, and to set realistic goals. Through the process of counseling, students may increase their knowledge and understanding of themselves, their relationships with others, and with their environment. Psychologists, professional counselors, and interns are available to speak confidentially in the Student Counseling Center, located in Rhoads Hall. Emergency services are available by contacting either the McLachlan Student Health Center (ext. 2052) or University Police (ext. 3333).

Dining Accommodations

The dining program at Slippery Rock University offers a variety of services throughout the campus for students and their guests. Meal service is available somewhere on campus from 7:00 a.m. to 12:00 midnight (Sunday through Thursday) and 8:00 a.m. to 9:30 p.m. (Friday and Saturday).

Weisenfluh Dining Hall, located across from North Hall parking lot, features a food court with a variety of food stations. This all-you-care-to-eat facility offers something for everyone: hot entrees and ethnic foods, sandwich selection from the cold deli or hot grille area, pizza, vegetarian entrees, and pasta. Also available is a soup/salad bar, fresh baked breads, desserts including ice cream and frozen yogurt, and a variety of beverages. The C-Zone at Weisenfluh is a convenience store located in the lobby. Students may use cash, debit credit cards, flex funds or Rock Dollars to make purchases from a large selection of pre-packaged foods, snacks, boxed lunches, beverages, and pastries/desserts.

Boozel Dining Hall, located on the lower end of campus beside the University Union, provides a variety of menu options in a restaurant-style atmosphere. Food stations with open kitchens offer made-to-order items including: home-style and international entrees, vegetarian and healthy choice options, deli and grille sandwiches, pizza and pasta, soup/salad, and a variety of desserts and beverages. A food tolerance line provides specialty items for those customers with food allergies/intolerances. This all-you-care-to-eat facility also features Boozel Xpress a take-out option located in the lobby, special meals, holiday dinners, monotony beakers, and prize giveaways.

Coffee Shops:

- Union Cafe, located in the lobby of the University Union, offers hot and cold beverages, smoothies, bagels and bakery treats, and other grab-n-go items.
- T&B naturally, located in Bailey Library, features organic and fair-trade products, pastries and a variety of grab-n-go items. A walk-up window provides quick service for those students hurrying through the quad.
- Taylor & Byrnes @ Watson, located in the residential village, offers hot and cold beverages, smoothies, and grab-n-go products.

Rocky's Grille, located on the lower level of the University Union, is an a la carte snack bar featuring grille and deli sandwiches, wraps, pizza and pasta, salads and other grab-n-go items, desserts, and beverages. This operation also provides a delivery service to students who have contracted for a meal plan.

There are a number of meal plan options available to Slippery Rock University students. Students residing in a university-managed residence hall sign a housing/food service contract. Once signed, these become binding contracts. The only reason for exemption from the meal contract will be suspension or withdrawal from the university. Meal contracts are optional for off-campus/commuter students.

Fraternities and Sororities

Slippery Rock University's national fraternities and sororities provide opportunities for fun, friendship, and learning. The primary purposes of these organizations are 1) educational excellence, 2) campus and community service, 3) leadership development, and 4) developing a friendship network. The Greek system at Slippery Rock University has played a positive role on the campus since 1961. For more information about fraternities and sororities call The Center for Student Involvement & Leadership at 724-738-2719.

Recognized Student Greek Organizations are:

North American Interfraternity Conference Fraternities	National Pan-Hellenic Council Fraternities and Sororities
---	--

Pi Kappa Alpha	Alpha Kappa Alpha Sorority Inc.
----------------	---------------------------------

Alpha Sigma Phi

Pi Kappa Phi	Phi Beta Sigma Fraternity, Inc.
--------------	---------------------------------

Theta Xi	Zeta Phi Beta Sorority, Inc.
----------	------------------------------

Sigma Tau Gamma	Omega Psi Phi Faternity, Inc.
-----------------	-------------------------------

Kappa Sigma

Kappa Delta Rho (colony)

National Panhellenic Conference Sororities

Alpha Omicron Pi

Alpha Sigma Tau

Alpha Xi Delta

Delta Zeta

Phi Sigma Sigma

Sigma Sigma Sigma

Health Services

Located along Campus Drive in Rhoads Hall, the McLachlan Student Health Services supports the university's mission by enhancing the educational process by providing quality health care and promoting an optimal level of health and

wellness among the student body. A cost-effective, comprehensive, and holistic approach to health care is provided in a confidential setting. Health care is provided by certified registered nurse practitioners in collaboration with a licensed physician. The health center is staffed by registered nurses, 7 days/week, 24 hours/day during the academic year (except scheduled break periods). Van transportation is provided as available.

The facility includes an outpatient clinic, inpatient facilities, a health promotion department with educational resources, and a cold self care center. The student health fee covers routine care, which may include referral to the staff physician, medication, flu vaccine, in-patient care, educational material and the self-care center. The student is responsible for all additional medical expenses that may be required, such as lab tests, x-rays, referral to specialists or dentists, hospitalization and non-formulary medications. Specific questions can be addressed by calling 724-738-2052.

Medical Visit Verification

Student Health Services (SHS) will issue a Medical Visit Verification form to student who request written documentation of SHS utilization. The verification form is designed to provide the date, time and duration of treatment. It is the student's responsibility to forward the Medical Visit Verification form to their professor/employer.

Absence policies are determined by the individual professors. It is the student's responsibility to be aware of these and do their part to meet the class requirements. Student Health Services does not have the authority to excuse students from class attendance.

Health Insurance

All students are encouraged to be covered by health and accident insurance. While it is not mandatory to carry insurance, it is advisable. (*Note: International students are required to carry health insurance and must make acceptable arrangements with the Office of International Services.*) Students may already have benefits through their family plan, an independent source, or elect to purchase student accident and sickness insurance made available through the University.

Students will receive a mailing regarding the purchase of accident and sickness insurance, or information can be obtained by visiting the Student Health Center. Coverage periods are available on an annual basis and per semester.

Insurance information should be included on the Health History form and submitted to Student Health Services as part of the student's record.

HOPE Peer Education Program (Healthy Outreach through Peer Education)

The HOPE program is one health promotion method used by Student Health Services to educate the student body on issues related to student health. Students are trained to provide educational programs for fellow students on issues such as dangerous alcohol consumption, rape, stress management, nutrition, flu illness prevention, safer sex, sexually transmitted infections, and leading a healthy lifestyle. Students interested in becoming a peer educator should contact the Coordinator for Health Promotion at 724-738-4206.

Protection Connection

Developed in 1998 in response to student suggestions, the Protection Connection offers a variety of safer sex supplies to the student population. The purpose of this service is to encourage sexually active students to realize the importance of the use of barrier protection to reduce their risk of contracting a sexually transmitted infection. Supplies are available to students at cost. The Protection Connection is staffed by HOPE Peer Educators, trained students who are knowledgeable about sexually transmitted infections and risk reduction. The Protection Connection is located in the Student Health Center. Hours vary by semester. Students who have questions or are interested in purchasing safer sex supplies can contact the Protection Connection at 724-738-4888.

ID Cards

The SRU One 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. Money deposited in a Rock Dollars account (pre-paid debit account) is accessible with your ID card. When a debit account is activated, the SRU One Card works similar to a checking account in that the funds deposited into your account are debited each time you make a purchase. Rock Dollars may be used to purchase items/services in a number of locations throughout campus; SGA Bookstore, dining facilities, selected vending machines, residence hall laundry machines, selected public-access copiers, ticket purchases, and parking fees/fines. 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.

Multicultural Development

The Office of Multicultural Development is a comprehensive office that assists with the educational and holistic development of students from a diverse population. The primary focus of the office is to assist in the development of students who are able to compete in a diverse environment. It encourages exposure to the cultural richness found within color, gender, national origin, creed, lifestyle and sexual orientation. Retention and personal enhancement programs are instituted to promote academic success and professional development. For additional information call 724-738-2700.

Leadership - Student

Center for Student Involvement & Leadership

The Center for Student Involvement & Leadership, located in the University Union, serves as a resource to students who want to get involved in campus life and who wish to develop and enhance their leadership skills. Their mission is to create valuable developmental and educational opportunities through activities, programs, student organizations, special events, services, and leadership training. The CSIL staff empowers students to be leaders that affect positive change on the campus and in their communities. The Center offers a resource library; a variety of student organization services; leadership workshops, community service opportunities, alternative spring break trips, seminars, and conferences; co-curricular experience transcripts; and information about campus-wide leadership involvement opportunities. The Center provides advisement and support for the University Program Board; fraternities, sororities, and the Greek governance councils; the First Year Leader Scholar Program; Student Ambassadors; and all student organizations and advisors. For more information regarding the Center for Student Involvement & Leadership call 724-738-2092.

First Year Leader Scholar Program

The First Year Leader Scholar Program (FLSP) is an opportunity for first year students to jump start their involvement in student organizations by providing a series of seminars, and experiences that improve the participants' leadership skills and increase their visibility as emerging student-leaders on campus. Activities are structured to be interesting and fun. Applications are accepted from first-year students each September. Successful applicants begin the program in October and continue with program activities through April of their first academic year.

Musical Organizations

In conjunction with the regularly scheduled student and faculty recitals, the university maintains the following well-developed musical organizations, which contribute to the wealth of fine music on the campus:

University Choir. Some 60 to 70 men and women, chosen by audition, study and perform the great choral literature from the Renaissance to the present. Concerts are presented on campus and on tours.

Symphonic Choir. This is a large ensemble, chosen by audition, which studies and performs the great choral literature.

Chamber Singers. This is a small ensemble of well-blended voices selected and trained for the performance of madrigals and other chamber vocal music.

Marching Rocket Band. The band performs during the half time at football games, both home and away, and for other special events. Much of its music is especially arranged.

Concert Band. The Concert Band members are carefully selected to provide a balanced instrumentation of the best players. Music written for the concert band is the main repertoire. Concerts are given by this group on campus and on tour.

Jazz-Rock Ensemble. The Slippery Rock University 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. Four and one-half hours of rehearsal per week.

Orchestra. The Orchestra is a symphonic-sized ensemble comprised of strings, woodwinds, brass and percussion. All string players are eligible. Woodwind, brass and percussion players are to consult with the director prior to registering.

Chamber String Ensemble. The selected members of the Chamber String Ensemble study and perform chamber music written for strings.

Brass Ensemble. The Brass Ensemble studies and performs music for brass from all historic periods. Members are selected after auditions.

Woodwind Ensemble. The Woodwind Ensemble is a small, selected group of students who study and perform music for woodwind.

Gospel Choir. The Gospel Choir is made up of students who enjoy singing Gospel music. The group sings on campus and goes on tour.

Outdoor Adventures

The outdoor adventures office is located in the Aebersold Recreation Center. Outdoor adventures sponsors a variety of outdoor programs throughout the year. Including, rock climbing, rappelling, canoeing, white water rafting, camping and mountain biking. Also available is the rental of outdoor equipment, such as cross country skis, tents, and backpacking equipment, all at affordable prices. Programs and services are open to students, faculty and staff of SRU. For additional information call 724-738-2620 or 724-738-2883.

Preschool Child Care Center

The SRU/SGA Preschool and Child Care Center is a state-licensed, nationally accredited non-profit facility owned by Student Government Association, Inc. of Slippery Rock University. Services are available for children ages three to five of students, faculty, staff, and members of the Slippery Rock community. Children through age 12 are welcome for after-school care and for summer programs.

The Center is located at 007 McKay Education Building, and is open from 7:30 a.m. to 5:00 p.m., Monday through Friday. Service is provided year round.

Since the center is licensed by the Pennsylvania Department of Public Welfare and accredited by the National Association for the Education of Young Children, all staff members are required to meet state regulations regarding training and experience. In addition to a professional staff, the center provides a rich variety of learning experiences that promote the physical, social, and intellectual development of each child. The staff seeks to provide each child with a safe, secure, happy environment and to provide parents with the knowledge and security that their children are being given excellent care. To contact the Center personnel, please call 724-738-2102.

Publications

SLAB (formerly Ginger Hill), which is one of the oldest and most distinguished American college literary journals, provides students with the experience of producing a high quality magazine. Participating undergraduates solicit

contributions of fiction, poetry, art, and photography; select and edit works for publication; and help develop layout, design, and typography for printing. Issued annually, Ginger Hill is funded by the Student Government Association.

Stone House Review is a journal of history and folklore dealing primarily with the western Pennsylvania region but also including other areas of interest. It is a student publication supported by university and student government funds. Although faculty members assist in editing and selecting works for publication, the history honorary, Phi Alpha Theta, is in charge of the annual publication. Contributors submit papers, book reviews, cartoons, artwork, or photographs, student editors arrange for publication and set up the final proof copy.

The Rocket named the "Most Outstanding College Newspaper" by the American Scholastic Press Association is the weekly campus newspaper. Its staff is made up of student reporters and editors who write on a wide variety of matters, which directly concern the students and the university community. The paper serves as an outlet for student opinion, through the editorial and letter-to-the-editor features. This publication provides an excellent experience for students whose career goals are in the areas of journalism, advertising, layout and design, and general newspaper management.

Radio and Television

WSRU RADIO - 88.1 FM is a university radio station, which is a student-operated, network serving the campus community. Its format consists of popular contemporary artists, rock and roll, progressive rock, music and concert news, special features and local, national, and international news and sports. WSRU operates at 100 watts serving the Slippery Rock area throughout the academic year and broadcasts from 8 a.m. to midnight when classes are in session.

Television Production Studio - The all-digital Television Studio, a three-camera color facility, was recently relocated to 101 Vincent Science Hall. The newly remodeled facility has a control room, audio production, and the broadcast announcing classes use the facility as a component of the broadcast journalism curriculum. The offices of the student production organization, WSRU-TV, are also located at the facility. This student organization produces news and interview programs for distribution on the campus cable network.

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 offers varied programs that provide residence hall students opportunities to meet a wide variety of needs. Full-time professional staff members known as Assistant Directors of Residence Life supervise the on-campus residence halls. These Assistant Directors have a master's degree in college student personnel, counseling or related field. Additionally, each residence hall floor has a community assistant available to provide educational and social programs 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-owned residence halls and one apartment complex, housing approximately 2,800 men and women. Currently, one hall is assigned to women, and eight are co-educational by room, floor, or wing. Apartments and suites are single sex.

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. All residence halls have microwaves available for students to cook snacks and all have kitchen facilities for use by occupants of the building.

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 when the advanced tuition deposit is submitted. The Housing Appeals Committee will review all requests. 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, religion, color or national origin. 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 nine living learning communities for residence hall students. These communities offer an opportunity for students to apply to live with other students who share similar interests and 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.

Students must vacate their rooms within 12 hours of withdrawal from the university, unless written permission is received to remain for a longer time period.

Housing, Off-Campus

Off-campus housing is available in privately owned residence halls, apartments, rooming houses and mobile 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 on the Residence Life website. Students who live off campus may contract to eat in the university dining facilities.

The Assistant Vice President for Student Development serves as a liaison in landlord-tenant concerns for students living off campus. Students desiring assistance should contact the Assistant Vice President for Student Development's office at 724-738-2525 to schedule an appointment. The Student Government Association also retains an attorney to assist students with various concerns.

Student Government Association

All students, by virtue of their undergraduate registration and payment of fees, are members of the Student Government Association. The Student Senate is the central representative and legislative organization of the university Student Government Association. The Student Senate recommends to the university the recognition of student organizations, allocation of the General Service (Activities) Fee money, and carries out other responsibilities as included in the Student Government Association constitution.

The role of the SGA is to act as an advocacy group for the students of SRU in order to ensure a healthy academic and social environment and to provide such services to the student body.

Student Organizations

Student organizations at Slippery Rock University provide excellent opportunities for self-development and self-expression. However, the success of student activities rests largely with the students. Students are encouraged to become involved in organizations as their time and interest warrant. There are more than 140 organizations, activities, and club sports, which have been created from student interest. The scope of the organizations includes athletics, drama, music, service, social, scholastic interest, the media, academic honoraries, governance and special interest groups. A variety of resources and workshops are available to assist student organization members with developing and enhancing their leadership skills. For more information about student organizations call the Center for Student Involvement & Leadership at 724-738-2092.

Judicial Programs

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 Code of Conduct. Copies of the code are available online or in the Office of Judicial Programs (008 Old Main). For information call 724-738-4985.

Theatre Productions

The Department of Theatre sponsors an active co-curricular program, partially funded by student activity fees. Each year it presents a season of faculty-directed productions: a balance of Broadway hits, new plays, classics of the world theatre, and, occasionally, a musical.

Participation in the program is open to any interested student and is not confined to theatre majors. A chapter of Alpha Psi Omega, the national collegiate dramatics honorary, selects its members based on commitment and achievement in the theatre.

University Police

All university community members have the responsibility to create and maintain a safe environment to live, work, and learn. The university police department has the responsibility to enforce the law and university policies to maintain campus safety. In addition to the enforcement of law and university policy, the university police department performs other functions such as investigations (criminal, traffic, and accidents), open and secure buildings, provide emergency first aid, monitor and respond to fire and intrusion alarms, provide a communication desk for information and emergency purposes, patrol grounds, provide escorts, and other responsibilities as determined by the administration.

The department has a complement of 16 commissioned officers that provide 24-hour, year round coverage. All university police officers are commissioned by the Governor of Pennsylvania and carry full police powers pursuant to the provisions of the Act of April 9, 1929, P.O. 177 known as "The Administrative Code of 1929" as amended. This includes, but is not limited to, the authority to arrest and issue citations. All officers have completed basic municipal police training as administered by the Municipal Police Officers Education and Training Commission.

Officers receive additional training through mandated updates and special training seminars. They are re-certified, as required, in first aid and CPR. The officers must qualify with their side arms and auxiliary weapons three times each year.

The department has conformed with uniform crime reporting procedures since 1970, submitting monthly reports to both federal and state governments. For a more complete analysis of the reports submitted, see "Crime in the United States" published by the U.S. Department of Justice. We also conform to "CLEARLY" and "Security Policies and Procedures" mandated by Federal and State Legislation. Please see contact us for a brochure.

All criminal or suspicious activity should be reported to a law enforcement agency. Slippery Rock University police department is the law enforcement agency of record for the campus.

Federal regulations require an official of the institution who has significant responsibility for student activities, but does not have significant counseling responsibilities, to report criminal offenses to law enforcement authorities.

University police routinely report maintenance problems regarding safety and security. They also suggest improvements pertinent to crime prevention.

The university police department has developed programs addressing personal and property safety for students and staff. Some of these programs or parts of them have been incorporated into student and staff orientations. Individuals or groups seeking information concerning the availability of literature or presentations are urged to contact the University Police Department.

As a fully authorized police force, an ability to assist neighboring police departments exists. Continued liaison with federal, state, and local law enforcement agencies promotes the exchange of information concerning criminal activity at on and off campus sites. This sharing of information greatly enhances the ability of law enforcement agencies to perform more efficiently in an effort to provide a safe community.

All vehicles parked on university property must be registered and display a current and properly mounted parking permit. All students are permitted to have vehicles on campus provided the vehicles are registered and have the proper decals and assuming the operators maintain good standing with regard to their parking privileges. Failure to comply with parking regulations is dealt with in accordance with the procedures contained in the University Parking and Traffic Regulations. To contact the University Police, please call 724-738-3333.

University Program Board

The University Program Board (UPB) is the major co-curricular sponsor of student activity events. It consists of five specialized committees and an executive position, all occupied by students, who provide variety of entertainment programming for the campus community. The five committees are: Concerts, University Events, Cultural Arts, Speakers, and Marketing. The University Program Board invites you to enjoy their many events. Most events are free of charge for SRU students. All students are encouraged to become a part of this exciting student organization and help create campus entertainment. For additional information, call 724-738-2729/2723 or visit the office located in B-122 on the main level in the University Union.

University Union

The mission of the Slippery Rock University Union is to serve as a gathering place for the campus community. The services, programs, activities, and opportunities that the Union provides are designed to meet the needs of students, faculty, staff, and visitors and foster a sense of community and campus loyalty. Through their involvement with the University Union, students develop skills in leadership, citizenship, diversity awareness, and professionalism. The following are located in the University Union: Center for Student Involvement & Leadership (leadership programs, campus activities, Greek affairs, student organization services), Office of Multicultural Development, Office of the Assistant Vice President for Student Development, University Union Operations (scheduling), Cooperative Activities, Student Government Association (SGA), Cultural and Commuter Center, WSRU Radio station, University Program Board (UPB), Taylor & Byrnes coffee shop, Rocky's Grille and Cyber Fresh, SGA Bookstore and Copy Corner, PNC Bank, Rocky's Den (indoor recreation area/TV lounge), and computer lab. For additional information stop by the Union Information Desk or call 724-738-4926.

Women's Center

The Women's Center, located at 007E Strain Behavioral Science Building (BSB), is an on-campus resource center that exists to promote equality and respect for women. The Women's Center serves students, staff, faculty, and community members by providing information, referrals, and programming on issues related to the empowerment of women. In addition, the Women's Center offers women and men a safe, comfortable environment in which to study, talk, or to simply relax between classes. The Women's Center also serves as the meeting place for various student organizations and support groups. It is the home of the Bridge Project, a grant funded program to address issues of violence against women on campus.

The University

Click on a link to be taken to the entry below.

- The University
- Vision
- Mission
- Accreditation
- Location
- Students
- Faculty
- Campus
- Grants and Sponsored Research
- Lifelong Learning
- University Advancement - Alumni Relations

The University

Slippery Rock University of Pennsylvania, one of 14 state-owned institutions that comprise the State System of Higher Education of the Commonwealth of Pennsylvania, 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, Information, and Social Sciences, College of Education, College of Health, Environment and Science, College of Humanities, Fine and Performing Arts, and Graduate Studies.

Vision

Slippery Rock University will excel as a caring community of lifelong learners connecting with the world.

Mission

The fundamental mission of Slippery Rock University is to provide high quality undergraduate and graduate academic instruction. Complementary missions are to conduct scholarly research, to promote professional performance, and to address the educationally related economic, health, environmental, social, cultural, and recreational needs of the region served by the university.

To accomplish these missions, Slippery Rock University primarily focuses its efforts in the academic areas of:

the arts and sciences,
business,
communication,
computer, and information sciences,
environmental sciences and studies,
health and human services
and, teacher
education,

The perspectives of Slippery Rock University are contemporary and futuristic, national and international. The university provides experiences and opportunities for students to demonstrate leadership and to develop confidence and self-reliance; it promotes their intellectual, social, and physical development; and it accomplishes these in an open,

caring, nurturing, and friendly environment. Slippery Rock University is committed to serving and empowering all segments of the population that can benefit from its offerings.

The individual and collective excellence for which Slippery Rock University stands will continue to be measured by the quality of its graduates and their successes in serving society.

Accreditation

Slippery Rock University is accredited by the following accrediting agencies:

Institutional:

Middle States Commission on Higher Education

3624 Market Street
Philadelphia, PA 19104-2680
www.msche.org

Programmatic:

Accreditation Association for Ambulatory Health Care, Inc.

3201 Old Glenview Road, Suite 300
Wilmette, IL 60091
www.aaahc.org

Computing Accreditation Commission of ABET

11 Market Place, Suite 1050
Baltimore, MD 21202
www.abet.org

American Physical Therapy Association

1111 N. Fairfax
Alexandria, VA 22314-1488
www.apta.org

Commission of Accreditation of Allied Health Education Programs

35 E. Wacker Dr., Suite 1970
Chicago, IL 60601-2208
www.caahep.org

Commission on Accreditation of Athletic Training Education (CAATE)

2201 Double Creek Drive Suite 5006
Round Rock, TX 78664
www.caate.net

Council for Accreditation of Counseling and Related Educational Programs

5999 Stevenson Avenue
Alexandria, VA 22304
www.cacrep.org

Council on Social Work Education

1600 Duke St., Suite 300
Alexandria, VA 22314
www.cswe.org

Institute for Safety and Health Management

2004 Hatton Court #101

Columbia, MO 65203
www.ishm.org

National Association for the Education of Young Children (NAEYC)
1313 L St. NW, Suite 500
Washington, D.C. 20005
www.naeyc.org

National Association of Schools of Art and Design
11250 Roger Bacon Drive, Suite 21
Reston, VA 20190-5248
www.nasad.arts-accredit.org

National Association of Schools of Dance
11250 Roger Bacon #21
Reston, VA 20190
www.nasd.art-accredit.org

National Association of Schools of Music
11250 Roger Bacon #5
Reston, VA 20190
www.nasm.arts-accredit.org

National Council for the Accreditation of Teacher Education
2010 Massachusetts Ave., N.W.
Washington, D.C. 20036-1023
www.ncate.org

National League for Nursing, Inc.
350 Hudson St.
New York, NY 10014
www.nln.org/nlnjournal

National Recreation and Park Association
22377 Belmont Ridge Road
Ashburn, Virginia 20148
www.nrpa.org

National Association of Schools of Theater
11250 Roger Baron Drive, Suite 21
Reston, VA 20190
http://nast.arts-accredit.org

North American Riding for the Handicapped Association
7475 Dakin Street, Suite # 600
Denver, CO 80221
www.narha.org

Location

Students and visitors to the SRU campus discover that the University is located in a small town of about 3,500 permanent residents. The University is also in the middle of a population center of about 120,000 people. Two major interstate highways, I-79 and I-80, intersect seven miles from the University and make the university easily accessible to Pittsburgh and Erie, PA, and to Youngstown, Ohio. Students can travel fifty minutes south on I-79 to Pittsburgh and

enjoy its major cultural venues that include opera, symphony, theatre, and museums and its major league baseball, football and hockey teams. The city of Erie, Presque Isle, and Lake Erie are an easy 90 minutes north on I-79, and thirty-five miles west on I-80 is Youngstown, Ohio.

Most students enjoy instructional experiences on-campus. In addition, students use learning facilities at nearby Moraine State Park, Jennings Environmental Education Center, McKeever Environmental Learning Center, Regional Learning Alliance at Cranberry Woods as well as the Wallops Island Marine Science Laboratory in Virginia. Many academic departments sponsor internship programs that provide on-the-job educational and professional training. Opportunities to study abroad in international settings are available to students.

Students

Approximately 80 percent of Slippery Rock University's 8,650 students are from western Pennsylvania, with Pittsburgh and other cities in Allegheny County providing the largest number of students. Another 10 percent of the student body comes from central and eastern Pennsylvania. The remaining 10 percent comes from more than 32 states in the United States and more than 37 other countries.

Faculty

The approximately 380 faculty members at Slippery Rock University are teachers, scholars and contributors to the University and community. The typical faculty member teaches four courses each semester, engages in scholarly research and creative endeavors, and participates in a variety of decision-making processes. Of the current faculty members, fifty-three percent are male and forty-seven percent are female. Seventeen percent are members of ethnic groups. In addition, 80 percent are tenured or occupy tenure-track positions, and 92% of full-time tenure or tenure track have instructional faculty have earned a Ph.D. or other terminal degree. <>

Campus

Slippery Rock University's gorgeous 650-acre campus is located in the rolling countryside of Western Pennsylvania. Thirty-four major buildings that blend traditional and modern architecture comprise the core of the campus for an optimum living and learning environment.

Among public and private universities in Pennsylvania, Bailey Library ranks as one of the most comprehensive public or private university libraries in Pennsylvania. The library website and online catalog allows easy searching of more than 500,000 print volumes in the library's collections, as well as many other resources including over 150,000 electronic books and 32,000 e-journals. Print and electronic materials at the other Pennsylvania State System university libraries, as well as the collections of thousands of libraries nationwide are accessible through interlibrary loan. Swope Music Hall is designed as both a performing and learning center. Vincent Science Hall has laboratories, classrooms, and a greenhouse. Morrow Field House is 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 Building are examples of standard educational facilities that have small and large classrooms, auditoriums and other specialized classrooms. The Physical Therapy building is a state-of-the-art building where the Graduate School of Physical Therapy program is located. International Services resides in the recently renovated Carruth Rizza Hall. The Advanced Technology and Science Hall opened in 2006 and houses Computer Science, Chemistry and Geography, Geology, and the Environment.

Students reside in eight on-campus residence halls. Six new buildings house students on the lower end of campus and two traditional halls are located on the upper end of campus. Upper class students can reside at the ROCK apartment complex. Privately owned residence halls, apartments, and other types of living accommodations are available off-campus. Students take their meals at Weisenfluh and Boozel dining halls.

Grants and Sponsored Research

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 & Sponsored Research (OGSR) 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 works closely with 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.

The Center for Student Research supports and promotes high-quality student/faculty collaborative research, scholarship and creative activity. The Center's mission is to create a community of leaders by facilitating the exchange of ideas, to provide a collegial venue that prepares students for further scholarly exploration and professional careers, and to promote scholarly inquiry as a fundamental value of the SRU experience. A Symposium for Student Research, Scholarship and Creative Activity is held annually to highlight the research, creative and scholarly endeavors of undergraduate and graduate students. The two-day, campus-wide event encompasses poster sessions, oral presentations and performances that showcase the work of projects conducted throughout the academic year.

Lifelong Learning

Center for Lifelong and Community Learning (CLCL)
165 Elm Street
724-738-1601

Departments

Workforce and Community Education (Continuing Education)
Workforce and Professional Development
Leadership Development Program

Programs

Educational Seminars in LTC Administration
e-Learning for Employees
GFT (WEDnetPA) Program
Customized Job Training
Allied Healthcare
OSHA
SHRM Learning System
IFMA
Customized Corporate Training
Reach Program
Leadership Reaction Course

Workforce and Community Education (Continuing Education)

165 Elm Street
Slippery Rock, PA 16057
Phone: 724-738-1601
Fax: 724-738-1605
lifelonglearning@sru.edu

Director:

Merilee Madera
merilee.madera@sru.edu

Secretary:

Brenda Best
brenda.best@sru.edu

In keeping with SRU's commitment to public education, the Office of Workforce and Community Education provides cost effective workforce training, continuing professional education and personal enrichment programs to residents of all ages and employers in Western Pennsylvania. The department has three primary initiatives: non-credit, open enrollment seminars, certificate programs, and courses; customized, contract training for non-profit organizations, government entities and corporations; and WEDnetPA Partner, the conduit through which corporations apply for and receive grant money for training from the Commonwealth of Pennsylvania's Department of Community and Economic Development. Classes are regularly scheduled at various locations throughout Western Pennsylvania and at times convenient to the part-time non-traditional student. Web based courses can be started at anytime and completed at the pace of the student.

The department is located in the Center for Lifelong and Community Learning, a building separate from, but near the main campus, that affords the users of the facility ample free and convenient parking and the amenities of a smaller and more intimate facility dedicated solely to their needs. The facility includes two classrooms, and a computer laboratory.

Workforce and Professional Development

165 Elm Street
Slippery Rock, PA 16057
Phone: 724-738-1601
Fax: 724-738-1605
lifelonglearning@sru.edu

Director:

James Brockman
james.brockman@sru.edu

Secretary:

Brenda Best
brenda.best@sru.edu

The Office of Workforce and Professional Development, established in 2006, develops relationships with regional companies and non-profit organizations in order to create and deliver professional development programs for employees. The office also manages national certification preparatory programs for a variety of organizations. The office works with the Pennsylvania Department of Community and Economic Development to manage Customized Job Training and Opportunity Grants awarded to local and regional economic development projects.

Leadership Development Program

Leadership Development Building
1 Morrow Way
Slippery Rock, PA 16057
724-738-4334

Director

Erin Strain
erin.strain@sru.edu

The most unique Executive Leadership Training Opportunity in the State. The 25-acre Leadership Reaction Course at Slippery Rock University provides a perfect setting for leadership training. It is ideal for corporate camps and conferences, police, fire and EMS programs, student workshops, athletic teams and management seminars. Everything a group needs for enrichment is on site: obstacle and rope courses, a climbing wall, rappel tower, pavilions, camping areas, and inter-connecting trails. Groups lease the course and lodging is available. Packages range from a two-hour activity, to a week-long adventure retreat. Slippery Rock University provides trainers and educators for all events. A high ropes challenge program (REACH) is also available to develop personal confidence and promote concepts of team work.

University Advancement - Alumni Relations

Russell Wright Alumni House
724-738-2018

Director

Michael Saraka

Secretary

Deborah Kedanis

Slippery Rock University has more than 45,000 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. One-year complementary memberships are provided to graduating seniors.

Among the services that are provided by the Slippery Rock University Alumni Association are insurance programs and regional chapters. Significantly, the Alumni Association manages and awards eleven scholarships. Nine of the scholarships, the Nancy Angell Scholarship, the Madeline F. Stoops Scholarship, the 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, and the Anna Bura Williams Scholarship for women elementary education majors, are for academic excellence. The N. Kerr Thompson and Jeanne Powell Furrie Scholarships are for athletics (see Scholarships).

The association also sponsors Homecoming and Alumni Reunion Weekend as well as special events throughout the year. Additional information on the Alumni Association as well as upcoming events can be found in the university's Rock Magazine, which is published three times a year, and on the alumni web site at www.rockalumni.cafe.com or at www.sru.edu and then clicking on Alumni.