# Undergraduate Catalog 2007-2008 EAST STROUDSBURG UNIVERSITY <br> of Pennsyrania 



## Visit East Stroudsburg University of Pennsylvania on the Web!

## www.esu.edu

Notice of Non-Discrimination
East Stroudsburg University of Pennysylvania does not discriminate on the basis of race, color, religion, national origin, sex, veteran status, disability or age in its programs and activities in accordance with state and federal laws. The following person has been designated to handle inquiries regarding this policy: Director of Diversity and Equal Opportunity, 200 Prospect Street, 115 Reibman Building, East Stroudsburg, PA 18301, 570-422-3656.

## East Stroudsburg Universițy of Pennsylvania



## 2007-2008

## Undergraduate Catalog

Office of Admission
Office of Admission Toll-free
Office of Admission (Fax)
ESU Main Number (Voice Maill)

570-422-3542
877-230-5547
570-422-3933
570-422-3211

East Stroudsburg University of Pennsylvania 200 Prospect Street
East Stroudsburg, PA 18301
A member of the Pennsylvania State System of Higher Education

## Table of Contents

Calendar ..... 4
Mission ..... 6
General Information ..... 7
Admission ..... 10
Academic Regulations ..... 15
Fees and Deposits. ..... 21
Financial Aid ..... 27
Student Life ..... 33
Degrees Offered ..... 45
University Requirements ..... 48
University Academic Initiatives ..... 53
Special Academic Opportunities ..... 57
Program Offerings ..... 60
Course Prefix Key ..... 70
Academic Programs and Course Descriptions ..... 71-352
Art ..... 71-74
Art and Design (see Art) ..... 71
Athletic Training ..... 75-82
Biochemistry ..... 83
Biological Sciences ..... 83-108
Biotechnology/Chemical Biotechnology. ..... 108
Business Management ..... 109-114
Chemistry ..... 115-126
Communication Studies ..... 127-133
Computer Science ..... 134-142
Computer Security ..... 134-142
Criminal Justice Administration ..... 143
Dance ..... 144-145
Early Childhood Education ..... 146-150
Earth and Space Science ..... 151-152
Economics ..... 153-157
Elementary Education ..... 158-165
Engineering Transfer Program. ..... 166-167
English ..... 168-179
Environmental Studies ..... 180
Exercise Science ..... 181-187
Fitness Program ..... 188-192
Foreign Languages ..... 193-206
Arabic ..... 196
Asian Languages (Chinese/Japanese) ..... 197
French ..... 197-199
German ..... 199-200
Italian ..... 200-201
Latin ..... 201
Portuguese ..... 201
Russian ..... 201
Spanish ..... 202-204
www.esu.edu Contents
General Science ..... 207-208
Geography ..... 209-212
Gerontology Certificate Program ..... 213
Health ..... 214-223
Health Services Administration (see Health) ..... 215, 223
History ..... 224-229
Hotel, Restaurant and Tourism Management ..... 230-234
Industrial Physics (see Physics) ..... 234
Interdisciplinary Studies ..... 234
International Studies ..... 235
Management (see Business Management) ..... 109
Marine Science (see Biological Sciences) ..... 103
Mathematics ..... 236-244
Media Communication and Technology ..... 245-248
Media Paraprofessional Program ..... 248
Medical Technology (see Biological Sciences) ..... 248
Movement Activities and Lifetime Fitness (see Fitness Program). ..... 188
Music. ..... 249-255
Nursing ..... 256-265
Philosophy and Religious Studies ..... 266-269
Physical Education Teacher Education ..... 270-278
Physical Science ..... 279
Physics ..... 279-286
Political Science ..... 287-293
Pre-Pharmacy Program (see Chemistry) ..... 294
Professional and Secondary Education ..... 294-299
Psychology ..... 300-308
Reading ..... 309-310
Recreation and Leisure Services Management ..... 311-315
Rehabilitative Services ..... 316-318
Social Studies ..... 319-320
Social Work ..... 320
Sociology ..... 321-327
Sociology and Spanish ..... 328
Special Education and Rehabilitation. ..... 329-334
Speech-Language Pathology ..... 335-339
Sport Management ..... 340-345
Theatre ..... 346-349
Women's Studies ..... 350-351
State and University Officials ..... 352
University Senior Administration ..... 353
University Senior Policy Administrators ..... 354
Faculty ..... 355-368
Faculty Emeriti ..... 369
Index ..... 371-373
Campus Map ..... 374-375(3)

## Calendar

## Summer Sessions 2007

## Pre Session

Classes begin at 8:00 a.m.
Memorial Day - no classes
Classes end at 10:00 p.m.

## Main Session

Classes begin at 8:00 a.m.
Independence Day - no classes
Classes end at 10:00 p.m.

## Post Session

Classes begin at 8:00 a.m.
Classes end at 10:00 p.m.

| Monday | May 21 |
| :--- | :--- |
| Monday | May 28 |
| Friday | June 8 |


| Monday | June 11 |
| :--- | :--- |
| Wednesday | July 4 |
| Friday | July 20 |

Monday July 23
Friday August 10

## Academic Year 2007-2008

## Fall 2007

Classes begin at 8:00 a.m.
Last day to withdraw from 1st quarter with no " N " grade
Last day to drop a class with no " N " grade
Last day to add to 1st quarter
Labor Day - no classes
Last day to add
Last day to withdraw from 1st quarter
Columbus Day - no classes
SWITCH DAY - Monday schedule
Second quarter begins
Last day to withdraw from second quarter
with no " N " grade
Last day to add to 2nd quarter
Last day to withdraw
Last day to withdraw from second quarter
Thanksgiving break begins
Classes resume
Fifteenth week begins
Semester ends at 10:00 p.m.
Commencement

Monday
Wednesday
Friday
Friday
Monday
Monday
Monday
Monday
Tuesday
Wednesday
Friday
Tuesday October 23
Tuesday November 6
Tuesday November 20
Wednesday November 21
Monday $\quad$ November 26
Monday December 10
Friday
Saturday

August 27
August 29
August 31
August 31
September 3
September 10
October 1
October 8
October 9
October 17
October 19

December 14
December 15

## Spring 2008

Classes begin at 8:00 a.m.
Last day to withdraw from third quarter with no " N " grade
Last day to drop a class with no " N " grade
Last day to add to third quarter
Martin Luther King Day - no class
Last day to add
Presidents' Weekend - no classes
SWITCH DAY - Monday schedule
Last day to withdraw from third quarter
Fourth quarter begins
Spring Break begins
Classes resume
Last day to withdraw from fourth quarter with no "N" grade
Last day to add to fourth quarter
Last day to withdraw
Spring holiday - no classes
Last day to withdraw from fourth quarter
Fifteenth week begins
Semester ends at 10:00 p.m.
Commencement

| Monday | January 14 |
| :--- | :--- |
| Wednesday | January 16 |
| Friday | January 18 |
| Friday | January 18 |
| Monday | January 21 |
| Monday | January 28 |
| Monday/Tuesday | February 18 \& 19 |
| Wednesday | February 20 |
| Wednesday | February 20 |
| Thursday | March 6 |
| Monday | March 10 |
| Monday | March 17 |
| Monday | March 17 |
|  |  |
| Wednesday | March 19 |
| Wednesday | April 2 |
| Thursday/Friday | April 10 \& 11 |
| Friday | April 18 |
| Monday | May 5 |
| Friday | May 9 |
| Saturday | May 10 |

## Summer Sessions 2008*

## Pre Session

Classes begin at 8:00 a.m.
Memorial Day - no classes
Classes end at 10:00 p.m.

| Monday | May 19 |
| :--- | :--- |
| Monday | May 26 |
| Friday | June 6 |

## Main Session

Classes begin at 8:00 a.m.
Independence Day - no classes
Classes end at 10:00 p.m.

| Monday | June 9 |
| :--- | :--- |
| Friday | July 4 |
| Friday | July 18 |

## Post Session

Classes begin at 8:00 a.m.
Classes end at 10:00 p.m.

| Monday | July 21 |
| :--- | :--- |
| Friday | August 8 |

[^0]
## Mission

## Vision Statement

East Stroudsburg University of Pennsylvania will be the first choice for students seeking a comprehensive university with a small college climate distinguished by innovation and tradition where they will learn to serve, lead and succeed in a global society.

## Mission Statement

East Stroudsburg University of Pennsylvania will provide:

- challenging and contemporary undergraduate and graduate curricula that engage and equip students to critically appraise and apply knowledge in their lives and chosen fields of study;
- a learning community that promotes diversity and views teaching as the university's primary focus;
- varied opportunities for student and faculty research, creative endeavors and involvement in public service; and
- leadership and service in the educational, cultural and economic development of the region.


## Values Statement

We are committed to the principles of intellectual integrity, freedom of expression, the fair and equal treatment of all, good citizenship, environmental stewardship, and accountability for our actions and the resources entrusted to us.

## General Information

## The University

East Stroudsburg University is one of the 14 institutions in the Pennsylvania State System of Higher Education. Founded in 1893 as a normal school to prepare teachers, the institution changed its name in 1927 to East Stroudsburg State Teachers College and again in 1960 to East Stroudsburg State College, reflecting the addition of liberal arts and science curriculums. In 1983, it achieved university status.

## The Campus

The university has 66 buildings located on approximately 252 acres in the East Stroudsburg Borough and in Smithfield Township. 46 acres of the property in Smithfield Township are leased to University Properties Inc. which has constructed 541 beds of student housing in six buildings on 43 acres, and to the Visiting Nurses Association which is constructing a six-bed Hospice House on three acres. The 61 buildings in East Stroudsburg Borough include academic facilities, eight residence halls (housing 2,100 students), a 1,000-seat dining hall, a Student Center and a new Recreation Center. The Student Activity Association, Inc., owns Stony Acres, a 119-acre off-campus student recreation area near Marshalls Creek, that includes a lodge and a small lake.

## Academic Buildings

The primary academic building is Stroud Hall. This four-story classroom building contains lecture halls, computer and language laboratories, instructional spaces and office areas. Beers Lecture Hall, which opened in 1997, seats 140 students and serves as a distance learning facility. The Fine and Performing Arts Center consists of two theatres, a gallery, concert hall, rehearsal areas, various art studios, and classrooms. Koehler Fieldhouse serves as the primary physical education facility. The University Center includes a food court, commuter lounge, convenience store, game room and the University Store.

Other major classroom buildings are: Moore Biology building, which contains a large group lecture hall, a greenhouse and wildlife museum; Gessner Science Hall, which contains laboratories for physics and chemistry; DeNike Center for Human Services, which houses classrooms and has laboratory areas for the departments of health, nursing, and recreation and leisure services management; LaRue Hall, which houses laboratories for speech pathology and audiology; Rosenkrans Hall, which houses offices as well as media communication and technology and programs for academic support; and the Center for Hospitality Management, including hotel, restaurant and tourism management, the Keystone Room, and P\&J's.

## The Library

Kemp Library provides students with opportunities to acquire, process and apply information in pursuit of their academic and career goals. Library faculty and staff offer a wide variety of traditional and innovative services. While the library continues building and sharing its print collections, it also provides digital e-books and electronic course reserves. The library licenses a wide variety of full-text databases, most of which are accessible both on- and off-campus. Kemp Library also provides interlibrary loan and document delivery services to supplement its holdings.

Kemp Library is also a repository of federal and state (Pennsylvania) documents and includes an Instructional Materials/Educational Resources collection of textbooks, courses of study, children's and young adult literature and other materials in support of our teacher education programs. Assistive technology is available in the library to make its resources fully accessible to differently abled students.

As Kemp Library takes full advantage of new products, new formats for information, and new delivery systems, its instructional role has never been more pronounced. The most effective approach to a research project changes from year to year, or even semester to semester. To keep current, students and faculty are invited to take full advantage of the library's reference services, to participate in group instruction offered by its public services librarians, and to check the library Web site, www.esu.edu/library, to see what changes have been made.

## Academic Facilities

The university Computing and Communications Center supports both administrative and academic computing. Administrative computing is served by a UNISYS mainframe, encompassing more than 30 on-line systems and providing services to the students, faculty and staff.

The Academic Computing network consists of 21 UNIX or Windows based servers that are connected to approximately 1800 PCs provided to support instruction, Internet access, campus network access, and e-mail. They are located in 23 computer laboratories across campus. There is an open access computer lab in each residence hall. Additionally, many academic departments maintain discipline-specific computer laboratories for their curricula. Wireless computing zones are located throughout the Residence Halls, University Center, Library, and the outdoor campus quadrangle. Students can connect to the Internet in these areas using a standard wireless laptop. In addition, faculty and students use wireless laptop technology for conducting specialized labs in a variety of courses. Helpful computing information can be found at www.esu.edu/ac.

Additionally, the Office of Computing and Communication Services support faculty, administration, students, and affiliated businesses with services such as local and long distance, voice mail, cable TV, and Internet. Requests for equipment like cell phones, two-way radios, paging and other wireless solutions are provided through this office.

The McGarry Communication Center is the campus base for the Instructional Resources Department, including the audiovisual, graphics, and television services units. The Communication Center houses two television studios and is the distribution center of campus cable television as well as the community-wide ESU television telecasts. WESS 90.3 FM radio is also located in the center.

## Faculty and Staff

The university faculty totals 312 , while another 461 employees make up the management and noninstructional staff. Faculty members are representative of many and varied institutions of higher education in both the United States and abroad. The terminal degree is held by 77 percent of the instructional faculty.

## Accreditation

East Stroudsburg University is accredited by the Commission on Higher Education of the Middle States Association of Colleges and Schools, 3624 Market Street, Philadelphia, PA 19104, 215-662-5606. The Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Commission on Recognition of Postsecondary Education.

In addition, all of the education programs offered by East Stroudsburg University are accredited by the National Council for Accreditation of Teacher Education and the Pennsylvania Department of Education.

## Accreditations awarded to other university programs include:

- The Chemistry program is accredited by the American Chemical Society.
- The Athletic Training program is accredited by the Commission on Accreditation of Allied Health Education Programs in collaboration with the National Athletic Trainers Association.
- The Nursing degree program is accredited by the National League for Nursing Accrediting Commission. In addition, the program is approved by the Pennsylvania State Board of Nursing.
- The Recreation degree program is accredited by the National Recreation and Park Association/ American Association for Leisure and Recreation (NRPA/AALR), a specialized accrediting agency recognized by the Commission on Recognition of Postsecondary Accreditation.
- The Public Health degree is accredited by the Council on Education For Public Health (CEPH).
- The Speech-Language degree is accredited by the Council of Academic Accreditation (CAA) of the American Speech-Language-Hearing Association (ASHA).
- The Exercise Science degree is accredited by Commission on Accreditation of Allied Health Education Programs.


## Location

East Stroudsburg University of Pennsylvania is nestled in the foothills of the Pocono Mountains. The combination of quiet woodlands, mountain streams, and refreshing clean air has made the Poconos famous as a resort area for more than 100 years.

Because of the university's location in the Poconos, students take advantage of the many scenic, historic, and recreational sites, including the Delaware Water Gap, Bushkill Falls, and the Pocono ski areas. Others have found that the resorts and
 restaurants offer an excellent opportunity for employment. In addition, the area offers fine restaurants, high quality entertainment, and excellent shopping.

Situated on a hill facing Prospect Street in the community of East Stroudsburg, the university is characterized by large areas of grassy expanses comfortably shaded by a variety of towering trees.

The campus is located approximately 75 miles west of New York City, 85 miles northeast of Philadelphia, 40 miles southeast of the Wilkes-Barre-Scranton area, and 40 miles northeast of the Allentown/Bethlehem/Easton area. Both students and faculty alike enjoy the opportunities and advantages of visits to the metropolitan areas.

The university, which is located approximately one-quarter mile from the East Stroudsburg exit of Interstate 80, exit 308 (old exit 51), is within easy reach of major highway systems and commercial air services.

## Admission

## Freshmen Applicants

## When to Apply

Prospective freshmen should apply in the fall of the senior year in high school. Applications are available on-line at www.esu.edu/admission. Printed copies may be requested from the Office of Admission by calling the toll-free number, 877-230-5547.

## Admission Criteria

Academic achievement is the primary factor considered in the selection process. Competitive applicants will have at least a " B " average in a solid college preparatory curriculum. While not specifically required for consideration, it is expected that successful applicants will have four years of English, algebra 1 and 2, geometry, a senior-year college-prep math course, three years of science (with at least two lab science courses), three years of social studies, and two years of a foreign language. ESU also seeks a good match between what each applicant can contribute to the university and how the university can meet each applicant's expectations. That approach is referred to as a "whole-person assessment." The Office of Admission will consider contributions to school and community, activities and achievements, aspirations, and other factors that help in evaluating a student's potential for success at ESU. Standardized test results - the SAT or ACT - are used as a common yardstick to help in the selection process. The average SAT score of students admitted to the most recent freshman class was approximately 1000 (combined math and critical reading scores only).

## Deadline for Applying

Prospective applicants are urged to submit applications between September and January of the senior year for a Fall semester start. The deadline for receipt of completed applications is April 1. Only limited numbers of freshmen are admitted for a spring semester start; therefore, students interested in January admission should contact the Office of Admission before applying. Typically the deadline for applying for the spring semester is November 15.

## Notification of Admission

Applications are reviewed as they are received. Competitive applicants are notified on a "rolling" basis beginning on or about November 1, 2007. Some applicants, however, may not be notified prior to April 1, 2008. This process allows the Office of Admission to review each applicant in comparison with all others to determine the appropriate number of offers to make. Applicants are encouraged to continue to submit additional academic information (new test scores and/or updated senior year grades). Applications received after February 16 are typically reviewed and acted upon within four weeks.

## Admission Presentations, Open House, Tours

Because personal interviews are not required for the admission process all freshmen applicants and their families are encouraged to visit campus and attend an admission presentation. Admission presentations and campus tours are available during the fall, spring, and summer semesters. Open House is usually held in late October/early November. Visit the Office of Admission home page, www.esu.edu/visit, for specific dates and times of all campus visit options and special events.

## Transfer Applicants

## When to Apply

Transfer applicants are urged to apply between September 1 and November 1 for spring semester (January) admission; all application materials must be postmarked by November 15. Those applying for the fall semester (September) are encouraged to apply between December 1 and April 1; all application materials must be postmarked by May 1. Required application materials include the application; fee; official transcripts from all colleges and universities attended and official high school transcripts (required for all transfer students entering ESU without a bachelor's degree). The application for admission is available on-line at www.esu.edu/admission or by contacting the Office of Admission, 877-230-5547.

## Academic Passport

Students holding the Academic Passport from Pennsylvania community colleges or other State System universities will transfer credit according to the Board of Governors Policy titled The Academic Passport and Student Transfer Policy. Further information may be obtained from the Office of Admission, or by visiting www.passhe.edu.

## Transfer of Credit Without the Academic Passport

Only credits for courses with grades "C-" or better will be transferable.
Students may transfer credit from institutions that have been accredited by:

- Middle States Association of Colleges and Schools
- New England Association of Schools and Colleges
- North Central Association of Colleges and Schools
- Northwest Association of Schools and Colleges
- Southern Association of Colleges and Schools, Inc.
- Western Association of Schools and Colleges
- Accrediting Commission for Community and Junior Colleges
- Accrediting Commission for Senior Colleges and Universities

Credits from either non-accredited institutions, foreign institutions, or institutions not accredited by the above may be accepted upon approval of a department within which the course or courses reside and by the academic dean.

## Notification of Admission

Transfer applicants are notified within three weeks of completed application, but no sooner than October 5, 2007, for spring 2008 admission and February 1, 2008, for fall 2008 admission.

Final Transfer of Credits
Transferable credits are officially added to a student's East Stroudsburg University record upon receipt of the final college transcript and upon verification of enrollment (completed course registration).

## Transfer Student Housing

On-campus housing is not guaranteed for transfer students. Some requests can be accommodated, but the number depends upon housing availability from year to year, which is generally limited. Students who wish to apply for on-campus housing can complete and return the Housing Request form enclosed with the offer of admission. The Office of Housing and Residence Life will review the wait list and contact students as openings occur. The coordinator of Judicial and Commuter Student Affairs can provide students with information regarding securing appropriate off-campus housing. Transfer students are also encouraged to contact University Ridge, a new off-campus apartment complex on the campus perimeter.

## Personal Interview

Interviews are not required, although professors of the various disciplines always welcome students who want to know more about their special field of knowledge. To make an appointment, call the academic department. Phone numbers are available on department home pages at www.esu.edu.

## Undergraduate Guaranteed Readmission Policy

Undergraduate students who are in good standing occasionally choose, prior to the beginning of a semester, not to return to the university for a semester or two. Reasons may include financial problems, personal or family health problems or study at another institution. These students intend to re-enter the university after a hiatus of one or at most two semesters. To guarantee readmission under the academic regulations contained in the catalog under which the student entered, the student should obtain a "Guaranteed Readmission" card and obtain the signature of the student's adviser or department chair. Once completed, this card should be submitted to Enrollment Services. The student should also schedule an appointment with her/his financial aid counselor to determine the effect this will have on any financial aid the student has received. Students planning to study or intern abroad or through the National Student Exchange must schedule an appointment with the director of International Programs and Student Exchange before submitting the "Guaranteed Readmission" card.

Please note that this procedure applies only to undergraduate students who wish to be absent from the university for one or two complete semesters. If, during a semester, an emergency occurs that will cause the student to miss the remainder of that semester, the student must withdraw from the university through the Center for Enrollment Services, according to the "Withdraw from the University" procedure for the partially completed semester. The student may use the "Guaranteed Readmission" policy for up to two additional complete semesters.

Under no circumstance will the guaranteed readmission extend more than two consecutive semesters. Further, no student may be granted more than two separate leaves. Students who fail to complete the "Guaranteed Readmission" card or who will be away from the university for longer periods of time must apply for readmission to the university. Upon readmission these students will be subject to the academic regulation in the current catalog.

## Applicants Seeking Readmission

Students who were previously enrolled in undergraduate degree status who wish to return to the university after an absence of one or more semesters must apply for readmission, unless they meet the requirements of "Guaranteed Readmission" as stated above. Readmission applications are available from the Center for Enrollment Services; a printable readmission application is also available on-line at www.esu.edu/admission. No application processing fee is required.

## Non-Matriculating (Special) Students

A non-degree student is one who is permitted to take courses at the university but is not admitted to the university or to any degree program. Typically, non-degree students are those who wish to take courses for the purpose of personal enrichment or to improve their academic standing prior to gaining admission as a degree student. Others who may be considered for non-matriculating status are: 1) students enrolled in degree programs at other universities who wish to earn credit to transfer to their home institution; 2) applicants who have been denied admission as degree-
seeking students and who wish to improve their academic standing; 3) eligible senior citizens (see below); and 4) high school students who wish to enroll for courses while simultaneously attending high school. For details about the process and to request an application, contact the Office of Admission at 570-422-3542. A printable application is also available on-line at www. esu.edu/admission.

## Senior Citizens

Pennsylvania residents who are retired may enroll as non-matriculating students (see above). Course registration is on "space-available" basis. Fees will be charged. For details about the process, and to request an application, contact the Center for Enrollment Services at 570-4222800.

## International Students

Persons who are not United States citizens or permanent resident aliens must apply using the international student application and follow the same procedures outlined for other applicants and, in addition, submit scores from the Test of English as a Foreign Language (TOEFL). Test scores should be sent directly from the Educational Testing Service, Princeton, N.J. International students should apply early so that information necessary for the preparation of their visas can be secured and processed. A statement of financial resources is required. Application deadline for fall admission is March 1. Admission of international students to the spring semester is limited to students already physically present in the United States; the deadline for application is November 15. Application information is available at www.esu.edu/admission.

## Residence Requirements

East Stroudsburg University's minimum residence requirement for a baccalaureate degree is one year. Thirty-two semester hours of work earned on campus will be regarded as one year of residence. Normally, the student must complete the final thirty-two semester hours of work at East Stroudsburg University. Individual departments may have a residence requirement.

## Advanced Placement

East Stroudsburg University permits students to earn credit toward the baccalaureate degree by successful completion of the Advanced Placement Examination. Students currently enrolled in high school should contact their guidance counselor about the AP Exam. A grade of '3' or higher on any of these examinations will be counted for three semester hours by East Stroudsburg University. Please refer to our web site at www.esu.edu for more information about the courses for which you may receive credit through AP testing.

## College-Level Examination Program

The College-Level Examination Program (CLEP) of the College Board enables students to earn college credit by examination. The General Examinations of CLEP (English Composition, Humanities, Mathematics, Natural Sciences and Social Sciences-History) may be taken to apply toward the General Education pattern of courses at East Stroudsburg University. Such examinations must be passed at the 50th percentile.

The following limit shall be applied to the number of credits which may be earned in General Examinations:

| English Composition | 3 credits |
| :--- | ---: |
| Humanities | 6 credits |
| Mathematics | 3 credits |
| Natural Sciences | 6 credits |
| Social Sciences - History | 6 credits |
| Total | $\mathbf{2 4}$ credits |

Subject matter examinations may also be taken under the CLEP program. These examinations must also be passed at the 50th percentile. Students shall not be given credit for both General and Subject examinations in the same areas. Normally CLEP examinations may not be counted toward the student's major field of study. Interested students should contact either the Office of Counseling and Psychological Services or the College Entrance Examination Board. Official CLEP results should be forwarded to the Center for Enrollment Services for consideration.

## Admission of Undergraduate Students To Graduate Courses

ESU undergraduate students may take a maximum of six graduate credits during their senior year if the following criteria are met: 1) satisfaction of the grade point requirements for admission with full graduate standing, i.e. 3.00 GPA in the major and 2.5 GPA overall (may be higher for some majors); 2) verification of senior class status (completion of 90 credits); 3) approval by the appropriate faculty member teaching the class; 4) and approval of the dean of the Graduate School. "Approval to Enroll" cards may be obtained at Enrollment Services or the Graduate School Office. All appropriate signatures must be secured prior to registering. Graduate credit that is used to satisfy graduation requirements for the bachelor's degree cannot be used to satisfy the requirements of a master's degree at ESU.

## Academic Regulations

## Attendance

Each professor will determine a class attendance policy. Excused absences, including absences due to participation in an approved university activity, will not result in a penalty provided that the student makes up the work missed to the satisfaction of the professor. Each professor will place on file in the departmental office that policy to which the class will adhere and make this attendance policy known to each class. Where non-compliance with policy occurs, the professor has the right to assign a grade consistent with the professor's stated policy. The Center for Enrollment Services will notify instructors of unusual circumstances of health or family problems if known.

## Changes of Registration

A student's course schedule should be regarded as a contract. Courses may be added during the first 10 class days (first four days of summer sessions) of the semester by completing an appropriately signed "Approval to Add" card and filing the card in the Center for Enrollment Services.

Course withdrawals, subject to the conditions described below, may be accomplished by completing a "Drop" card, obtaining the instructor's signature and filing the card at the Center for Enrollment Services. Any student who discontinues attendance in a course without formally withdrawing will be assigned an "E" as a final grade. A student who has not attended a course during the first week (first five class days of the semester or first two days of summer sessions) may be dropped from the course by the instructor.

During the first week of the semester a student may withdraw from a course and have no record of that course appear on the student's permanent record. Students who withdraw from week two through week 10 will receive a grade of "W" for that course on the student's permanent record. After the 10 th week the student may withdraw only if there are extraordinary circumstances (e.g. illness, death in the family, etc.). In this situation the student must also secure the appropriate Academic Dean's signature on the "Drop" card. A grade of "W" will be assigned if the student is passing; " $Z$ " will be assigned if the student is failing.

A student may withdraw ("W" or "Z") from a maximum of 16 credits during the student's stay at the university. Any course dropped during the first week of the semester, for which no grade is assigned, will not be counted toward this limit nor will "Ws" received for a total semester withdrawal from the university.

A student attending a course without proper registration and payment of all tuition and fees does not constitute de facto enrollment. The university will not permit retroactive enrollment in or payment for any class after the end of the term in which the course is offered. This policy was made effective with the beginning of the fall 1997 semester.

| Type of Action | Semesters | Quarters | Summer Session <br> 3 weeks | Summer Session <br> 6 weeks |
| :---: | :---: | :---: | :---: | :---: |
| No record on <br> academic transcript | $1^{\text {st }}$ week | First 3 days | $1^{\text {st }}$ day | 2 days |
| Grade of W | $2^{\text {nd }}$ through <br> $10^{\text {th }}$ week | $4^{\text {th }}$ day through <br> $5^{\text {th }}$ week | $2^{\text {nd }}$ day through <br> $2^{\text {nd }}$ week | $3^{\text {rd }}$ day through <br> $4^{\text {th }}$ week |
| No withdrawal * | $11^{\text {th }}$ through <br> $15^{\text {th }}$ week | $6^{\text {th }}$ through <br> $7^{1 / 2}$ week | $3^{\text {trd }}$ week | $5^{\text {th through }}$ <br> $6^{\text {th }}$ week |

* Except for extraordinary reasons approved by the dean.


## Grade Reports

Student grade reports are available at mid-semester and at the end of the semester. Only the semester grades are entered on permanent records. Semester grade reports are available online via a secure web-site at www.esu.edu. Specific information about access is mailed to each student upon his or her enrollment at East Stroudsburg University.

## Quality Point System

In addition to meeting course and semester hour requirements for graduation, students must maintain a specified academic level throughout a given curriculum as measured by quality points. The minimum number of quality points required for graduation is twice the number of semester hours of credit attempted. Pass/fail courses are not used in the computation of the quality point average. Work completed at other colleges and accepted as transfer credit is not considered in computing the quality point average. The required quality point average for graduation is 2.0 or higher. Each semester hour grade is calculated as follows:


## Incompletes

The maximum time for completing course requirements to remove incomplete grades is one year from the end of the session in which the I grade was assigned. After that time, the I grade will automatically be converted by the Registrar to an E, F, or U. The student can then only earn credits for the course by registering for it again in another term. If a student applies for graduation in a session before the one-year period has expired, the course requirements must be completed by the end of that session, or the I grade will be converted by the Registrar to an $\mathrm{E}, \mathrm{F}$, or U . A faculty member who chooses to deviate from this policy will require the student to sign a contract specifying conditions necessary for course completion, which may include a time period for completion of less than one year or other conditions.

## Auditing Courses

A student desiring to audit a course must complete a "Permission To Audit" card and secure the signature of the professor of the course. A change of registration from credit to audit or from audit to credit may occur only during the first week of the semester. Auditing students pay the same tuition and fees as students taking courses for credit.

## Course Repeats

A student may not register to repeat a course in which the student has a grade, other than "W" or " $Z$," or in which that student is currently registered, until the end of the regular pre-registration period.

## Scholarship Standing

## Academic Good Standing

A student at East Stroudsburg University must earn a minimum quality point average of 2.00 in order to maintain satisfactory academic standing for graduation. (Individual departments may, however, stipulate higher requirements.) The current policy is under review at time of print and will likely change. The new Academic Good Standing Policy will include a requirement that a student at East Stroudsburg University must achieve a minimum quality point average of 2.00 to maintain satisfactory academic standing. Once the new policy is implemented students will be informed and it will become part of this catalog. Students who do not meet the above requirements will fall into one of the categories listed below.

## Academic Warning

Regular matriculated students who are below the 2.00 QPA , but who are not in academic jeopardy, as listed below, will be placed on academic warning. While on academic warning the student may not register for more than 13 credits in any semester. Regular matriculated students who have a quality point average lower than the values listed below are in academic jeopardy and will be subject to the following actions by the university.

| Minimum Cumulative Quality Point |  |
| :---: | :---: |
| Credits Attempted | Average |
| Less than 16 credits. | 1.000 |
| 16 to 30 credits | 1.500 |
| 31 to 45 credits | . 1.750 |
| 46 to 63 credits | 1.900 |
| 64 or more credits | 2.000 |

## Academic Probation

Regular matriculated students who are in academic jeopardy for the first time will be placed on academic probation and will be granted one semester to raise the QPA to the required level. While on academic probation, the student may not register for more than 13 credits. Furthermore, students on academic probation are prohibited from participating in intercollegiate athletics and are not eligible to compete or practice.

## Academic Suspension

Students who are on academic probation and who fail to raise their QPA to the required level and who have a QPA of less than 2.20 for the semester on probation will be suspended from the university for a period of one calendar year. At the end of that year, the student will be eligible for readmission in Academic Probation status. Academic suspension is not subject to appeal. The student will be able to register for no more than six credits per semester through the Continuing Education program during the suspension year.

## Academic Dismissal

Students returning from academic suspension who fail to maintain a QPA of 2.20 or better each semester until their cumulative QPA has risen to the required level will be dismissed from the university for academic failure. At this time, they have the right to appeal to the Admissions Appeals Committee.

## Appeal Process

A student who has been dismissed from the university for academic failure may appeal the dismissal by submitting a letter to the Admissions Appeals Committee. This letter must include why the student was unsuccessful in previous academic experiences and why he/she feels that
future academic endeavors will be successful. The committee will review the letter, review the academic record, and conduct an interview with the student, and then either uphold the dismissal or approve a reinstatement under stipulated conditions.

## Transfer Students

Transfer credits will not be counted in determining academic jeopardy for a student's first semester on campus. That is, transfer students will not be in academic jeopardy following their first semester on campus unless their grade point average is below 1.00.

## Dean's List

To qualify for the Dean's List, a student must complete at least twelve semester hours during a regular semester and receive a quality point average of 3.50 or higher for all course work for that semester. The Dean's List is publicized in regional newspapers and press releases are sent to students' hometown newspapers.

## Graduation Honors

In order to qualify for graduation honors, (the only honors other than the University Leadership Award to be announced at commencement exercises), a student must have completed at East Stroudsburg University 60 credits in which the letter grades of A, B, C, D or E are assigned. Students who have the appropriate grade point average at the time the honor's designation is determined, and who will have met the 60 -credit minimum once the final semester is completed, will be granted graduation honors as follows:
Summa Cum Laude............................... Cumulative quality point average of 3.800 or above.
Magna Cum Laude ........................... Cumulative quality point average of 3.600 to 3.799 .
Cum Laude .................................... Cumulative quality point average of 3.400 to 3.599 .

Graduation honors are based on all work completed at East Stroudsburg University by March 15 of the academic year for May Commencement, and by November 1 for December Commencement. The official university transcript will carry the appropriate honors designation based on all work completed at the university.

## Applicable Undergraduate Catalog Policy

An undergraduate student is subject to the academic requirements and regulations contained in the catalog in effect during the semester in which the student is first registered as a matriculated student. (This semester is listed on the student file as the initial matriculation date - IMD.) The only exceptions to this policy are stated below:

1. A student who first attends the university during the summer will be subject to the requirements and regulations in effect for the following academic year.
2. A student who declares or changes a major or other academic program (minor, concentration) after matriculation is subject to the program requirements as outlined in the catalog in effect at the time of declaration.
3. A student may choose to follow all regulations and academic program requirements in effect in the current catalog. It is the student's responsibility to complete a "Change of Catalog" card, obtain the required signature and submit the card to the Center for Enrollment Services.
4. A student who discontinues attendance for two or more consecutive semesters (fall/ spring or spring/fall) will be subject to the regulations and program requirements in effect when the student re-enters the university. This includes students who are dismissed from the university for academic or disciplinary reasons. The only exception to this rule is for students who are granted a Guaranteed Readmission according to the conditions of that policy.
5. Some programs are subject to requirements that originate with legal and governing authorities outside the university (for example, requirements for teacher and other professional certifications). Such requirements are sometimes subject to change for all participants on a specific date and do not lend themselves to implementation by catalog year.
6. Occasionally the university will adopt or revise a regulation (other than an academic program requirement) that cannot equitably or administratively be implemented by catalog year. In those cases all students shall be advised of the change at least one full semester in advance and through several venues before the change goes into effect.
7. Some academic departments place time restrictions on the completion of major courses and/or major requirements. Such restrictions are clearly articulated in the university catalog and take priority over this policy.

## Program Changes

A student may change curriculum or field of specialization only with the approval of the student's adviser and the director of the curriculum or the chair of the department the student wishes to enter. The student's quality point average and the reasons for change will be assessed by the chair of the department into which the student is transferring. Changes in program should be requested only after careful counseling and planning. All such changes require the completion of a "Change of Major" card that is available at the Center for Enrollment Services. Specific professional programs, such as nursing, medical technology, are limited in the number of students who can be accommodated. Students planning to enter these fields should contact the appropriate department.

## Class Standing

Class designation is determined by the number of semester hours of work, which the student has satisfactorily completed in accordance with the following:

## Semester Hours

| Completed | Class |
| :---: | :---: |
| 0-29 | ... Freshman |
| 30-59 | Sophomore |
| 60-89. | .. Junior |
| 90 and ov | Senior |

## Double Degrees

Students who complete the requirements of two or more majors in combinations of Bachelor of Arts and Bachelor of Science areas will have the choice of designating either B.A. or B.S. as their primary degree. Students with dual degrees will receive a diploma for each degree conferred. The permanent record (transcript) will indicate both degrees.

## Second Degrees

A student who is already the recipient of a baccalaureate degree (from East Stroudsburg University or elsewhere) who wishes to pursue an additional undergraduate field will be required to complete a minimum of thirty-two semester hours at East Stroudsburg University including the requirements for the major. The program of study for the additional degree is to be approved by the appropriate department chair and appropriate academic dean.

## National Honor Societies

| Alpha Psi Omega | dramatic fraternity |
| :--- | :--- |
| Alpha Kappa Delta | sociology honor society |
| Chi Alpha Epsilon | Act 101/Student support services honor society |
| Delta Alpha Pi | students with disabilities honor society |
| Eta Sigma Delta | hotel, restaurant, and tourism management honorary |
| Eta Sigma Gamma | health science and education honor society <br> Gamma Theta Upsilon <br> professional geography fraternity <br> lota lota lota |
| women's studies honor society |  |
| Kappa Delta Pi | honor society in education |
| Lambda Pi Eta | communication honor society |
| Omicron Delta Epsilon | honor society of economics <br> Omicron Delta Kappa <br> leadership honorary |
| Phi Alpha Theta | history fraternity |
| Phi Epsilon Kappa | physical education honorary |
| Phi Sigma lota | foreign language honor society |
| Pi Sigma Alpha | government honor society |
| Psi Chi | psychology honor society |
| Rho Phi Lambda | recreation honor fraternity <br> Sigma Phi Omega |
| gerontology academic honor and professional society |  |
| Sigma Pi Sigma | physics honor society within the Society of Physics Students |
| Sigma Tau Delta | English honorary fraternity |
| Sigma Theta Tau | nursing honorary |
| Sigma Xi | sciences and mathematics honorary of the |

Additional information on Academic Regulations is available in the Student Handbook.

## Fees and Deposits

## Financial Obligation

Students, parents and others who are responsible for the financial obligations of students at East Stroudsburg University should understand that acceptance of admission and the privilege of attending imposes a financial obligation for a complete semester. Neither non-attendance, nonpayment, nor failure to attend class constitutes official withdrawal. This must be done through the Center for Enrollment Services using the appropriate form(s).

Students who register by mail or in person must assume they are registered, whether or not they receive a confirmation or a bill. They will be held financially liable for their registration unless it is officially canceled through the Center for Enrollment Services.

Non-payment of fees or other financial obligations will prevent a student from being allowed to register for subsequent academic work and from receiving any official transcript of their academic record at this university.

Should the university find it necessary to refer a delinquent account to a collection agency or to an attorney, the cost of collection including attorney's fees, if incurred, is the student's responsibility.

## Student Payment Policy

A student attending a course without proper registration and payment of all tuition and fees does not constitute de facto enrollment. The university will not permit retroactive enrollment in or payment for any class after the end of the term in which the course is offered. This policy was made effective with the beginning of the fall 1997 semester.

## Summary of University Fees per Semester (2006-2007 Fees) <br> NOTE: Subject to change without notice

## RECURRING FEES

## Basic Fees

Pennsylvania Residents, Full-Time (12-18 Semester Credit Hours)
\$2,519.00
Full-time students taking more than 18 semester hours pay an additional $\$ 210.00$ per semester hour for any undergraduate credit hours in excess of 18. Undergraduate students taking a mixed load of undergraduate and graduate credits will be charged for any overload credits at the graduate rate of $\$ 336.00$ per graduate semester credit hour.

Part-time Pennsylvania Resident Students taking fewer than 12 semester hours, pay at the rate of $\$ 210.00$ per undergraduate semester hour scheduled and $\$ 336.00$ per graduate semester hour scheduled.

Full-time students taking more than 18 semester hours pay an additional $\$ 525.00$ per semester hour for any undergraduate credit hours in excess of 18 . Undergraduate students taking a mixed load of undergraduate and graduate credits will be charged for any overload credits at the graduate rate of $\$ 538.00$ per graduate semester credit hour.

Part-time out-of-state resident students taking fewer than 12 semester hours, pay at the rate of $\$ 525.00$ per undergraduate semester hour scheduled and $\$ 538.00$ per graduate semester hour scheduled.

## Room and Board Fee

This charge represents the room and board fee for students who reside in on-campus facilities other than University Apartments.
\$2,651.00
Room and board fee for students residing in University Apartments is
\$2,776.00
ONLY University Apartments residents may choose alternative meal plans or delete meal service; all other students in on-campus housing must participate in either the 19,15 or 10 meals a week meal plan or the 175 meals per semester block plan. A student may make meal plan changes during the first two weeks of the semester only.

## Board Only

This charge is for off-campus students who wish to eat meals in the university dining hall.

| ANY 19 meals | w/100 flex dollars | $\$ 898.00$ |
| ---: | :---: | :---: |
| (Monday-Friday: Breakfast, Lunch \& Dinner; Saturday and Sunday: Brunch \& Dinner) |  |  |
| ANY 15 meals | w/100 flex dollars | $\$ 866.00$ |
| ANY 10 meals | w/150 flex dollars | $\$ 750.00$ |
| 175 Block | w/100 flex dollars | $\$ 828.00$ |
| 75 Block | w/100 flex dollars | $\$ 501.00$ |

Flex Dollars: Unused flex dollars will carry over from fall to spring semester; however, they do not carry over to the next academic year. Unused flex dollars will lapse to the university at the end of each spring semester.

## Advance Deposits

| Registration (non-recurring) | $\$ 100.00$ |
| :--- | :--- | :--- |
| Reom | $\$ 150.00$ |

## Additional Fees

| General Fee (mandatory fee) full-time student | \$ | 695.00 |
| :---: | :---: | :---: |
| Part-time student, per semester hour | \$ | 58.00 |
| Summer Sessions, per semester hour | \$ | 58.00 |
| Technology Fee, (mandatory) full-time student: |  |  |
| Pennsylvania Resident Student | \$ | 62.50 |
| Out-of-State Student | \$ | 94.00 |
| Technology Fee, part-time, any number of credits: |  |  |
| Pennsylvania Resident Student | \$ | 31.00 |
| Out-of-State Student | \$ | 47.00 |
| Transportation Fee |  |  |
| Part time Students | \$ | 6.00 |
| Full time student | \$ | 12.00 |

## NON-RECURRING FEES

## Late Registration Fees

$$
\begin{array}{ll}
\text { Late Request for Schedule } & \$ 50.00 \\
\text { (Charges apply to students who were registered for } \\
\text { and completed the previous academic semester) } & \\
\text { Late Payment of Fees } & \$ 50.00 \\
\begin{array}{l}
\text { (Charges apply to those who fail to make payment by the due date } \\
\text { indicated in billing instructions) }
\end{array} &
\end{array}
$$

Graduation Fee (non-refundable) \$ 25.00
Application Fee (non-refundable) $\$ 35.00$

Identification Card Fee $\$ 15.00$
This is a permanent card that is validated each semester for use of the library, dining hall, student activities, and student identification.
Lost or damaged cards will be replaced at a cost of $\$ 15.00$.

## Bad Check Fee

This is a handling fee assessed for all checks drawn in payment of fees that are not honored due to insufficient funds.

## Guidelines for Determining Resident Status for Students

## (Title 22 Pennsylvania Code, Section 153.1)

A student is classified as a Pennsylvania resident for tuition purposes if the student has a Pennsylvania domicile.A domicile is the place where one intends to and does, in fact, permanently reside. Because this decision is subjective, documentary evidence must be submitted to the Center for Enrollment Services for consideration.

Students who believe that they are qualified for in-state residency and those who would like to be made aware of the necessary factors to make such a transition should contact the Center for Enrollment Services. Each case will be decided on the basis of all facts submitted with qualitative rather than quantitative emphasis in support of the intention of the student to reside indefinitely in Pennsylvania.

If the student is not satisfied with the decision made by the university in response to the challenge, the student may make a written appeal to the Office of the Chancellor, State System of Higher Education, Dixon University Center, 2986 North Second Street, Harrisburg, PA 17110. The decision on the challenge shall be final.

Fees and Deposits

## Detailed Information

## RECURRING FEES

## Basic Fees

## Pennsylvania Residents

This basic fee covers library and laboratory fees, the cost of registration, and the maintaining of student records. Students enrolled for continuing education courses and non-matriculated students pay at the applicable rate per semester hour.

## Out-of-State Students

Students whose legal residence is beyond the boundaries of the Commonwealth of Pennsylvania pay out-of-state fees.

## Food Service Fee

Students in the eight (8) on-campus residence halls may choose from the 19,15 or 10 meals a week meal plan or the 175 meals per semester block plan. There are NO exceptions to this rule. Students living at the University Apartments may choose any of the alternative meal plans or delete meal service entirely. Off-campus students may purchase meal plans for the entire semester, individual meals at the dining hall, or may purchase E-dollars at the (E-card) office.

## Advance Deposits

## Registration

Each applicant offered admission to the university must pay the advance registration deposit of $\$ 100$ to reserve a place in the incoming class. The fee is applied to the first semester of attendance at this institution. This payment is not refundable.

## Room

Each academic year an advance deposit of $\$ 150$ is required, to be credited toward the second semester of that year. This deposit is non-refundable. Checks or money orders for the advance registration deposit and the advance room deposit should be payable to East Stroudsburg University and mailed to the Center for Enrollment Services, East Stroudsburg, PA 18301.

## General Fee

This mandatory fee is used to support the university's academic programs and a variety of on-going student services and activities such as student government, student organizations, health services and wellness programs, and Student Center debt service, capital replacement, and maintenance. This fee is charged to all students (undergraduate and graduate, full-time and part-time, residential and commuting/off-campus) during all university sessions (including Intersession and Summer Sessions), and at all course locations (including internships, student teaching, University Center in Harrisburg, and all other off-campus sites). Refunds of the General Fee during regular and special sessions will be processed in accordance with the same schedule and policy as tuition refunds.

## Technology Fee

This mandatory fee was instituted by the State System Board of Governors in the fall of 2002 and is used to enhance student access to the latest technology in the classroom and to prepare our students for high-tech careers in the $21^{\text {st }}$ century.

## Damage Charges

Students are held responsible for damage, breakage, loss, or delayed return of university property. Damages that are determined to be communal will be pro-rated in accordance with university policy and housing contract agreement. Deliberate disregard for university property will also result in disciplinary action. All keys to university rooms are university property and are loaned to students. Students who do not return keys will be charged a lock replacement fee to be determined by the institution. Loss of a room key should be reported immediately.

## Summer Sessions Fees 2007

(subject to change without notice)

## Basic Fee

Pennsylvania resident
Out-of-state resident (summer only) General Fee
per semester hour $\quad \$ 210.00$
per semester hour $\quad \$ 525.00$
per credit $\$ 58.00$

Students enrolled for a period of instruction differing from the regular schedule pay additional fees on a pro-rated basis of the schedule of fees provided for the regular summer sessions.

## Payment Information

Payments may be made via mail, telephone, or in person at the Center for Enrollment Services in Zimbar-Liljenstein Hall. ESU accepts bank or personal checks, MasterCard, Visa, and Discover.

## Delinquent Accounts

No student shall be enrolled, graduated, or granted a transcript of records until all previous charges have been paid.

## Refund Policies

## Housing

A student who officially withdraws completely from the university PRIOR to the beginning of any semester is eligible to receive a full refund of housing fees, but must forfeit the housing deposit.

A student who officially withdraws completely from the university DURING the semester will forfeit the housing deposit but is entitled to receive a pro-rated refund of housing fees, based upon a weekly scale.

The Housing Office will determine if any refund of housing fees is possible for a student who leaves university housing for medical reasons.

If a student is asked to leave university housing, the details concerning a housing refund shall be determined by the Director of Housing. The university shall always retain the authority to allow exceptions to this policy.

Fees and Deposits

## Meals

A student who officially withdraws after the beginning of a semester and who notifies Enrollment Services will be entitled to a refund of the board paid for the remainder of the semester. A student who withdraws during a week will be charged for the entire week.

## Summer Session

Refunds of fees for a student who withdraws after the beginning of a summer session will be determined by the proportion of the term attended and will be pro-rated on the basis of the refund policy in effect for a regular session. It is the student's responsibility to complete the "Withdrawal" or "Drop" Cards. They are available in Department Offices and the Center for Enrollment Services.

## Tuition

The date when students submit a completed "Drop" card to Enrollment Services to cancel their registration or to withdraw from a course determines their eligibility for a refund. A student who submits to Enrollment Services an officially approved withdrawal form prior to the beginning of any semester is eligible for a complete refund of all fees EXCEPT the application fee and registration and room deposits. (Please refer to refund policies that pertain to housing and meal refunds, if applicable.)

A student who withdraws after the beginning of a semester and who submits to Enrollment Services an officially approved withdrawal form is entitled to a refund of tuition according to the schedule as follows (Subject to change):

| Refund (\%) | Period of Attendance |
| :---: | :---: |
| 90 | First Week |
| 80 | Second Week |
|  | . Third Week |
| 60 | . Fourth Week |
| 50 | . Fifth Week |
| No Refund. | . After the Fifth Week |

Federal guidelines for the pro-rating of student financial aid awards to students who totally withdraw from the university partway through a term usually do not coincide with the above refund policy. Students contemplating mid-term withdrawal from the university should first contact the Center for Enrollment Services to discuss the impact of a contemplated mid-term withdrawal on their student financial aid awards and possible resultant personal liability to the university for charges not covered by prorated student financial aid awards.

## Financial Aid

Financial aid is designed to help families offset the cost of a post secondary education. A student's financial aid package can be made up of grants and scholarships, which do not have to be repaid, loans, which must be repaid with interest, and student employment which allows students to earn money. More than 72 percent of East Stroudsburg University students receive some type of financial assistance. The $\$ 43$ million in financial aid distributed to students during the 2005-2006 academic year included \$32.1 million in loans with the remainder in grants, scholarships, university employment and miscellaneous awards.

## General Eligibility Requirements

In general, to be eligible for financial aid, a student must:

- Be a citizen or permanent resident of the United States;
- Have a high school diploma or an equivalent;
- Be matriculated at East Stroudsburg University and be enrolled in a degree, certificate, or other program (non-degree students are not eligible for financial aid); and,
- Maintain satisfactory academic progress to remain eligible for financial aid.


## Application Process

East Stroudsburg University aid applicants must complete the Free Application for Federal Student Aid (FAFSA) to be considered for a Federal Pell Grant, Federal Supplemental Educational Opportunity Grant (FSEOG), Academic Competitiveness Grant (ACG), National Science \& Mathematics Access to Retain Talent (SMART) Grant, Federal Perkins Loan, Federal and University Student Employment, and the Federal Family Education Loan Program, which includes the Subsidized and Unsubsidized Federal Stafford Loan. ESU does not require or use the College Scholarship Service Profile application for aid consideration. Incoming first year students should submit the FAFSA by March 1. All other students should submit the FAFSA by May 1. You may apply on line by visiting the United States Department of Education's website at www.fafsa.ed.gov or by completing a paper FAFSA. When completing the FAFSA, students interested in applying for Student Employment and/or the Federal Stafford Loans should check "yes" to the appropriate questions on the FAFSA. Those interested in receiving a Federal Stafford Loan, will have a loan pre-certified by Enrollment Services. No disbursements will be received or credited to the student until you have electronically or manually completed the MPN and submitted it to the guarantor. Eligibility for the Federal Perkins Loan will be determined by Enrollment Services.

The FAFSA serves as a student's application for the Federal Pell and Federal Supplemental Educational Opportunity Grants. Pennsylvania residents will automatically be considered for the Pennsylvania State Grant if the FAFSA is completed. In some cases, the Pennsylvania Higher Education Assistance Agency (PHEAA) may request additional information. Non-residents should check on the availability of state aid through their state agency. Please contact Enrollment Services if a current address and telephone number of a particular state agency is needed.

Financial Aid
www.esu.edu

## Financial Need

Financial aid is awarded on the basis of financial need, which is the difference between the total estimated cost of attending East Stroudsburg University and the ability of the family to contribute to educational costs. Each student is assigned a budget that includes tuition, fees, room, board and other costs which includes books, personal expenses and transportation to and from home each semester.

The family contribution is determined when the information submitted on the FAFSA is put through a formula approved by Congress. The resulting expected family contribution (EFC) is the amount you and your family are expected to contribute. The EFC is made up of a contribution from the parents total income and assets and a contribution from the students income and assets.

## Verification Requirements

Verification is the process of comparing actual financial data from tax returns to the data provided on the FAFSA. Much of the selection process is random. However, some applicants are selected because the information on the Free Application for Federal Student Aid is inconsistent. Applicants for financial aid should save all records and other materials used to complete the FAFSA such as U.S. Federal Income Tax Returns, statements of benefits received from the Social Security Administration (SSA-1099 Forms), and other records which will substantiate sources of income available. If a file is selected for verification, the required information will be requested from the applicant. Failure to supply this information will result in the cancellation of all financial aids. Verification may also result in a revision to any aids awarded prior to the completion of the verification process.

## Payment of Financial Aid

Financial aid awards are credited directly to the student's university account each semester. Refunds from financial aid will not become available until the student's university account is satisfied. Students should plan to arrive on campus with enough personal money to purchase books and pay any off-campus housing expenses.

## Forms of Financial Assistance

## Grants

- Federal Pell Grants are available to undergraduates who are pursuing their first baccalaureate degree. Eligibility is determined from the information submitted on the Free Application for Federal Student Aid.
- Pennsylvania State Grants are awarded to undergraduate students who are residents of Pennsylvania. The award value is determined by PHEAA and is based upon the financial need of the applicant.
- Academic Competitiveness Grants (ACG) are available for undergraduate students who are enrolled full-time, a Federal Pell Grant recipient and are in their first or second academic year of a two or four-year degree program. The student must have completed a rigorous high school program of study as designated by his/her state.
- National Science \& Mathematics Access to Retain Talent (SMART) Grants are awarded to undergraduate students who are enrolled in an eligible major for their third or fourth academic year. The student must be enrolled full-time and be a Federal Pell grant recipient. Students must have a cumulative GPA of at least 3.0 in order to be eligible.
- Federal Supplemental Education Opportunity Grants (FSEOG) are available to Pell eligible students who demonstrate exceptional financial need as determined by the analysis of the Free Application for Federal Student Aid.


## Loans

Federal Perkins Loans are low interest (5 percent) loans for undergraduates who demonstrate exceptional financial need. Students who graduate, withdraw, or cease at least half-time enrollment will have a nine-month grace period before repayment begins.
Federal Family Education Loan Program (FFELP) offered by the Federal Government includes both Subsidized and Unsubsidized Stafford Loans. Eligibility for the Subsidized Federal Stafford Loan is determined on the basis of need as measured by the FAFSA and requires no payment of interest or principal until six months after the student ceases half-time enrollment, withdraws, or graduates. Unsubsidized Federal Stafford Loans substitute for the EFC, up to the maximum per grade level, and require payment of interest only during periods of enrollment and the six-month grace period. The option of deferring these interest payments through capitalization is available.

Please be aware that lenders are now offering a variety of competitive student loan programs. Carefully compare these programs before selecting a lender in order to determine which program benefits your needs. Also note that any funds borrowed in the summer will have an impact on loan eligibility for the following academic year. The following chart shows Stafford Loan amounts based on credits earned:

| $0-29$ credits | $\$ 3,500$ | Year 1 |
| :--- | :--- | :--- |
| $30-59$ credits | $\$ 4,500$ | Year 2 |
| $60-89$ credits | $\$ 5,500$ | Year 3 |
| 90 credits \& over | $\$ 5,500$ | Year 4 |

Additional Unsubsidized Federal Stafford Loan funds are available to independent undergraduate students. Freshmen and sophomores may request up to $\$ 4,000$, while juniors and seniors may request up to $\$ 5,000$. Dependent students whose parents have been denied a Federal PLUS Loan may also apply for these additional unsubsidized funds.

Federal PLUS Loans are available to parents who have no adverse credit history. Repayment of a PLUS loan generally begins within sixty days of disbursement at a variable annual interest rate.

## University Student Employment

- Student Employment provides an opportunity for students to earn money for personal expenses. Campus employment consists of the Federal Work-Study and State Student Employment Programs. Students usually work 10 hours per week and are paid every other week.
- Community Service Learning (CSL) work opportunities are available to students who demonstrate a financial need according to the FAFSA. Under this program, students provide services to off-campus non-profit agencies that include activities in the fields of health care, literary training, education, welfare, social services, and neighborhood and community improvement.


## Other Sources

- Athletic Grants-In-Aid are awarded in accordance with intercollegiate athletics as a Division II institution and NCAA rules and regulations. Interested students should contact their respective coaches.
- Scholarships, based upon a variety of achievements and talents, are available at East Stroudsburg University. Funds for the various scholarship areas are made available through donations by private industry, faculty, staff, community contributions and through private endorsements. For a list of scholarships offered by the university, visit Enrollment Services web site at www.esu.edu.
- A Tuition Payment Plan through Academic Management Services, Inc., is available at East Stroudsburg University. This plan offers a low-cost, flexible system for paying educational expenses from current income through regularly scheduled payments over a period of ten months. The cost of this plan is $\$ 60$ (subject to change). There are no other fees or interest charges. Additional information is available from Academic Management Services, toll-free 800-635-0120.


## Satisfactory Academic Progress Policy

To be eligible for federal financial aid and athletic grant-in-aid, a student must maintain satisfactory academic progress. Satisfactory academic progress is based on the total number of NEW credits that a student passed during an academic year (defined as Fall and Spring) as well as the cumulative quality point average (QPA). The original enrollment status determines the number of credits that a student must pass. All students are subject to the progress rule regardless of previous receipt of financial aid. An annual review occurs at the completion of each academic year. The review determines student aid eligibility for the next enrollment period (summer session and/or the following academic school year).

## Undergraduate Students

The following chart shows the number of credits which must be successfully completed for a student to maintain satisfactory academic progress:


Students enrolled full-time, three-quarter or half-time for only one (1) semester must pass onehalf of the requirement for the academic year. Less than half-time students enrolled for one (1) semester must pass all of the classes in which they originally enrolled.

Students must also meet a qualitative measure of progress.
Federal regulations require that, upon completion of four (4) semesters at East Stroudsburg University, the student must have attained an overall quality point average (QPA) of at least a 2.00 in order to receive financial aid.

For students enrolled less than four (4) semesters, the following chart shows the minimum QPA that must be achieved in order to continue receiving federal financial aid.
Semester Hours Attempted Minimum QPA
Less than 16 credits........................................... 1.000
16-30 credits ..... 1.500
31-45 credits ..... 1.750
46-63 credits ..... 1.900
64 or more. ..... 2.000

## Special Grades

The following grades will have an adverse impact on academic progress because they are credits attempted and are used to determine the semester enrollment status:

WIZ Withdrawing from a course after the first day of class.
I/X Incomplete grades or no grade reported. If the incomplete grade is resolved by the close of the following semester and a passing grade is received, the credits will be counted.
E/F/U Failure of a course.
L/Y Classes that are audited.
R Repeated classes will not count toward academic progress if the class was passed the first time the student was enrolled and the student is retaking the class for a better grade. Only repeated classes that students originally failed will be counted toward academic progress.

Remedial classes successfully completed will be counted toward the academic progress requirement for federal financial aid. They DO NOT count toward a student's total credits for graduation, nor do they count in the determination of grade level for student loans. For the PA State Grant program, the successful completion of a remedial class may not always count toward the PA State Grant academic progress requirement. Students receiving a PA State Grant who are taking remedial courses should consult with the staff in the Center for Enrollment Services.

In addition, credits received from Advanced Placement Exams and College Level Examination Program (CLEP) tests are not used to satisfy a credit deficiency.

## Summer School Enrollment

If a student is deficient in credits and/or QPA at the end of the academic year, summer school classes may be used to eliminate the deficiency. No financial aid will be provided to help defray these summer school costs. The summer work need not be completed at ESU, but students should be aware that

- transient clearance must be obtained prior to taking courses elsewhere to ensure these credits will be accepted at ESU;
- courses taken elsewhere will not affect the QPA. If the student's deficiency is in QPA, taking courses at another institution will not make up that deficiency.
It is the responsibility of the student to notify Enrollment Services that he/she has completed the necessary classes and is now maintaining satisfactory academic progress.


## Maximum Time Frame for Program Completion

Full-time undergraduate students are expected to complete their program of study within five (5) years or the equivalency of ten (10) semesters of full-time enrollment. Full-time students enrolled in an Associate Degree Program are expected to complete their program within two and one-half ( $21 / 2$ ) years. The total semesters for completion of a program of study for part-time students will be extended proportionally.

For transfer students, the enrollment at prior institution(s) will be prorated by counting every eighteen (18) credits or part thereof that is transferred in as one semester. That total number of semesters will be subtracted from the ten (10) semester maximum time frame, with that remaining number being the number of semesters a student can receive financial aid at East Stroudsburg University. No financial aid will be awarded to any student beyond the undergraduate limitations unless extraordinary circumstances exist, as determined by Enrollment Services.

## Academic Probation

Matriculated undergraduate students will be placed on academic probation for one (1) semester the first time the quality point average is lower than the required values unless the student has been enrolled at ESU for at least four (4) semesters. A student on probation may retain federal financial aid for the one (1) semester that the probation occurs. If, at the end of the probation semester, the semester quality point average is raised to a level that satisfies the academic standing-but the overall quality point average is still below the required values, the student will be ineligible for federal financial aid.

## Academic Dismissal/Suspension

Academically dismissed students who have been readmitted through the admissions appeals process are not automatically reinstated for financial aid. They may file for an appeal using the appeals process below.

## Appeals Process

A student whose financial aid has been canceled due to unsatisfactory academic progress may appeal this decision (in writing) to the Associate Director of Enrollment Services/ Financial Aid. Documentation of extenuating circumstances (student illness, death in the family, etc.) must be included.

The East Stroudsburg University Center for Enrollment Services welcomes the opportunity to provide information and to assist students. Office hours are 8:00 a.m. to 4:30 p.m.

## Student Life

Opportunities for participation in co-curricular activities at the university are virtually unlimited. Learning outside the classroom is considered to be an integral part of the student's personal growth and development.

## Alumni Association

The Alumni Association serves the university's 40,000 living alumni and promotes their continued involvement with ESU. The Board of Directors state that their mission is to "foster camaraderie, prosperity and the achievement of goals and endeavors set forth by the Association and the university." They have four standing committees (Volunteerism, Administrative, Programs and Communications) to perform the bulk of their work.

Some of the benefits and services alumni can take advantage of are: 1) access to an online community where they can see and register for the latest events as well as find classmates and network, 2) receive the Alumni Herald which is produced three times a year and contains information on the happenings in the lives of classmates and university news, and 3) get discounts on car/home/renters insurance, to name a few.

For over 100 years East Stroudsburg alumni have also financially supported their alma mater. Whenever their help was needed with new initiatives, alumni rose to the challenge. The Comprehensive Campaign, Today's Dream, Tomorrow's Reality, is a first for ESU and alumni leadership has been instrumental. The focal point of the campaign is the building of a new state of the art Science and Technology Center. Other areas of the Campaign are Scholarship endowment, annual funds, arts and athletic renovations.

Everyone is welcome to visit the Henry A. Ahnert, Jr. Alumni Center, located just north of Kemp Library on Smith Street. Office hours are 8 a.m. to $4: 30$ p.m., Monday through Friday.

## Athletics

## Intercollegiate

The Intercollegiate Athletic Program at East Stroudsburg University provides a quality educational opportunity for skilled students to maximize their sport abilities by means of competition against other colleges and universities. This is complemented by the enrichment of student-life experiences and the promotion of desirable alumni-community relations.

Schedules for 21 sport teams for men and women are arranged on a seasonal basis for fall, winter and spring sports. The sports are as follows:

Fall Men: cross country, football, soccer<br>Women: cross country, field hockey, volleyball, soccer<br>Winter Men: basketball, indoor track and field, volleyball, wrestling<br>Women: basketball, indoor track and field, swimming<br>Spring Men: baseball, tennis, outdoor track and field<br>Women: lacrosse, softball, outdoor track and field, tennis

Outdoor facilities for athletic activities include a variety of athletic fields, an all-weather track and outdoor tennis courts. The main athletic field, Eiler-Martin Stadium, is lighted and has seating space for approximately 6,000 spectators. The indoor teams practice and compete in the multi-purpose LeRoy J. Koehler Fieldhouse which seats 2,500.
As part of the university's effort to ensure compliance with the Higher Education Act and Equity in Athletics Disclosure Act, the Gender Equity Survey Report is on file in the Offices of Intercollegiate Athletics and Enrollment Services. This report contains information on participation and financial support as it pertains to East Stroudsburg University's Intercollegiate Athletics Program.

## Recreation Center Leagues

Recreation Center Leagues offers students the ability to form teams and play sports in a seasonal format. The entire program is voluntary for those who are not regular members of varsity or junior varsity squads and does not require the intensified training or high degree of skill necessary for intercollegiate athletics. Sports offered during the year include flag football, soccer, volleyball, dodge ball, softball, basketball, and wally ball to name a few. Opportunities for participation are available in Men's, Women's, and Co-Ed Leagues.

## ATM Services

ATM services provided by Pennsylvania State Employees Credit Union are located just outside the ground floor of the University Center between the University Center and the Keystone Room.

## Campus Activities Board (CAB)

The Campus Activities Board (CAB) is a student-run organization responsible for a wide variety of activities and events for the enrichment of the East Stroudsburg University community. The organization presents a diversified and unique program schedule of quality educational, cultural, social and recreational programs throughout the academic year.

CAB is comprised of nine executive board members who meet on a weekly basis during the semester for the purpose of coordinating the various activities. The executive board consists of the four club officers and five committee chairpersons. The five CAB committees are: Concerts, Films, Coffeehouse (Comedy), Out and About (Trips), and Special Events. CAB is also involved with planning and promoting activities during Welcome Week, Family Weekend, and Homecoming.
Students who serve on CAB develop strong leadership skills and gain practical hands-on experience while having a great time in the process!

## Campus Card Center

The Campus Card Center, located on the ground floor of the University Center, provides ESU students and employees with both a campus identification card (E-Card) and a convenient, easy, and safe way to make purchases and use services on and off campus. The E-Card provides electronic access to a declining balance (debit) account that can be used for the payment of certain items/services in the bookstore, convenience store, selected vending machines, residence hall laundry facilities, library, and campus dining facilities. The off campus sites that currently accept the E-Card include Burger King, CVS, Dansbury Depot, Domino’s Pizza, Kasa’s Pizza, Paradise Tanning, and Wendy's. Students may also use it to gain access to their residence hall. Deposits may be made online, please visit the esu.edu website, please visit the esu.edu website. For further information, call 570-422-CARD.

## Housing Information

The campus contains eight spacious, well-situated residence halls that are equipped with lounges, kitchenettes, laundry and vending facilities as well as living areas. In addition, apartment style housing is available for upper-class students at the University Apartment complex. Each apartment has three bedrooms, two baths, a kitchen, and a living room area. Students residing in the apartments, unlike the residence hall students, are not required to participate in a meal plan but may elect to do so. Specific rules and regulations governing the residence halls are published and made available each year in the Residence Halls Information and Policies brochure. All residence halls are smoke-free.

Freshmen are required to live on campus except for those students commuting from their parents' or guardians' homes. Housing on campus is provided on a combined room and board basis only.

Off campus housing information for upper-class students and graduate students is available through the Office of Judicial and Commuter Student Services.

## Off-Campus Housing List

Commuter Student Services provides students with a list of off-campus housing opportunities. This list contains apartment and room rental availability throughout the surrounding area as well as a brief description of the unit. The list contains a brief description of the unit including information on rental charge and utilities. The rooms/units listed are not inspected by the university and the university does not represent the landlord or tenant. The Office of Commuter Students Services acts only as a clearinghouse for this information.

## Off-Campus Housing Guide

Commuter Student Services publishes a Guide to Off-Campus Living. This guide is designed to offer the student guidance on what to look for when deciding to live off campus. It also provides information on how to inspect a dwelling and provides tips for reviewing a lease agreement. A copy of this guide may be obtained from the office located on the second floor of the FlaglerMetzgar Center and the Office of the Vice President for Student Affairs.

## Orientation

One of the most important programs to assist new students and their parents in transitioning to the university experience is the summer Orientation program. Academic placement testing, informal discussions, and various presentations are provided along with the opportunity to meet other incoming students and parents and interact with members of the university community. Six orientation sessions are scheduled. Each two-day session is held on a two-day MondayTuesday or Thursday-Friday sequence during June and July for new students entering the university in the fall semester. New Transfer students have the option of participating in a one-day Orientation specifically addressing transfer issues.

## Publications/Media

## Radio Station (WESS FM)

Students interested in radio broadcasting or in any aspect of radio station work have an opportunity to gain experience by working with WESS 90.3 FM, the student-oriented and operated educational radio station. The station's format is "diversified" and includes vintage radio shows, BBC world news, sports, talk shows, as well as many music genres such as alternative, classical, sports, rap and modern rock.

Student Life

## Stroud Courier

The Stroud Courier is the student-funded campus newspaper. The staff consists of students interested in all facets of journalism, who are responsible for each aspect of publication including news writing and editing, feature writing, sports reporting, photography, and layout. The Stroud Courier covers issues, events, and activities on campus, the surrounding area, and the world.

## Student Handbook

The Student Handbook, prepared bi-annually by the Office of Student Affairs, is a compendium of information about the various phases of life on campus. Specifically, the Handbook provides the student with information concerning campus services, co-curricular groups and activities, as well as the official regulations, standards and policies of the campus.

## Standards of Behavior

The mission and objectives of the university include a serious concern for the overall development of the individual. This philosophy implies that all students maintain high personal standards and conduct themselves in a manner, which manifests not only intellectual and emotional growth but also personal and social development. The basic standards of behavior are outlined in the Student Handbook under the Judicial Process and Regulations and the Student Code of Conduct.

## Student and Community Services

## Academic Advisement

A faculty member from the student's major department serves as the academic adviser throughout the student's career at the university. The Office for Undeclared Advising serves all students who are undecided by providing academic advising and guidance in selecting a major. The office will help students choose a career path of interest to them and declare a major that will help them achieve their career goal. The Office of Academic Advising also provides academic advising and course selection assistance during the weeks prior to and during all pre-registration periods. For further information, call 570-422-3164 or visit our web site http://www3.esu. edu/academics/acadadv.asp.

## Academic Enrichment and Learning

The Department of Academic Enrichment and Learning houses the ACT 101 Program, Student Support Services, the Learning Center, Office of Disability Services, Office for Undeclared Advising, Advising for Students in Academic Jeopardy, and the University Wide Tutorial Program. Located in Rosenkrans East, students are invited to drop in at the Learning Center to find out more about academic support services that may enhance their academic development.

## ACT 101: A Program for Excellence

The ACT 101 Program is a Pennsylvania grant-funded equal education opportunity, that extends academic supportive services to educationally and/or economically challenged students. The program provides counseling services (individual, small group, career, and peer), tutoring, social activities and help with study skills strategies. For further information, call 570-422-3507 or visit the Learning Center, located in Rosenkrans East, or visit our website at www3.esu. edu/academics/act101/index.asp.

## Career Resources Center

Located on the second floor of the University Center, this office provides an array of services which guide and support students and alumni through their career exploration, career building, and eventual professional job placement. Students should start their career planning during their first or second year and should contact this office to make an appointment or visit the office's website: www.esu.edu/careerservices.

Services provided include career counseling, career workshops, and computer technology based services such as a weekly part-time/summer jobs list and links to numerous sites pertaining to internships, career exploration, and professional job listings. This office also coordinates career days, job fairs, and on-campus recruitment by employers, and offers resume critiques and job search guidance. Students should visit the center to review books, computer programs, brochures, magazines, and videotapes relating to careers, employers, and graduate schools.

## Child Care Center

The Rose Mekeel Child Care Center, Inc. is an independently governed and operated affiliate of the university. It is accredited by the National Association for the Education of Young Children and licensed by the Department of Public Welfare. The center is available to students, faculty, and staff of the university. The remaining spaces are filled by the community. The Center is staffed by a Director, six teachers, and work-study students. This facility is open from 7:45 a.m.5:00 p.m. (Monday to Friday) during the fall, spring, and summer sessions.

The program is a hands-on, developmentally appropriate program for children between 18 months and 5 years of age. Please call 570-422-3514 for information about enrollment and fees.

## Community Band, Concert Choir, and Orchestra Program

These large performing groups are open to all university and community instrumentalists/vocalists with previous experience in high school or college ensembles. The ensembles rehearse for two hours, one night a week and will perform pieces of standard literature. Public performances will occur at the end of each semester

## Community Dance Program

The Community Dance Program includes classes for children and adults including adult classes in yoga and ballroom Dance, and childrens' classes in age groups from 4 to 15 . Qualified students in the dance program teach the classes under faculty supervision; the community-service program provides students with authentic hands-on learning experience.

## Commuter Lounge

The Commuter Lounge is located in the University Center on the first floor. This lounge is equipped with a television, microwave and plenty of study and lounge space. Lockers are also located in the lounge. The locker rental is free for students but individuals must register with the University Center Information Desk where assignments are made. The lounge is also a place to find information about campus events and activities.

## Commuter Newsletter

Commuter Student Services publishes a commuter newsletter four times a year. The Student Tracker is mailed to all ESU commuter students. The newsletter contains articles of interest to commuters and lists activities on campus to encourage commuter student involvement. If you would like to submit articles for the newsletter, contact the Office of Commuter Student Services.

## Commuter Student Services

Commuting students make up the predominant population on our university campus. ESU, in addressing the needs of our commuter student population, offers various academic and student services for commuters. The Commuter Student Services office, located in the Flagler-Metzgar Center, serves as a clearinghouse for information about these services as well as a place where commuting students can receive advocacy and support. For more information about the following services call the Office of Commuter Student Services at 570-422-3461 or 570-422-3598.

## Counseling and Psychological Services (CAPS)

The Department of Counseling and Psychological Services offers a range of counseling services to facilitate and enhance the educational, psychological, and interpersonal well being of the East Stroudsburg University student community. The services provided are designed to maximize students' personal and educational functioning, to prevent and remediate emotional/ social problems, to help students attain their educational goals, and to promote their professional competence.

Services offered include personal counseling/psychotherapy, vocational counseling, psychological and vocational testing, developmental and outreach programming, and consultation services in individual and group formats. Some of the issues students often address through counseling include anxiety, career exploration/indecision, depression, difficulties in interpersonal relationships, eating disorders, family concerns, self-doubt, sexual concerns and substance abuse. In addition, the center maintains a small library of vocational information materials, study-skill aids, and resources and guides addressing various psychological and interpersonal problems and concerns. Lastly, the Graduate Record Examination Subject Tests (GRE), the College Level Examination Program (CLEP), the Miller Analogies Test (MAT), the National Teachers Examination (PRAXIS), and the Certified Health Education Specialist Examination (CHES), and the Certified Strength and Conditioning Specialist exam (CSCS) are administered by the Counseling Center.

The Counseling and Psychological Services staff are licensed psychologists. Their professional training and experience prepare them to deal with a wide range of issues faced by university students. Currently enrolled students are eligible to receive services that are free of charge except for the fees associated with the national exams.

All information shared by a client is kept confidential, and all client records are classified as confidential records. Without a client's written permission, no information is released to anyone outside of the Center, except as required by law. The Counseling and Psychological Services office is located on the second floor of the Flagler-Metzgar Center. Normal hours of operation are 8:00 a.m. to $4: 30$ p.m. Monday through Friday. Services generally are offered by appointment and may be scheduled by stopping at the office in-person or by calling 570-422-3277. For additional information, call or visit our web site at www.esu.edu/caps.

## Dance Program

The university provides several options for those interested in dance. The University Dance Company is a select group of $15-25$ students, chosen by audition, who produce a performance each semester with choreography by faculty, guest artists and students. The ESU Contemporary Dancers is open to all students regardless of background that produces recitals choreographed and performed by students. The Dance Team performs high-energy hip-hop and jazz dance during sports events. All of these organizations are open to majors in any area.

## Educational Trips

Various departments, as well as clubs and organizations, sponsor field trips to points of interest in the surrounding area. The proximity to New York City and Philadelphia provides exciting opportunities for students to enrich the activities of their curricula.

## Fraternities and Sororities

The organizations that comprise the fraternity and sorority system provide a wide variety of educational, social, academic, philanthropic and leadership activities, events and programs for ESU students. All ESU Greek organizations strive to excel in all areas of student life including: academics, community service, leadership, social and personal development. Being 'Greek' provides a unique, diverse experience where students learn teamwork, time management, financial and organizational skills, and the importance of friendship and social responsibility that will help them as they become alumni and enter 'the real world.' Fraternity and sorority members are actively involved in extracurricular activities at ESU including intercollegiate athletics, club sports, and Recreation Center Leagues.
The ESU fraternities and sororities are self-governing and work together to benefit and support the university and the surrounding community. The Interfraternity Council (IFC) and College Panhellenic Council (CPH) are the governing bodies that represent all fraternal organizations at ESU and provide cultural, social and educational programs and events for the ESU student community. At the beginning of each semester, fraternities and sororities conduct "recruitment events" for the purpose of selecting new members.

In order to be eligible for membership in a fraternity or sorority at ESU a student must be at least a second semester freshman, enrolled in at least six (6) credits, and have a minimum of a 2.2 Cumulative Quality Point Average (transfer students must have completed at least twelve (12) credits at the college level). For a current list of recognized fraternities or sororities eligible to extend invitations to membership please contact Shannon Corr, Assistant Director of Student Activities at 570-422-3429.

## Learning Center

The Learning Center provides academic supportive services to the entire ESU community and houses the Tutoring Program and a computer lab. Professional and peer tutoring and drop-intutoring labs in mathematics, chemistry, physics, economics and writing are available to all students. The Learning Center, located in Rosenkrans East, is open Monday through Thursday from 8:00 a.m. to 10:00 p.m. and Friday from 8:00 a.m. to 4:30 p.m. and Sundays from 12 noon until 10:00 p.m. for tutoring, studying and computer use.
The Learning Center is also responsible for helping students who are on academic warning or probation. The director meets with students to discuss learning strategies and study techniques, and to offer referrals to other services such as meeting with the student's classroom instructor or adviser, tutoring or the BALANCE workshops. Students who are in academic difficulty should make an appointment with the director as soon as they know they have been placed on warning or probation by calling 570-422-3504. Students may also stop in to the Learning Center director's office located in Rosenkrans East, Room 22. For further information, call 570-4223507 or visit our website at www3.esu.edu/academics/learningcenter.asp.

## Office of Diversity and Equal Opportunity

The Office of Diversity and Equal Opportunity's mission is to promote, plan and monitor social justice in the university community. In addition, it is to implement programs that enhance the human rights of the members of the East Stroudsburg University family. Moreover, the Office of Diversity and Equal Opportunity, with the cooperation of faculty, students, staff and administration, strives to:

- Ensure that the university is in compliance with equal employment law, affirmative action statues, regulations, and legislation;
- Promote respect for individual differences and the right of individuals to be treated with respect and civility;
- Assure equity and to serve as an advocate for ethnic minorities, women, persons with disabilities, and other groups protected by federal, state or local laws;
- Assist in the creation of an environment in which diversity will be perceived as a strength; and
- Assist in the creation of a campus climate that is conducive to the optimal learning and development of all people at the university.

The staff of the Office of Diversity and Equal Opportunity is here to serve student, faculty, and staff at the university as well as guests of the campus. For more information please contact the office at 570-422-3656 or e-mail the office's administrative assistant, Michelle Keiper, at mkeiper@po-box.esu.edu.

## Recreation Center

The Recreation Center, a new state-of-the-art facility that opened in August 2003, provides the ESU community with general recreation opportunities and supports the ever-changing exercise needs of students interested in pursuing healthy lifestyles.
The 58,000 square foot facility offers students a four-court arena for basketball, volleyball, and tennis; a fitness center including cardiovascular, free-weight, and selectorized equipment; multipurpose studio for group fitness, dance, martial arts and other exercise programs; fitness arcade featuring Dance Dance Revolution and Game Bikes; racquetball courts; elevated track; indoor and outdoor equipment check-out; and locker/shower facilities. The Recreation Center offers comprehensive programs that include Group Fitness, Special Events, and Leagues.
Weekly group fitness programs are offered that include kickboxing, abs, yoga, step and other aerobic activities. On a regular basis, a variety of special events are hosted that include sport tournaments (racquetball, dodgeball, wallyball, tennis), wellness seminars, and clinics. For more information on services, hours of operation, policies, and procedures, please visit the Recreation Center Web site at www.esu.edu/reccenter or call the membership service desk at 570-422-2970.

## Religious Life

United Campus Ministry (UCM) is a branch within the Office of Student Affairs that is supported by the Diocese of Scranton, the Northeast Regional Ministry in Higher Education, and is a member of the Monroe County Clergy Association. Its mission is both ecumenical and interfaith in nature that fosters an environment conducive to spiritual growth and development. UCM assists students in networking with local churches, places of worship, and local clergy.

UCM helps the local community in the following areas:

- Big Brothers/Big Sisters
- Habitat for Humanity
- Local soup kitchens
- Food pantries
- Schools and youth groups

Religious education and education in social justice are provided through retreats, educational programs, faith discussions, visits on campus by local clergy, and annual mission trips. For more information, telephone 570-422-3525; or access the web site of UCM at www.esu.edu/ ministry.

## Residence Hall Association

Each residence hall has an elected council, which serves the interests of the students of the hall and sends representatives to the Residence Hall Association meetings. This representative group of men and women works toward enhancing residence life for students. It assists in formulating official standards and operational policies for residence halls, provides meaningful social activities, establishes programs of educational enrichment in the residence halls, and participates in various community service projects.

## Services for Students with Disabilities

East Stroudsburg University of Pennsylvania is committed to providing equal educational access to otherwise qualified students with disabilities. Individuals with disabilities are guaranteed certain protections and rights of equal access to programs and services under Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA). Academic adjustments and reasonable accommodations are determined by specific nature and severity of the disability and any functional limitations that may result. Students who wish to request accommodations are responsible for providing documentation of their disability that consists of an evaluation by an appropriate professional and describes the current impact of the disability as it relates to the accommodation request. For further information, call 570-422-3954 V/TTY or visit our website at http://www3.esu.edu/academics/disabilityservices/index.asp.

## Social and Cultural Activities

The university offers a variety of social activities and opportunities for the campus community. Programs are sponsored throughout the year to enhance the quality of student life. Guest speakers on contemporary topics or controversial messages often visit the campus. Theatrical events and recitals featuring students and faculty are produced annually. Such activities as films, comedy shows, and concerts are also held throughout the year. In addition, a wide variety of intercollegiate, intramural, and club sports are available. Finally, major events such as Welcome Week, Family Weekend, Homecoming, Spring Week, Commuter on the Quad Series and Greek Week round out the social calendar.

## Speech and Hearing Center

The Speech and Hearing Clinic, located in LaRue Hall, is operated by the Department of SpeechLanguage Pathology in connection with its clinical training program. Students provide therapy while being supervised by faculty who hold appropriate clinical certification and licensure.
Services provided by the clinic include evaluation and therapy in the following areas:

- Speech/articulation disorders
- Developmental language disorders
- Aphasia resulting from head injury or stroke
- Voice disorders
- Laryngectomy
- Cleft palate
- Stuttering
- Foreign accent reduction
- Communication problems resulting from hearing loss

Complete audiologic evaluations are available. Therapy is conducted in rooms that are observable through one-way mirrors. Families of clients are encouraged to observe therapy so that they may better help the clients at home.

Clients at the clinic include members of the community, children attending the Mekeel Child Care Center, and students and employees of the university. Both evaluation and therapy are free of charge to students and employees of the university. Anyone interested in clinic services should contact the clinic director at 570-422-3247.

Student Life

## Stony Acres

Stony Acres, a 119-acre student-owned recreation area, is located just nine miles north of the university in Marshalls Creek. A multipurpose lodge, six cabins, a climbing tower, a challenge course, a camping equipment program and a variety of activities including canoeing, camping, cross country skiing, ice skating, hiking, fishing, and picnicking have made Stony Acres a popular spot year round.

The Stony Acres lodge is available free of charge to campus organizations for meetings, workshops and other programs. For lodge reservations, call Stony Acres directly at 570-223-8316. Cabin reservations and other information may be obtained by contacting the University Center at 570-422-3767.

## Student Government

The Student Senate comprises elected student officials and represents the student body in issues related to campus life. Senators from each class serve on committees concerned with academic affairs, social activities, clubs and organizations, student rights and responsibilities, etc.

## Student Organizations

Approximately 100 clubs and organizations have been created as a result of student interest, funded by the Student Activity Association. The scope of these organizations is widely varied, including publications, athletics, drama, music, service, social, scholastic, cultural, recreation, and scholastic honoraries.

## Student Support Services

Student Support Services (SSS) is a federally funded TRIO program, housed in the Department of Academic Enrichment and Learning, designed to improve eligible students' academic performance, increase their motivation and enhance their potential for graduation. Students whose parents did not graduate from a four-year college or who meet certain economic guidelines or have a physical or learning disability may qualify for participation in SSS. Academic and career counseling, peer counseling, tutoring and drop-in-labs, study skills workshops, cultural and social activities are services that are provided. For further information, call 570-422-3825 or visit our website at www3.esu.edu/academics/sss.asp.

## Telecommunication Service

Resident students are provided cable TV, Internet, and a "local service only" telephone line on their room. Students must provide their own telephone instrument to hook up to the phone line. Long distance phone service is NOT provided, and should be secured, if needed, through phone cards or personal cellular service.

## Theatre Program

The university provides a comprehensive program in theatre through the coordination of the Theatre Department and Stage II, the undergraduate dramatic organization. The program includes four major theatrical productions which include children's theatre as well classical and contemporary offerings utilizing the university's main and experimental theaters.

## Transportation Options

Commuter students have various transportation options at ESU. Students must register their personal vehicles with the University Police and receive a parking decal. This decal enables the student to park in designated parking areas for commuters.

Other options for travel to and from campus follow below:

## University Shuttle

A shuttle service is available on campus that is in operation Monday through Friday when classes are in session. It stops at University Ridge as well as other designated locations around the campus.

## Local Bus Service with Monroe County Transit

The Monroe County (MC) Transit has a local bus route that runs through campus and has various pick-up points and bus stops in East Stroudsburg, Stroudsburg, Tannersville, and Mount Pocono. The transit services extend as far as Snydersville and Effort. For more information on bus schedules, areas of transit and bus passes, contact MC Transit at 570-839-6282 or stop by the Office of Commuter Student Services for schedule guides.

## Car-Pooling

Commuter Student Services assists students with car pool arrangements. If you are interested in learning if others want to commute with you from your area, visit the office and take advantage of this service. Car-pooling is a great way to lower the expense of commuting to campus.

## Tutoring

The University-Wide Tutorial Program (UWTP), housed in the Department of Academic Enrichment and Learning, offers free individual and small-group tutoring in most 100 and 200 level undergraduate courses. Students may request tutors in one or more courses by completing the appropriate forms, which are available in the Learning Center in Rosenkrans East. In addition to individual and small group tutoring, drop-in tutoring labs in a variety of high demand subject areas, such as math, economics, physics, chemistry and writing skills, are offered each semester. These labs require no scheduled appointments. Supplemental Instruction is also offered in conjunction with specific courses. For further information, call 570-422-3515 or visit the UWTP website at www3.esu.edu/academics/tutoringcenter.asp.

## University Health Services

The university employs registered nurses, physicians, and a health educator to care for student health needs. The services provided include educational programs, diagnostic services and medical care for minor illnesses and injuries. All major problems are referred to the student's personal physician or to a local physician specialist; all serious accidents are referred to Pocono Medical Center. In cases where referral is necessary to either the student's physician, a physician specialist, to a hospital or other medical facility, the costs incurred must be borne by the student. Fees for any medical treatment provided away from the health center, and for diagnostic testing which includes lab tests, x-rays, etc. are the responsibility of the student.
The Flagler-Metzgar Health Center maintains a formulary where most routine prescription drugs are supplied without cost. Special prescription costs, however, must be borne by the student.

Only students who are currently enrolled in classes and who have completed their Report of Medical History Form, including required, updated immunization dates, will be treated at the university Health Services. Students who leave the university for whatever reason for a period of more than one year are required to complete new health examination forms.
Pennsylvania law (2002) requires all students who reside in university-owned housing have documentation of receiving/refusal of the meningitis vaccine. All students planning to live in university-owned housing must submit their completed Report of Medical History form which includes this information prior to being permitted to move-in.

The health center is closed on weekends, holidays, and breaks when classes are not in session.

## HEALTH CENTER HOURS:

| Fall and Spring Semesters | Monday and Tuesday | 8:00 a.m. $-7: 30$ p.m. |
| :--- | :--- | :--- |
|  | Wednesday and Thursday | 8:00 a.m. $-5: 30$ p.m. |
|  | Friday | 8:00 a.m. $-4: 00$ p.m. |
| Summer Sessions | Monday to Friday | 8:00 a.m. $-4: 00$ p.m. |

## University Store

The University Store, located on the lower level of the University Center supports the academic and service mission of East Stroudsburg University through the sale of books, supplies, and technology products to the students, faculty, staff and alumni of the university. The primary function of the store is to provide course books, both new and used, and supplies required for course work as well as other products and services that enhance the collegiate experience. The faculty and store cooperate in the process of making course books available to students.
The Store also offers the following products and services: general books, educational-priced computer software, supplies, stationery, campus apparel, prerecorded music, greeting cards, glassware, class rings, gifts, phone cards, shipping, fax, Western Union, money orders, textbook reservation service and many assorted imprinted items. Store hours, during the academic year while classes are in session, are Monday through Friday, 8:00 a.m. - 5:00 p.m. and Saturday, 11:00 a.m. - 3:00 p.m. At the beginning of the semesters, the store is open additional evenings to better serve the students' needs.

The Convenience Store features snacks, sodas, juices, frozen and microwaveable foods, health and beauty aids, cards, supplies and film. The entrance is on the university walk near the bridge. Hours: Monday through Friday, 7:30 a.m.-8:00 p.m. and Saturday and Sunday, 11:00 a.m. - 7:00 p.m. For more information, call 570-422-BOOK or visit www.esubookstore.com.

## Women's Center

The Women's Center, located in Rosenkrans East, provides a drop-in center and supportive networking environment for all campus women - students, staff, faculty, and administrators. In addition, the Women's Center offers educational workshops on a variety of topics, supports political action for social change relevant to women, maintains a resource library on women's issues, supports student attendance at women's conferences and sponsors other special events for Women's History Month in March. The Women's Center emphasizes and encourages the involvement of diverse groups of women including women of all races and ethnicities, sexual orientation, ages and physical abilities. For further information, call 570-422-3472 or visit or website at www3.esu.edu/academics/womenscenter.asp.

## Veterans Affairs

The Veterans Certifying Official is located within the Center for Enrollment Services. The Certifying Official has the delegated authority to sign enrollment certifications, and other certification documents and reports relating to veterans and their dependents who are eligible for VA education benefits.

## Degrees Offered

## Associate of Science Degree

## The College of Education

The Media Paraprofessional Program is a two-year technically oriented program of study. This sixty semester credit hour program includes training in media-related skills, operating television and recording equipment, developing multi-media productions, and maintaining audiovisual equipment. Students may eventually transfer into the B.S. degree program in the Media Communication and Technology Department.

## Bachelor of Arts Degree

## The School of Arts and Sciences

The Faculty of Arts and Letters
The Faculty of Science
The Faculty of Social Sciences
The Bachelor of Arts degree emphasizes a liberal arts education which stresses cultivation of a breadth of learning in the sciences, social sciences, humanities and fine arts and is combined with strong competence in at least one field of the student's choosing. Because the program is flexible, students can obtain a basic preparation appropriate for graduate study or for professional studies in areas such as dentistry, engineering, law, medicine, and theology. Graduates may also compete, through civil service examinations, for positions with the state or federal governments. Other graduates may seek employment in business firms or with industry. Whatever their career choices, students with a liberal arts education will acquire far more than training for a job.

The combination of General Education courses, a major in a discipline, a complementary minor or concentration if desired, a substantial number of free electives, and learning experiences outside the classroom through internships or travel will provide students with a sense of the historical and contemporary dynamics of our culture as well as the knowledge, skills, and understanding essential for the successful pursuit of one's personal, interpersonal, and professional life.

Students major in an area of specialization in a single department or an interdepartmental program such as Fine Arts, Earth and Space Science, Environmental Studies, or Interdisciplinary Studies. It is possible to complete requirements for more than one major within the four years of normal undergraduate study.

In addition to a major or double major, students may develop an interdisciplinary major appropriate to their interests and career objectives. For specific requirements, see "Interdisciplinary Studies" in the "Degree Programs and Course Descriptions" section of the Catalog.

No more than 48 of the 120 credits required for the Bachelor of Arts degree may be from a single discipline. In interpreting this requirement, "English Composition" is not counted with other courses in English. Departments, which offer courses in more than one discipline, count these areas separately, for example, French, German, and Spanish in the Foreign Languages Department or Sociology, Social Work, and Criminal Justice in the Sociology Department.

A typical student in a liberal arts program will choose 50 credits in fulfillment of General Education. Most departments require at least 30 credits for a major. A few departments, notably the sciences, have co requisite requirements in other disciplines. This still leaves as many as 30 credits of free electives. While free electives are ordinarily taken in the liberal arts, students may also elect courses offered by the College of Education and the School of Health Sciences and Human Performance, providing there are seats remaining after the needs of their own degree candidates have been met. Students are strongly urged to consult with their adviser prior to scheduling courses in these schools. (This list will occasionally be revised. Current information will be available from the Dean of Arts and Sciences.)

## Bachelor of Science Degree

## The College of Education <br> The College of Business, Management and Economics The School of Health Sciences and Human Performance The School of Arts and Sciences

The Faculty of Science<br>The Faculty of Social Sciences

The Bachelor of Science degree offered by the College of Education, Faculty of Science, leads to teacher certification on the pre-school, elementary, and secondary school levels according to the program choice of the student. A comprehensive certification program in special education is also offered.

Programs in teacher education at East Stroudsburg University are approved by the National Council for Accreditation of Teacher Education and the Pennsylvania State Department of Education. Graduates who receive the degree of Bachelor of Science will have completed the coursework necessary to be eligible for certification to teach the subjects and grade levels in which they are qualified. Certification programs include early childhood, elementary, special education, and several secondary education areas. All applicants must be endorsed by the adviser, the chair of the department, and the Dean of the College of Education who is the certifying officer of the university.

The Faculty of Science also offers a Bachelor of Science degree in Media Communication and Technology and a B.S. degree in Rehabilitative Services. These degrees do not lead to certification in a teaching field.

The Faculty of Hospitality and Leisure Services Management within the College of Education offers the Bachelor of Science degree in Recreation and Leisure Services Management and in Hotel, Restaurant and Tourism Management.

The Bachelor of Science degree offered through the School of Health Sciences and Human Performance may lead to teacher certification, depending upon the program selected by the student. Teacher certification programs are offered in health and physical education, school health education and school nursing.

The Bachelor of Science degree is also offered through this School in Allied Health Education, Athletic Training, Exercise Science, Health Education, Health Services Administration, Nursing, Physical Education, Speech-Language Pathology, and Sport Management. Concentrations are available in community health education, public health administration,
exercise physiology, sport and exercise conditioning, school health, and health and physical education.

Finally, the Bachelor of Science degree is available through the School of Arts and Sciences (Faculty of Science) in special fields within Biology, Chemistry, Computer Science, Mathematics, Physics and Psychology, and through the School of Arts and Sciences (Faculty of Social Science) in the field of Management.

No more than 60 of the 120 credits required for the Bachelor of Science degree may be from a single discipline.

## Graduate Degrees

The university offers the Master of Arts, Master of Science, Master of Public Health, and Master of Education degrees in twenty-one areas of specialization. Post-baccalaureate initial and advanced certification in Education programs is offered in twenty-five different areas. A cooperative cohort doctoral program with Indiana University of Pennsylvania in Education Administration and Leadership is available with all coursework taken at ESU. In addition, a unique teacher intern program is available for college graduates who are not certified in teaching secondary school subjects and special education. The program allows graduates to earn teaching credits while they teach, under supervision, and on a full salary.

Detailed information concerning graduate degrees may be obtained in the Graduate Catalog or on our web site at www.esu.edu.

## University Requirements

The requirements for the baccalaureate degree at East Stroudsburg University are:

1. A minimum of 120 semester hours. Some degree programs may require more than 120 credits.
2. A minimum of 30 credits in courses with numbers 300 or higher.

3 . A minimum cumulative quality point average of 2.00 . Some degree programs may require a higher cumulative quality point average.
4. Demonstration of competence in basic mathematical skills. (See page 49.)
5. Completion of the general education requirements. (See page 53.)
6. For students in B.A. programs, no more than 48 credits from any single department may be applied toward the 120 credit minimum. Students in B.S. programs may apply no more than 64 credits from any single department toward the 120 credit minimum. In either case, if a department offers courses under more than one rubric, then this regulation applies separately to each rubric used.
7. Completion of the requirements for one or more majors.
8. A minimum residency as outlined below:
a. The minimum residence requirement for the baccalaureate degree is one year ( 32 credits earned from East Stroudsburg University).
b. The last 32 credits must be taken at East Stroudsburg University unless a waiver is granted. This waiver requires the approval of the student's adviser, major department chair, and academic dean. Some programs which require off-campus senior level experiences at other schools have automatic exemptions from this section.
c. The minimum number of credits in the major which must be taken at East Stroudsburg University will be determined by the department housing the major.

## Home Study Credit Limit

A maximum of nine (9) credits of home study courses may be counted toward the minimum 120 credits required for graduation. A maximum of six (6) of these may be from one department.

## Course Numbers

Course descriptions are arranged by departments or by program. The course numbers are used to indicate the year in which courses are usually taken by students and/or the minimum number of prerequisite course(s) the student ought to have completed to gain admission in to the course. The student should read the catalog description of each course for more detailed information regarding the prerequisite(s) for that course.

- Below 100 level remedial courses do not carry credits toward graduation
- 100-199 Freshman level courses; typically no prerequisites
- 200-299 Sophomore level courses; probably has one prerequisite
- 300-399 Junior level courses; at least one prerequisite
- 400-499 Senior level courses; at least two prerequisites
- 500-600 graduate courses, cannot be taken by undergraduates without advance approval

In cases where students have not completed the prerequisites for a particular course, they may request a waiver of the prerequisites from the course instructor.

## Course Credit

Course credit is measured in semester hours. A semester hour represents academic work equivalent to one hour per week in class plus two hours per week of outside studying for a semester. Class periods at East Stroudsburg are generally 50 minutes in length and are regarded as class hours. A semester is 15 calendar weeks. A semester hour of credit is also equivalent to one week of full time study whether in class or outside of class. In some courses two hours of laboratory per week for a semester earns one semester hour of credit, while in other courses three hours of laboratory or fieldwork per week for a semester earns one semester hour of credit.

Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title:

- The first number shows the credit in semester hours.
- The second number shows the periods of concentrated classroom instruction per week.
- The third number shows the periods of laboratory, field or other supervised activity work per week.

For example, CHEM 353 PHYSICAL CHEMISTRY (4:3:3) is a course in Chemistry which earns 4 semester hours of credit. It meets for 3 periods of class lecture and 3 periods of laboratory per week for one semester.

## Basic Mathematical Skills Competency

Every undergraduate student who is seeking a first bachelor's degree must demonstrate a basic level of competency in mathematics as a condition for continuing enrollment at East Stroudsburg University. Because the skills that a student demonstrates by satisfying this competency requirement are essential for a successful undergraduate experience, including satisfactory completion of collegiate level mathematics and quantitative reasoning based requirements, the university requires that students demonstrate these skills early in their university attendance. Under no circumstances will a student graduate without having met this requirement. Following are means for meeting this requirement and a summary of the university's developmental approach to students who fail to meet this requirement in a timely fashion.

## Means for Demonstrating Basic Mathematical Skills Competency

This competency may be demonstrated in any of the following ways:

1) A Math SAT score of 500 or higher;
2) A Pennsylvania System of School Assessment (PSSA) ranking of Proficient or Advanced on the Grade 11 Mathematics Exam;
3) A grade of 3 or higher in an AP Calculus or Statistics test;
4) A passing score on the "College Mathematics" CLEP test;
5) A grade of $C$ or better in a mathematics transfer course that is applicable toward satisfying the East Stroudsburg University general education requirement in Science: Mathematics;
6) A passing score on the ESU Basic Mathematics Competency Exam (Note: This exam may be attempted up to three times.); or
7) A passing score on the ESU course MATH 090 Intermediate Algebra (for which the ESU Basic Mathematics Competency Exam is the final examination).

Criteria 1-5 above will satisfy competency only if completed within five years prior to the date of matriculation to East Stroudsburg University.

If students have not satisfied the requirement based on SAT, AP or CLEP scores, PSSA ranking, or transfer credit, they will have an opportunity to take the Basic Mathematics Competency Exam during the summer orientation program. If students have not satisfied the competency requirement prior to the beginning of the first full-time semester, they should attempt the exam during the first semester of attendance. The exam is given during each semester for students who do not attend orientation or who fail the test during orientation.

## Developmental Approach

Entering full-time students and full-time transfer students with fewer than 45 credits who have not satisfied the competency requirement will not be allowed to register or enroll in a third semester until they have formulated a plan for satisfying the requirement and had that plan approved by an appropriate academic authority (see Plans below).

If, by the end of the third semester of attendance, any students still have not satisfied this requirement, they will be allowed to register and enroll in the next semester only if the course MATH 090 is included in their schedules.

If, by the end of this fourth semester, any students still have not satisfied this requirement, they will be permitted to register and enroll in ONLY MATH 090 until this requirement is met. See the requirements under "Entering and Transfer Students with Fewer Than 45 Credits Who Have Not Satisfied the Basic Mathematical Skills Competence Requirement," below.

Students starting at ESU with 45 or more credits (as well as continuing and readmitted ESU students under previous catalogs) who have not satisfied the competency requirement will not be allowed to register or enroll in a second semester until they have formulated a plan for satisfying the requirement and had that plan approved by an appropriate academic authority (see Plans below).

If, by the end of the second semester of attendance, any students still have not satisfied this requirement, they will be allowed to register and enroll in the next semester only if the course MATH 090 is included in their schedules.

If, by the end of this third semester, any students still have not satisfied this requirement, they will be permitted to register and enroll in ONLY MATH 090 until this requirement is met. See the requirements, below, under "Students Transferring to ESU with 45 or More Credits, Readmitted Students, and Students Continuing under Previous Catalog Students."

Plans: Information concerning the process for requesting approval of a plan will be available from the Center for Enrollment Services and the Department of Mathematics. University pre-approved model plans written in contract form are available from the student's academic adviser.

## Entering and Transfer Students With Fewer Than 45 Credits Who Have Not Satisfied the Basic Mathematical Skills Competency Requirement

1st ESU Semester: Academic advisers review the math competency requirement with students who have not satisfied it and together they formulate a plan to satisfy the requirement no later than the end of the second semester.

2nd ESU Semester: Students receive a letter notifying them that a "hold" has been placed on their registration. Students must formulate a plan for satisfying the requirement. The plan must be approved by the appropriate academic authority before the registration "hold" will be released.

3rd ESU Semester: Students receive a letter notifying them that a "hold" has been placed on their registration. Students must include MATH 090 in their next semester's schedule and submit their schedules to the appropriate academic authority before the registration "hold" will be released.

4th ESU Semester: Students receive a letter notifying them that a "hold" has been placed on their registration. Students may enroll only in MATH 090 in the next semester. Schedules must be approved by the appropriate academic authority.

## Students Transferring to ESU with 45 or More Credits, Readmitted Students, and Students Continuing under Previous Catalogs Who have Not Satisfied the Basic Mathematical Skills Competency Requirement

1st ESU Semester for Transfers/ 1st Semester Policy I in Effect for Readmitted and Continuing Students: Students receive a letter notifying them that a "hold" has been placed on their registration. Students must formulate a plan for satisfying the requirement. The plan must be approved by the appropriate academic authority before the registration "hold" will be released.

2nd ESU Semester for Transfers: Students receive a letter notifying them that a "hold" has been placed on their registration. Students must include MATH 090 in their next semester's schedule and submit their schedules to the appropriate academic authority before the registration "hold" will be released.

3rd ESU Semester for Transfers: Students receive a letter notifying them that a "hold" has been placed on their registration. Students may enroll only in MATH 090 in the next semester. Schedules must be approved by the appropriate academic authority.

## Foreign Language Competency Requirement For Certain Bachelor of Arts Degrees

The following foreign language competency is required for selected Bachelor of Arts degrees:

## Native speakers of English

- Passing a foreign language competency examination offered by the Department of Foreign Languages at a level equivalent to Language II with a grade of "C" or better.
- Completing a college course at the level of Language II with a grade of "C" or better.
- Passing the CLEP test.

CLEP results are listed as either a "raw score" or a "percentile." The "raw scores" are translated on the test and indicate whether or not the student receives 3 credits. A "percentile" score of $50 \%$ or higher will result in the student receiving 3 credits.

- Passing the AP test with a score of " 3 " or higher.
- Transfer students who have successfully completed a course of foreign language study at Level II with a grade of "C" or better, within the last 6 years, will be considered as having satisfied this requirement.

Native speakers of a language other than English will satisfy this requirement by successfully completing English Composition (ENGL. 103) with a grade of "C" or better. Final determination of a student's status as a native speaker of a language other than English shall be established by the Department of Foreign Languages.

## Bachelor of Arts Degrees requiring foreign language proficiency at level II are:

- Biochemistry
- Biology
- Chemistry
- English
- Mathematics
- Environmental Studies
- Geography
- Philosophy
- Psychology


## University Academic Initiatives

University Academic Initiatives consist of six university-wide academic services and/or programs aimed at ensuring the academic success of all students. The goal of these initiatives are to achieve greater rates of student persistence, higher levels of student learning, more effective use of existing resources and more information for students and advisers.

## The General Education Program

In collaboration with the University-Wide General Education Curriculum Committee and faculty from across the university, this program communicates the purpose and benefits of ESU's 50 -credit General Education requirement to students and faculty. The program works to enhance ESU's determination of academic placements and competencies such as English and math, significantly contributes to the assessment of student learning outcomes, and facilitates ESU's on-going dialog about the continuous improvement of General Education.

Students who began their academic careers at East Stroudsburg University prior to the summer of 1996 are required to complete the General Education curriculum which was in place at the time of their entry.

Undergraduate students complete their academic coursework within the offerings of one of four Undergraduate Schools:

- The School of Arts and Sciences
- The College of Business, Management and Economics
- The College of Education
- The School of Health Sciences and Human Performance

In addition to completing the requirements for the major field of study, all students are required to complete 50 semester hours in General Education. Students will be assigned a faculty adviser who will provide guidance in planning their academic program. Students are responsible for knowing the requirements for the degree they propose to earn and for arranging their program of study accordingly.

A minimum of 120 semester hours is required for graduation. (Some programs require more.)
The General Education Curriculum at East Stroudsburg University provides a core of interrelated liberal studies for all students. By design it provides students with knowledge and perspectives and enables them to adopt varied modes of thought and develop specific competencies. Students become prepared to make informed judgments as citizens of this state, this nation, and a global society in which the quantity of information continues to grow. Students completing the general education program at East Stroudsburg University will be able to:

- Analyze problems from historical, contemporary and personal perspectives in order to make informed choices in facing present and future dilemmas;
- Describe, analyze, or evaluate art in some of its specific and various forms - performance, visual, practical and literary;
- Apply concepts from the behavioral, life, and social sciences to personal and social issues and problems involving individuals, communities, and institutions;
- Analyze scientific evidence as it relates to the physical world and its interrelationship with human values and interests;
- Discuss some of the best original scholarly and creative works that have been produced throughout human history;
- Use qualitative and quantitative approaches to problem solving and research;
- Analyze relationships among culture, language, ethnicity, gender, and nationality and to apply that analysis to specific national and international social, political and economic changes; and
- Demonstrate the skills needed to enrich the quality of life through physical activities which enhance cultural awareness and promote lifetime fitness.


## The $\mathbf{5 0}$ semester hours in General Education are distributed in the following manner:

## Required: 5 credits

## English Composition: 3 credits

All students write a placement essay. They are then placed in ENGL 090, Composition Skills, or ENGL 103, English Composition. Those placed in 090 must take and pass it before they can be admitted to ENGL 103. Students may be exempted from and receive credit for English Composition, ENGL 103, if they take and achieve a high score on the CLEP General Examination in English Composition (with essay). Students must receive a minimum grade of "C" to fulfill the English Composition requirement.

## Lifetime Fitness Activities: 2 credits

To fulfill this requirement, a student must successfully complete two credits selected from the Lifetime Fitness courses offered by the Department of Movement Activities and Lifetime Fitness. Credit may be earned by successful completion of a proficiency test in any of the courses offered by the department. (Movement Studies and Exercise Science majors are exempt from this requirement.) Prior military service or law enforcement experience is not accepted for lifetime fitness credit.

## Distributive Electives: 45 credits

Each student must complete at least 15 credits in each of three areas:

> Group A - Arts and Letters
> Group B - Science
> Group C - Social Science

In each group, the student may take three credits in each of three subjects and six credits in a fourth subject or three credits in each of five subjects. Courses that satisfy General Education requirements are identified as GE in department course listings. Students should meet with their faculty advisers to plan appropriate choices to meet these requirements. Some GE courses may have specific prerequisites.

Arts and Letters (Group A) 15 credits

1. English Language and Literature
2. Fine Arts - Art, Communication Studies, Music, and Theatre
3. Foreign Languages
4. Performing Arts - Dance, Communication Studies, Music, and Theatre
5. Philosophy
(The distinction between fine and performing arts may be obtained from the faculty adviser.)

Science (Group B) 15 credits

1. Biology
2. Chemistry
3. Computer Science
4. Mathematics
5. Physics
6. Psychology

Social Science (Group C) 15 credits

1. Economics
2. Geography
3. History
4. Political Science
5. Sociology-Anthropology

Corequisite courses may be counted under General Education requirements in Groups A, B, or C if appropriate.

## Exceptions

Required Science Courses: Where coursework in biology, chemistry, mathematics, or physics is required (or listed as recommended in the catalog) for the major, a student with a declared major may substitute those courses for courses in the same departments listed under Science Group B. If a student adopts the above provision and later changes his or her major to a field which does not require coursework in those disciplines, the student may nevertheless receive General Education credit for courses taken in those departments.

Foreign Language Courses: Students may substitute a higher-level foreign language course taught in the language for courses listed under Foreign Language Group A.

Teacher Certification: Students pursuing teacher certification must take two mathematics courses and two English courses (including one composition and one literature course).

Teacher Certification Requirements - please refer to The College of Education in the Program Offerings section of this catalog.

## American Democracy Project

The American Democracy Project is a multi-campus initiative that seeks to create an intellectual and experiential understanding of civic engagement for undergraduates enrolled at institutions that are members of the American Association of State Colleges and Universities (AASCU). The goal of the non-partisan project is to produce graduates who understand and are committed to engaging in meaningful actions as citizens in a democracy. East Stroudsburg University is a participant in this initiative by supporting and creating opportunities for student and faculty participation in the development of a campus-wide culture of democratic dispositions and practices.

## Honors Program

The Honors Program offers our best students the opportunity to fulfill part of the general education requirements with special honors courses. Unique features of the honors courses include a maximum class size of twenty, specially selected professors, and close teaching-learning relationships in and out of the classroom. Honors courses provide a stimulating introduction to the various aspects of our social, cultural, and scientific heritage. In the junior year, students take the honors seminar and, in the senior year, an honors thesis project must be completed within the department of the student's major. Each student has an honors adviser in addition to an academic adviser. Field trips and special speakers are common among honors courses. The honors program affords opportunities such as registration for courses ahead of other students, honors scholarships, international summer study scholarships, special recognition at graduation and on the official university transcript, and membership in the Honors Student Association. There is a honors program house on campus for student and faculty use. Also, special attention and assistance in graduate school applications and job applications are available from the program director and honors adviser. For more information, visit www.esu.edu/honors.

## Summer Seminar for Outstanding Sophomore Students

Students beginning or early in their sophomore year compete for the opportunity to participate in special late summer one-credit special topics seminars. The one-week seminar includes the conduct of independent, innovative projects as well as two special events that often involve travel, and mentor training. There is no cost to the selected students. Subsequent to the seminar, students serve as mentors to six entering freshmen during the fall semester.

## Academic Research

Faculty in nearly every university department participate in scholarly activities including original research and creative endeavors, and student participation is often an integral part of such activities. Students who participate with faculty in creative activities and research experience are often set apart from others in the job market and application to graduate school. The university supports these activities by providing academic credit, space and monetary support for materials, logistics and travel to conferences through a variety of funding sources. Successful faculty and students regularly attend regional and national conferences.

## Service Learning

The Service-Learning initiative seeks to expand opportunities to apply classroom knowledge in meeting the social needs of the community in a broader quest for the common good. This is accomplished through an experiential approach to teaching and learning that can be implemented in courses that incorporate moral development, civic literacy, or the development of critical thinking as it relates to society. Service-Learning, whether through short or long-term community service projects, affords students with the opportunity to integrate theory into practice, apply practical skills, clarify values, and raise consciousness about community issues. Through real life experience, Service-Learning recognizes the reciprocal relationship between our campus and those being served thereby encouraging students to embrace their role as vested community members while assisting our community in seeing the promise in our students.

## Special Academic Opportunities

## Air Force ROTC

East Stroudsburg University students are eligible to participate in the Air Force Reserve Officer Training Corps (AFROTC) through a cross-enrollment agreement with Wilkes University. Courses in this program will be taught at Wilkes University. For additional information, contact the Aerospace Studies Department at Wilkes University, 800-WILKES-U, extension 4860 or 4861.

## Army ROTC

East Stroudsburg University students are eligible to participate in the Army's Reserve Officer Training Corps (ROTC) through a cross-enrollment agreement with Lehigh University. Courses in this program will be taught at Lehigh University. For additional information, contact Captain Kyle Brede at 610-758-3272.

## Continuing Education

The continuing education program is designed to meet the needs of society by presenting a number of credit and non-credit courses at times convenient for the general public. These courses vary in length from one day to several weeks to the entire semester. For additional information, contact the Office of Continuing Education at 570-422-2853.

## High School Access Program (Early Admission)

The High School Access Program provides an opportunity for high school students to begin their college careers early, on either a part-time or full-time basis.

The part-time (summer or regular academic year) student is a high school junior or senior who wishes to take one or two courses at East Stroudsburg University in order to enrich his/her high school program. Highly motivated students with a minimum average of B or higher in a college preparatory program may be recommended to the university by their guidance counselors. Students with less than a B average but who have demonstrated particular skill or talent in a given area may be recommended by their counselors to pursue coursework in that area. Recommendations should be sent to the Office of Admission. Students are admitted to ESU in a non-degree status. Should a student wish to matriculate as degree-seeking at ESU after high school graduation, he/she must apply during the senior year of high school using the regular freshman application.

The full-time student is a student who has completed his/her junior year in high school and wishes to enroll in a full course of study at East Stroudsburg University in lieu of the senior year in high school. Such students must rank in the top 10 percent of their class and be enrolled in a college preparatory curriculum in order to be considered. Full details are available from the Office of Admission or on the freshman information page of the admissions website at www. esu.edu/admission.

Special Academic Opportunities

## International Programs and Student Exchange

## Study Abroad

Study abroad opportunities are available to students who wish to experience life in another culture by studying in a foreign country. These programs are sponsored by the Pennsylvania State System of Higher Education universities and by colleges and universities throughout the United States. Information is available in the Office of International Study on internship and volunteering opportunities abroad. Students will be shown how to research study abroad programs, how to select a program, and how to guarantee a smooth re-entry into ESU upon their return.

## National Student Exchange

Students who wish to experience a different learning environment and to broaden their social and cultural awareness, but who are not ready to leave the continent, should investigate opportunities offered by the National Student Exchange (NSE). Qualified students are given the opportunity to study for a semester or more at another American or Canadian institution at instate rates. Credits and grades earned during the exchange become part of the student's ESU transcript. The deadline for application to NSE is the last week of January. Students who are interested in applying may pick up a brochure from the office as early as October. For further information on educational opportunities abroad and National Student Exchange, contact the Office of International Study

## Internship Opportunities

Internships are available to students in most majors; academic credit may be awarded for the internship experience. Information regarding specific opportunities may be obtained by contacting department chairs or the deans of the School of Arts and Sciences, Health Sciences and Human Performance, and College of Education. A list of organizations with which university students have recently interned, student taught, and volunteered is available in the offices of the School deans. If students are considering an international internship, they may contact the Office of International Programs at 570-422-2853.

## The Harrisburg Internship Semester (THIS)

During each semester of the academic year, East Stroudsburg University selects two undergraduate students to participate in The Harrisburg Internship Semester (THIS), sponsored by the State System of Higher Education and administered by the Dixon University Center in Harrisburg. Students selected are placed with policy makers in state government offices and agencies. Each THIS intern earns 15 semester hours: 9 semester hours for the internship program, 3 semester hours for a research project, and 3 semester hours for participating in an academic seminar. A stipend is involved, which covers tuition and living expenses. To be eligible to apply, a student must have maintained a 3.1 GPA in at least 60 semester hours. However, students with 90 or more semester hours are given priority. These internships are available to students from all majors who are interested in public policy aspects of their disciplines. For application materials or more information, contact the THIS campus coordinator, Marcia Godich, at (570) 422-3743, or through the Internet at www.esu.edu/~godich.

## Law School Express Admissions Program

East Stroudsburg University has entered a partnership with Widener University School of Law in Harrisburg that allows graduates to apply to the law school under an Express Admissions Program. East Stroudsburg University graduates are guaranteed admission to the law school if they rank in the top 50 percent of their graduating class, score at or above the 50th percentile on the Law School Admission Test (LSAT), submit a timely application, and meet the law school's character and fitness requirements. East Stroudsburg University graduates admitted under this program are also eligible for Dixon Scholarships that cover 30 percent of the law school's tuition. For further information contact Professor Kenneth Mash at 570-422-3273.

## Marine Science Consortium

The university is a member of the Marine Science Consortium which provides students in Marine Science and related disciplines with access to a marine station for field trips, summer courses, and research. The Consortium's field station at Wallops Island, Virginia, is only a short distance from Chincoteague and Assateague Islands, which are well-known for their abundant wildlife.

For more information, see the Biological Sciences section in the Degree Programs and Course Descriptions portion of this catalog.

## Summer Sessions

Summer at ESU is a time to choose from a number of special programs, including innovative and stimulating courses, workshops, and travel programs. Undergraduate students wishing to accelerate and complete the four-year college program in three calendar years may do so by completing summer sessions over a period of three years. Graduate and non-matriculated students have the opportunity to take varied courses to acquire academic credit and professional competencies.

The official Summer Session bulletin, containing information on courses, expenses, and general regulations, may be obtained in late February by contacting the Summer Sessions Office at 570-422-2853.

## Upward Bound

Upward Bound is a highly successful, college-based program of rigorous academic instruction, individualized tutoring and counseling for high school students who are the first generation in their families to consider post-secondary education. A federally funded TRIO program, Upward Bound is designed to motivate and prepare students to successfully graduate from high school, enter and graduate from college. During the six-week summer program, students live on campus and participate in an intensive academic program. During the academic year, students receive academic instruction, tutoring, counseling and SAT preparation on Saturdays at the university. For further information, call 570-422-3476.

## Program Offerings Definitions

Major - A major is a program of study, usually within a discipline or group of related disciplines, consisting of a specified number of courses, credits, or achievements of increasing sophistication, subject to the requirements of the degree under which it is authorized.

Minor - A minor shares definition with the major but is essentially a "half major" which may or may not complement the student's major field. Its requirements typically include most of the required courses of a major, but fewer electives. Like the major, it is expected to have coherence and increasing sophistication rather than just a collection of courses with a common theme.

Concentration - A concentration is a sub-specialization within a major field, usually taken by a student majoring in that discipline. In some cases, a concentration may be elected by a student with a different major.

Track - A track is one of two or more paths through a major program. Students in various tracks share a common core but have variations and options peculiar to their particular needs.

## The School of Arts and Sciences

Rosenkrans Hall East, Room 123A
Dean Peter Hawkes
570-422-3494
www3.esu.edu/academics/schoolartsscienceshome.asp
The School of Arts and Sciences includes the Faculties of Arts and Letters, Science, and Social Sciences. Following the custom of hundreds of years, the faculties and disciplines represented in the school offer a basic core of knowledge to which other dimensions and specializations are added.

## THE FACULTY OF ARTS AND LETTERS <br> Offers the following degree programs:

- Art and Design
- Communication Studies
- English
- Fine Arts - Art
- Fine Arts - Music
- Art
- Communication Studies
- English
- French
- Fine Arts - Theatre
- French
- Philosophy
- Spanish
- Theatre


## Minors:

- German Studies
- Music
- Philosophy
- Spanish

Secondary Education programs leading to the Bachelor of Science degree with a major in English, French, or Spanish are offered jointly with the Faculty of Education.
Studies in the liberal and fine arts enrich the intellectual, emotional, and social lives of all students, and thereby contribute to future success in any specific career. The student who majors in an Arts and Letters field enjoys flexible scheduling to reflect wide interests. The degree also provides a strong foundation for graduate study.

## THE FACULTY OF SCIENCE

Offers the following degree programs:
Cooperative Professional Degree Programs with other institutions:

- Engineering
- Medical Technology


## Minors:

- Chemistry
- Computer Science Applications

Concentrations:

- Actuarial Science
- Laboratory Medicine
- Mental Health Worker
- Pharmacy
- Podiatry
- Mathematics
- Psychology
- Pre-Medicine
- Pre-Physical Therapy

Students participating in the programs in science have great opportunities to enter a wide variety of fields, many of which are career-oriented and involve professional training and internships. For example, a student whose primary interest includes biology can study biotechnology, laboratory medicine, environmental studies, or marine science. Secondary Education programs leading to the Bachelor of Science degree with a major in biological sciences, chemistry, earth and space science, general science, mathematics, or physics are offered jointly with the Faculty of Education.
Students may concentrate and/or prepare for further studies in the areas of environmental studies, medical technology, physical therapy, mental health, pre-medical school, marine science, and professional engineering. Students desiring to enter one of these programs should indicate such interest on the application for admission.
Some combination of chemistry and biology is valuable in any one of these programs. A major in any one or a combination among biology, chemistry and physics prepares one for medical, dental, optometry or pharmacy school.

The curriculum in Environmental Studies has been designed to meet the needs of students seeking an integrated interdisciplinary background within the tradition of a liberal education. The program is intended to provide students with an opportunity to select courses from various disciplines that will strengthen their understanding of environmental problems. The broad interdisciplinary nature of the program permits students to enroll in courses offered by different academic divisions and by various departments.

Cooperative engineering programs with Penn State University and the University of Pittsburgh permit a student to complete a Bachelor of Science in engineering at one of these institutions in two years, after completing the first three years at East Stroudsburg University. The student is also awarded the Bachelor of Arts degree from East Stroudsburg University with a major in any one or combination among the fields of chemistry, mathematics and physics. Similar arrangements in medical technology, pharmacy, and podiatry are also available.
Courses in Computer Science prepare students with valuable experience and training for jobs in industry and in management positions. Internships and training programs in psychology at hospitals and industries are useful in jobs related to human relations.

## THE FACULTY OF SOCIAL SCIENCES

Offers the following degree programs:

## Majors:

- Geography
- Sociology
- Political Science
- History
- Social Studies

Minors:

- Geography
- History
- Political Science

Concentrations:

- Criminal Justice Administration - Management
- Social Work

The Faculty of Social Sciences promotes the scholarly tradition in the disciplines of anthropology, economics, geography, history, political science, and sociology. The Faculty is committed to the belief that an education centered in the liberal arts is essential in the preparation of potential teachers and in a wide variety of professional careers. A Secondary Education program leading to a Bachelor of Science degree with a double major in social sudies and either history, geography, economics or political science is offered jointly with the Faculty of Education.

A democratic society needs to generate a pool of people with the training, philosophical perspectives, and broad academic knowledge to assume leadership roles in society and to become responsible citizens in today's changing social, political, economic, and demographic environment. Accordingly, the Faculty of Social Sciences' programs are designed specifically for men and women who are career-oriented.

The Faculty of Social Sciences' curricula permit students to broaden their knowledge through general education requirements and to concentrate in an academic discipline through the departmental requirements of the chosen major.
The Criminal Justice Administration, and Social Work concentrations are professional programs for those students who satisfy general education requirements and complete a departmental major. These concentrations provide academic and practical approaches by critically examining and interrelating subject matter within the Faculty of Social Sciences.

## The College of Business, Management and Economics

Zimbar Hall, Room 156
570-422-3589

Interim Dean Alla Wilson
www.esu.edu

The new College of Business, Management and Economics consist of four existing departments: the Department of Business Management and Economics, the Department of Sport Management, the Department of Recreation and Leisure Services Management, and the Department of Hotel, Restaurant and Tourism Management. The combined enrollment for these departments was 1,104 during the fall semester ' 06 .

The ESU Council of Trustees approved the new College of Business, Management and Economics as of January 1, 2007. Dr. Robert Dillman, President of ESU and Dr. Judy G. Hample, chancellor of the Pennsylvania Sate System of Higher Education have determined new accreditations as the primary initiatives for the new college.

# THE FACULTY OF BUSINESS MANAGEMENT AND ECONOMICS <br> Offers the following degree programs: 

Majors:<br>- Management: Specialization in Accounting, Finance, Management, or Marketing<br>- Economics: Specialization in Quantitative, Global Economics, or Financial and Monetary<br>Minors:<br>- Economics - Economics and Management Interdisciplinary Minor

As companies strive to compete in a global market they look for employees who are knowledgeable in current business practices and who can effectively evaluate the current competitive environment and meet customer needs. Businesses want employees with strong communication skills who are good at analyzing and solving problems and thinking critically.
A business management degree can provide those skills, and earning this degree can increase your job opportunities and salary potential. The study of business management provides a broad education in business management practices and can be pursued on its own or with more a specialized area of study such as Finance, Accounting or Marketing.

Economics majors will obtain a foundation in traditional economic theory that is the basis for the analytical thinking and sound managerial decision making. Students may choose to specialize in Quantitative Economics, Global Markets, or Finance. The B.A. in Economics will prepare students to either pursue graduate studies in Economics or to enter the work force with careers in Management, Finance, and Applied Economics. Graduates have achieved careers such as Actuaries, Economics Researchers, Data Analyst Careers in Management, Stock Brokers, and Account Executives.

## THE FACULTY OF HOSPITALITY, LEISURE AND SPORT MANAGEMENT Offers the following degree programs:

## Department of Hotel Restaurant and Tourism Management

## Majors:

- Hotel and Lodging Management
- Restaurant Management
- Tourism Management

Concentrations:

- General Hotel Management - Food and Beverage Management
- Tourism Management

The Hotel, Restaurant and Tourism Management program provides a Bachelor of Science degree for students preparing for a career in the hospitality industry. A core of required courses represents every segment of the hospitality field; electives are selected to complement these and, along with the general education requirements of the university, a well-rounded curriculum results.

The travel and tourism industry is one of the largest, most dynamic industries in the world. Students of the Hotel, Restaurant and Tourism Management program are introduced to this exciting industry and will be prepared to enjoy a successful career in the travel and tourism industry. All courses are taught by faculty who combine excellent academic credentials with a strong professional background.

The Hotel, Restaurant and Tourism Management program is further enhanced through activities supported by the hospitality industry. Students participate in hotel and restaurant shows, tour hospitality facilities, listen to industry speakers, attend career days, and conduct special projects for the industry.

Department of Recreation and Leisure Services Management Majors:<br>- Recreation and Leisure Services Management<br>Career Speciality Areas:<br>- Commercial • Commercial<br>- Therapeutic

The program in Recreation and Leisure Services Management provides a Bachelor of Science degree for students preparing for a career in the recreation profession. Students may choose emphasis areas in commercial, outdoor, and therapeutic recreation. Courses cover all aspects of recreation and leisure, from recreation for persons with disabilities, to resort recreation, to environment interpretation. The department has three full-time tenured faculty and approximately 100 majors. Over 700 have graduated and a majority of them have full-time employment in recreation or closely related fields. The degree program is fully accredited by the National Recreation and Park Association/American Association for Physical Activity and Recreation. The department has maintained accreditation since 1983.

## Department of Sport Management Major: <br> - Sport Management

The goals of a degree in Sport Management are to prepare students for careers as administrators and managers in athletic, health, and country clubs, as well as entry level management positions in college and professional athletic organizations. Through this program, students are prepared for a diversity of roles in the areas of sport marketing and promotions, facility management and planning, activity programming and events management.
Internships are available in the areas of professional sports, college athletics, amateur and Olympic athletes and recreation sport. This program follows the North American Society for Sport Management ("NASSM") and National Association for Sport and Physical Education ("NASPE") requirements.

## The College of Education

Rosenkrans Hall East, Room 123C
570-422-3377

Dean Patricia Miller
www.esu.edu/sps

The programs in the College of Education are designed to provide meaningful learning opportunities for students aspiring to enter professional careers related to education or media communication and technology. Students are active learners in a variety of professional knowledge and performance-based preparation programs.

## THE COLLEGE OF EDUCATION

Offers the following degree programs:

- Early Childhood Education
- Early Childhood/Elementary Education
- Elementary Education
- Elementary Education/Special Education
- Media Communications
- Media Paraprofessional
- Rehabilitation Services
- Special Education

The conceptual framework of the teacher education program focuses on the decision-making processes of teaching and learning. The model for ESU is ESU Educators: Reflective and Deliberate Decision-Makers. The beginning teacher must demonstrate knowledge and skill outcomes in four broad domains: 1) Content, 2) The Learner and Learning Environment, 3) The Teaching and Learning Process, and 4) Professionalism. The model is supported through a mission statement, professional commitments, learning style practices and university and school initiatives.

The undergraduate curricula of the College of Education are designed primarily for students preparing for teaching careers in the early childhood and elementary schools, the middle or junior high school, or the senior high school. The College of Education encompasses the departments of Early Childhood and Elementary Education, Media Communication and Technology, Professional and Secondary Education, Reading, and Special Education and Rehabilitation, as well as the Office of Field Experiences and Partnerships. Its major purpose is to prepare teachers for positions in elementary and secondary schools and people-oriented occupations, such as social and restoration agencies, state and federal government, and private industry.

The College provides programs that lead to certification in Early Childhood, Elementary Education, Secondary Education, and Special Education (mentally and/or physically handicapped). Graduates receive the degree of Bachelor of Science and are eligible for certification to teach in the schools of Pennsylvania. Students are encouraged to earn certification in several fields to enhance their employment opportunities.

Full national accreditation allows the graduate to be recommended for certification to teach in most other states without further course requirements. Information and advisement on certification is available in the office of the Dean of the College of Education. Graduates are eligible to receive an Instructional I certificate (provisional) which is valid for a period of six years of teaching in Pennsylvania. The Instructional I certificate must be made permanent after six years of teaching.

The B.S. degree program in Media Communication and Technology emphasizes extensive practical experiences in media production. Graduates qualify for positions in television production, photography, graphic design, and computer imaging in business, industry, government, and education where media are used to communicate. ESU's facilities include television studios, television editing, computer imaging, distance learning, desktop publishing, sound recording, and filmmaking. A two-year Associate Degree is also offered.

Graduate work is offered leading to the Master of Education degree in Elementary Education, Secondary Education, Special Education, Reading, Instructional Technology, and School Administration. Students interested in graduate programs should refer to the Graduate Catalog. The programs of the College of Education are fully accredited by the National Council for Accreditation of Teacher Education. All standards for program approval by the Pennsylvania Department of Education have been met.

## REQUIREMENTS FOR TEACHER CERTIFICATION

## Selection for the Teaching Profession

The nature and importance of teaching requires that students who seek to enter the profession must possess unimpeachable character, above average academic ability, and personality traits suitable for working with children and young adults. The teacher education faculty perceive their ultimate obligations to be to the students who will be taught by their graduates. Consequently, the student's admission to teacher candidacy and to student teaching and final institutional recommendations for a teaching certificate are not achieved solely by meeting routine academic requirements. As the student in each of these steps progresses toward final certification, the faculty of the student's certification area exercise their professional judgment as to the student's competency for the teaching profession.

## Admission into Teacher Education Program

All education majors seeking certification must successfully complete teacher education program admission, monitoring, and exit criteria procedures. For admission into the Teacher Education Program, students must meet the following requirements:

1) Complete faculty interviews;
2) Satisfactorily pass the Praxis I Academic Skills Assessments in reading, writing, and mathematics;
3) Earn a minimum overall undergraduate QPA as identified by PA law (2.8 or as determined by the department; transfer students' grades are included in averaging the QPA);
4) Complete 6 credits of mathematics courses and 6 credits of English (including one composition and one literature) courses;
5) Complete 48 hours by the time candidacy admission is decided;
6) Satisfactorily complete early field experiences;
7) Complete Act 34 and/or FBI clearance and ACT 151 child abuse clearance;
8) Any other specific departmental requirements; and
9) Be recommended by departmental faculty and approved by the Teacher Education Council.

Students are then admitted to candidacy in the teacher education program and are permitted to take majors-only courses. A 3.0 QPA is required for Pennsylvania teacher certification.
The student's progress and mastery of competencies will be monitored while completing requirements in the program. All students are required to maintain a cumulative and major average as specified by Pennsylvania law, to remain in the program and/or to take teacher education classes. Students must satisfy all program requirements to be recommended for the degree and teacher certification, including a 3.00 QPA. Only qualified teacher education majors are allowed to take teacher education classes. Each department will provide each student a copy of its program requirements, course checklist, and expectations.
All applicants must be endorsed by the faculty adviser, the department, and the Dean of the College of Education, who serves as the certifying officer for the university.
Experienced non-degree teachers, graduates of other colleges or universities, or others who need special assignments in student teaching will have their individual alternative programs planned and approved by the appropriate department and by the Dean of the College of Education. Transfer students' transcripts will be individually evaluated by the department chair to determine equivalent courses to be accepted.
The Pennsylvania Department of Education requires that all certification applicants satisfactorily pass the appropriate sections of the ETS Praxis Series Tests. Students must also complete the teacher certification application and respond to immigration, criminal record, child abuse, and health statements.

## Pre-Student Teaching Field Experiences

The importance of providing opportunities for education students to observe and work directly with children in schools before student teaching is recognized. To make this possible, the director of the Office of Field Experiences and Partnerships works with departments to secure quality sites for students to engage in field experiences. Field experiences are required in association with most education courses. Prior to being placed in their first field experience, students must submit a negative test for tuberculosis form and clearances for Act 34/FBI and Act 151.

## Requirements for Approval to Student Teach

The Office of Field Experiences and Partnerships coordinates student teaching assignments. Students are required to submit an application to student teach to the Office of Field Experiences and Partnerships. Students planning to student teach in the FALL semester must satisfy all Teacher Education Program admission criteria at the end of the previous spring semester.

Students planning to student teach in the SPRING semester must satisfy all Teacher Education Program admission criteria at the end of the previous summer session.

Students must meet the following requirements in addition to departmental requirements specified under the course listing for student teaching:

1) Possess health, personal characteristics, and professional attitudes considered essential for successful teaching.
2) Have completed at least 90 semester hours of credit.
3) Have successfully completed prerequisite courses in education and have no incomplete grades.
4) Have a minimum cumulative quality point average of 2.8 or as identified by PA law, Chapter 354 (some departments require specific major quality point averages as well). Students should see their department chairperson for specific requirements for their overall quality point average.
5) Provide evidence of a negative test for tuberculosis.
6) Have met all requirements for admission to teacher candidacy as required by the major department in education.
7) For K-6 and K-12 programs that the Praxis II Fundamental Subjects test prior to student teaching, passing scores must be submitted to the major department office by the first day of the semester prior to student teaching.
8) Have satisfied ACT 34 and/or FBI clearance and have satisfied ACT 151 Pennsylvania History of Child Abuse Clearance.
9) Have successfully submitted the necessary state clearances (ACT 34, ACT 151, and/ or FBI) and passing test scores to the respective teacher certification department, prior to the semester of student teaching. Students are required to submit current and acceptable clearances to university supervisors at the first student teaching practicum session, in order to be eligible for student teaching.
The Teacher Education Council recommends that student teachers have C or higher grades in all required major classes and no incomplete grades in major classes. Students are encouraged to possess at least a B average.

## Student Teaching

Student teaching is the culminating experience in a series of planned laboratory and field experiences. Student teachers spend a full semester off campus in a regular classroom under the guidance and direction of a fully certified, master teacher. The university provides each student with the additional support of a university faculty member with a background in supervision and instruction. Student teaching is planned to provide an opportunity for continued professional growth in the application of theory, methods, and subject content. Students are placed in school districts with which the university has an executed Affiliation Agreement or Articulation Contract. To date, the university has identified more than 90 school districts, within a radius of 50 miles from campus. All student teaching arrangements are made through the Office of Field Experiences and Partnerships. It is inappropriate for students to make their own student teaching arrangements.

Student teachers are expected to comply with the following list of requirements:

1) Establishing personal transportation to and from the assigned school district.
2) Adhere to school district policies, procedures, ethics codes, schedules, and dress codes.
3) Purchase Student P.S.E.A. Liability Insurance.
4) Continue to hold required clearances. An unacceptable clearance will result in the student being removed from student teaching.
5) Make arrangements for on and/or off campus housing.

## Teacher Education Council

The Teacher Education Council provides the governance of the teacher certification programs. The Council administers existing policies related to teacher education, admits students to teacher education programs and hears appeals from students, develops and proposes new policies in teacher education, and reviews certification programs and their modifications as proposed by departments and faculties to insure compliance with the standards of state and national accrediting agencies. These policies are found in the Teacher Education Program Policy Manual and minutes of council meetings.

## Student Professional Program

Designed as an alternative route to teacher certification, this program offers the senior Elementary Education or Early Childhood major (dual major students may participate after consultation with the program coordinator) a full year of guided field experience in elementary and/or middle schools which are exploring new methods of teaching. Admission to the program is limited and requires the approval of the Early Childhood and Elementary Education Department chair and the program coordinator. Interested students are advised to make inquiry no later than the beginning of their sophomore year.

## Areas of Teacher Certification

## Instructional

- Biology
- Chemistry
- Early Childhood
- Earth and Space Science
- Elementary Education
- English
- French
- General Science

Special Endorsement to Instructional I

- Driver Education

Educational Specialist

- Dental Hygiene
- Instructional Technology

School Administration or Supervision

- Elementary and Secondary Principal
- Health
- Health and Physical Education
- Mathematics
- Mentally and/or Physically Handicapped
- Physics
- Social Studies
- Spanish
- Speech and Language Impaired
- Reading Specialist
- School Nurse
- Special Education Supervisor

Students must satisfy all teacher education program, departmental requirements, and revised PDE standards before they will be recommended for the degree and teacher certification. For public disclosure information on teacher education program completers, please see the ESU Title II website at www.esu.edu/sps/titleII.htm giving passing rates and other summary data.

## The School of Health Sciences and Human Performance

105 Rosenkrans West
570-422-3425

Dean Mark Kilker www.esu.edu/hshp

The mission of the School of Health Sciences and Human Performance is to provide opportunities for undergraduate and graduate students to develop knowledge and skills in the disciplines of athletic training, clinical exercise physiology, dance, exercise science, health and physical education teacher certification, health education, health services administration, nursing, physical education, public health, safety, and speech language pathology. The mission is in response to the nation's concern for healthy persons and healthy communities and to students interested in careers in health and human performance areas. Underlying the mission are three basic assumptions:

1) We can improve the quality of life in America through health education systems as society relies more extensively on individual and community responsibility to prevent disease and promote health for all citizens.
2) We can be instrumental in the promotion of exercise and movement which can improve the quality and length of life.
3) We can assist in prevention of illness and rehabilitation of health and human performance.

Seven departments - Athletic Training, Health, Exercise Science, Movement Activities and Lifetime Fitness, Nursing, Physical Education, and Speech-Language Pathology - comprise the school. Each student's major program consists of sequential experiences which lead to a body of knowledge within the respective field of study as well as modes of inquiry in discovering new knowledge and its significant experiential values. Within the school, students are encouraged to develop and pursue specialized interests in relation to their goals and to accept the responsibility for their academic pursuits and ultimate professional growth.

## the faculty of health sciences

Offers the following degree programs:

## Majors:

- Health Education
- Nursing


## Interdisciplinary:

- Gerontology


## Concentrations:

- Community Health Education • Dance
- School Health Education


## Teacher Certifications:

- School Health Education


## Certifications:

- School Nurse

Health Services Administration

- Speech-Language Pathology


## THE FACULTY OF HUMAN PERFORMANCE

## Offers the following degree program:

## Majors:

- Athletic Training • Exercise Science • Physical Education


## Teacher Certification:

- Health and Physical Education


## Concentrations:

- Dance - Exercise Physiology
- Health \& Physical Education
- Sport and Exercise Conditioning

Physical activity courses are offered for the student through general education in the Department of Movement Activities and Lifetime Fitness. These movement activities and lifetime fitness experiences are intended to develop and improve the lifetime sport and fitness skills of the individual and to improve the student's perception of the role of exercise and sport in living. As our society becomes more technical, there is an increased need to enhance its vigor and productivity by managing stress, mastering the art of relaxation, and developing healthful lifetime activity skills.

## Course Prefix Key

The following abbreviations are used to identify courses referred to in this catalog:

| ART | Art | FLSP | Spanish |
| :--- | :--- | :--- | :--- |
| ATEP | Athletic Training | GEOG | Geography |
| BIOL | Biology | GSCI | General Science |
| BIOM | Marine Science | HIST | History |
| CEXP | Clinical Exercise Physiology | HLTH | Health |
| CHEM | Chemistry | HRTM | Hotel, Restaurant and Tourism |
| CMST | Communication Studies |  | Management |
| CPSC | Computer Science | MATH | Mathematics |
| DANC | Dance | MCOM | Media Communications |
| ECED | Early Childhood Education | MUS | Music |
| ECON | Economics | NURS | Nursing |
| ELED | Elementary Education | PETE | Physical Education Teacher Education |
| EMGT | Business Management | PHIL | Philosophy |
| ENGL | English | PHYS | Physics |
| EXSC | Exercise Science | POLS | Political Science |
| FIT | Fitness | PSED | Professional and Secondary Education |
| FLAR | Arabic | PSY | Psychology |
| FLCH | Chinese | RECR | Recreation |
| FLFR | French | REED | Reading |
| FLGR | German | SMGT | Sport Studies |
| FLIT | Italian | SOC | Sociology |
| FLLN | Latin | SOCJ | Criminal Justice |
| FLNG | Foreign Language General | SOSW | Social Work |
| FLJA | Japanese | SPED | Special Education |
| FLPG | Portuguese | SPPA | Speech Language Pathology |
| FLRU | Russian | SPRE | Rehabilitative Services |
|  |  | THTR | Theatre |

# Academic Programs and Course Descriptions 

## Art

School of Arts and Sciences<br>The Faculty of Arts and Letters<br>Fine and Performing Arts Center, Room 233

570-422-3759
www.esu.edu/art

## Department Faculty <br> Professors:

Assistant Professors:

> Irene Mitchel (imitchel@po-box.esu.edu)
> Herbert Weigand, chair (hweigand@po-box.esu.edu)
> Miharu Lane (mlane@po-box.esu.edu)
> Melissa Geiger (mgeiger@po-box.esu.edu)
> Joni Oye-Benintende (jbenintende@po-box.esu.edu)

Bachelor of Arts with a Fine Arts major (core emphasis: Art) - 54 semester hours

- Required Fine Arts courses: MUS 100 and either 211 or 311, and three additional semester hours; THTR 100 and either 302 or 304, and three additional semester hours.
- Required core courses: ART 101, 151, 153, 201, 202, 496 and any six additional courses in the 200,300 and 400 catalog listing, provided prerequisites are fulfilled.
- At least 18 semester hours in art must be completed at East Stroudsburg University.
- Please view the university requirements in this catalog.


## Bachelor of Arts with an Art and Design major - 36 semester hours

- Required Courses: ART 151, 153, 154, 220, 254, 280, 321, 356, 401, 405, 485 and 486.


## Art minor-21 semester hours

- Required courses: ART 101, 151 and either ART 201, 202 and 9 semester hours from 302, 305, 412, 486 or ART 251, 254 and 9 semester hours from 321, 354, 356, 401, 485.


## Course Descriptions

(Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title.)
§ART 101 GE: Introduction to Art (3:3:0)
This course is an introduction to art of western culture with emphasis on painting, sculpture, and architecture through the ages.
§ART 151 GE: Basic Drawing (3:0:6)
This course is an introduction to many drawing approaches with a variety of media and subject matter.
§ART 152 GE: Letterforms (3:0:6)
This course involves studying the major letter styles of the English alphabet in chronological order - Roman, Bookhand, Italic, Gothic, and Contemporary styles. Exercises will include a series of problems that will be rendered in calligraphic lettering with pen and brush and media appropriate for developing various styles. Emphasis is on the composition, design elements, and expressive quality.

[^1]Art
§ART 153 GE: Two-Dimensional Design (3:0:6)
This course is a study of basic design concepts fundamental in the visual arts.
§ART 154 GE: Three-Dimensional Design (3:0:6)
This is foundation course in the development of concepts in three-dimensional design. The course involves the use of various materials and organizational concepts to create form.
§ART 201 GE: History of Art I (3:3:0)
This course consists of detailed study of the history of art to the Renaissance. It is designed to express the relationship between the artists and common historical, geographical, and ideological contexts and to note influences of other cultures on our own. It is offered in the fall semester.
§ART 202 GE: History of Art II (3:3:0)
This course consists of detailed study of the history of art from the Renaissance to modern times. It is offered in the spring semester.
§ART 220 GE: Advertising Graphics (3:0:6)
This course is an introduction to graphic art design used in advertising. The tools, media, techniques, and production processes used in commercial art will be emphasized. Prerequisite: ART 151 or 153.
§ART 251 GE: Sculpture (3:0:6)
This course explores sculpture processes in wood, plaster, metal, and other materials. It is offered biennially or on the basis of student interest or need. Prerequisite: ART 151.
ART 252 Crafts Design (3:0:6)
This course explores the design and creation of craft objects in leather, fiber, glass, and other materials.
§ART 253 GE: Ceramics I (3:0:6)
The course explores handforming methods in clay and basic glazing techniques. Prerequisite: ART 151 or 153.
§ART 254 GE: Painting I (3:0:6)
This is an introductory course in acrylic and oil painting with a focus on color and painting techniques, as well as the development of visual awareness. Prerequsite: ART 151.
§ART 256 GE: Watercolor Painting (3:0:6)
This is a study of watercolor painting with emphasis on color, composition, pictorial expression, techniques, and materials. Prerequisite: ART 151.
§ART 260 GE: Printmaking I (3:0:6)
This is a basic course in printmaking. Content: Relief, Intaglio, Lithography, and Serigraphy. Prerequisite: ART 151.
§ART 280 GE: Communication Graphics (3:0:6)
This course is concerned with communication techniques that involve services and products. It also involves techniques associated with the visual communication processes. Prerequisite: ART 151 or 153.

## ART 290 Special Topics (Semester hours arranged)

These courses are designed to meet specific needs of groups of students or courses to be offered on a trial basis in order to determine the demand for introducing them as part of the university curriculum.
§ART 302 GE: American Art (3:3:0)
This course is a study of North American art from the colonial period to the present and will encompass painting, sculpture, and architecture. Offered biennially or on the basis of student interest or need. Prerequisite: ART 101 or 202.
ART 304 Art Gallery Management (3:3:0)
This course will explore the management of an art gallery from the perspectives of both the artist and of the gallery director. Prerequisites: Any two art courses at the 300 level or above.
§ART 305 GE: The Visual Arts Since 1945 (3:3:0)
This course is a descriptive investigation of the visual arts from the late 1940s to the present. The unique contributions of various artists are investigated, as well as major movements. Prerequisite: ART 101.

## §ART 321 GE: Drawing II (3:0:6)

Emphasis is on the human figure, using various media and techniques. Prerequisite: ART 151.
§ART 354 GE: Ceramics II (3:0:6)
The basic focus of this course is wheel throwing, advanced hand building techniques, and glaze formulation. Prerequisite: ART 253.
§ART 355 GE: Ceramic Sculpture (3:0:6)
Various methods of ceramic sculpture are explored ranging from in-the-round to relief. Prerequisite: ART 253.
§ART 356 GE: Painting II (3:0:6)
Students are given the opportunity to work in greater depth in acrylics or oils to develop individual approaches, techniques, and forms of creative expression. Prerequisite: ART 254.

## ART 401 Composition and Painting (3:0:6)

It is a course with emphasis on color, composition, and design in painting. Prerequisite: ART 254 and either 254 or 356 .

## ART 405 Illustration (3:0:6)

This course will build upon skills developed in lower level design, drawing and painting classes to enable the student to prepare illustrative materials for publication in the mass media. Prerequisites: ART 321 and 356.

## ART 412 WS: Women Artists: From the Middle Ages to the Present (3:3:0)

This course is a historical survey of works by women artists in Europe and America from the Early Middle Ages to the present. Prerequisites: ART 101, 202.
ART 485 Independent Study (Semester hours arranged)
This course consists of directed research and study on an individual basis. Prerequisites: Any two courses in ART.
ART 486 Field Experience and Internships (Semester hours arranged)
Prerequisite: 18 credit hours in ART.
ART 496 Fine Arts Seminar (3:3:0)
A team-taught interdisciplinary capstone experience for senior Fine Arts majors. In conjunction with this seminar the student and faculty explore selected topics in the fine arts relative to the preparation of a thesis project in Art, Music, or Theatre through which the student will demonstrate a satisfactory level of performance and/or research skills. Prerequisites: ART 101 and one of 201, 202, or 205 . Advanced standing of 90 credits and permission of instructor required. Also offered as MUS 496 and THTR 496.

## Bachelor of Arts Major in Fine Arts and a Concentration in Art

 For students subject to the 2003-04 and later catalogs Program Curriculum PlanFreshman Year

| Fall | Spring |  |  |
| :--- | ---: | :--- | ---: |
| ART 151 GE: Basic Drawing | 3 | ART 101 GE: Introduction to Art | 3 |
| ART 153 GE: Design I: Two Dimensional | 3 | ART elective (200, 300, 400 level) | 3 |
| MUS 100 GE: Introduction to Music | 3 | THTR 100 GE: Introduction to Theatre | 3 |
| English Composition | 3 | GE:English, Philosophy or Foreign Language | 3 |
| GE: Science or Social Science | 3 | GE: Science or Social Science | 3 |
| Subtotal | 15 | Subtotal | $\mathbf{1 5}$ |

Fall
Sophomore Year
Spring

| ART 201 GE: History of Art I | 3 | ART 202 GE: History of Art II | 3 |
| :--- | ---: | :--- | ---: |
| MUS 211 or 311 | 3 | ART elective (200, 300, 400 level) | 3 |
| ART elective (200, 300, 400 level) | 3 | GE: Science or Social Science | 6 |
| GE: Science or Social Science | 3 | PE Activity | 1 |
| GE: English, Philosophy or Foreign Language | 3 | Elective credits | 3 |
| Subtotal | $\mathbf{1 5}$ | Subtotal | $\mathbf{1 6}$ |


| Fall |  |  |
| :--- | ---: | :--- | ---: |
| Music upper division elective 3 Art elective (200, 300, 400 level) 3 <br> THTR 302 or 304 3 Upper Level Theatre Class 3 <br> Art elective (200, 300, 400 level) 3 GE: Science or Social Science 6 <br> GE: Science or Social Science 3 Elective credits 3 <br> PE Activity 1   <br> Elective credits 3   <br> Subtotal $\mathbf{1 6}$ Subtotal $\mathbf{1 5}$ |  |  |


| Sall Spring |  |  |  |
| :--- | ---: | :--- | ---: |
| Art elective (200, 300, 400 level) 3 ART 496 Fine Arts Seminar 3 <br> GE: Science or Social Science 3 Elective credits 10 <br> Elective credits 9   <br> Subtotal 15 Subtotal 13 |  |  |  |

TOTAL CREDITS

## Athletic Training

| School of Health Sciences and Human Performance |  |
| :---: | :---: |
| The Faculty of Human Performance |  |
| Koehler Fieldhouse | 570-422-3231 www.esu.edu/atep/atep.htm |
| Department faculty: |  |
| Professor: | John Hauth, Chair (jhauth@po-box.esu.edu) |
| Associate Professor: | Mertice Shane (mshane@po-box.esu.edu) |
| Assistant Professors: | Kelly Harrison (kharrison@po-box.esu.edu) |
|  | Gerard Rozea (grozea@po-box.esu.edu) |
|  | Keith Vanic (kvanic@po-box.esu.edu) |

The Athletic Training Education Program leads to a Bachelor of Science Degree with a major in Athletic Training. This program is accredited by the Commission on Accreditation of Allied Training Education (CAATE). Successful completion of the program leads to candidacy for the Board of Certification (BOC) examination for athletic training and Certification through the Pennsylvania State Board of Medicine.

## Bachelor of Science with an Athletic Training major-58 semester hours

- Required major courses: ATEP 100, 120, 121, 122, 202, 230, 235, 240, 330, 429, 430, 431, 432, 433, 436, 440, 445, 450, 487, 488,489, 490.
- Corequisites: BIOL 111, 112; MATH 110 or higher; PHYS 110 or 131; PSY 100. Also EXSC or SMGT 302; EXSC 310, EXSC 447.
- Please see the university requirements in this catalog.

Admission to the Athletic Training Education Program at East Stroudsburg University is competitive among eligible applicants. Minimum academic requirements have been established for students admitted to the Athletic Training Education Program and are described below. Exceptions to this requirement may be approved by the ESU Athletic Training Education Program faculty.

## Admission Requirements and Retention Standards

## Core Performance Standards for Admission and Progression

Applicants and students admitted into the Athletic Training Education Program (ATEP) offered through the Department of Athletic Training must possess the necessary intellectual, physical, emotional, social and communication skills to provide safe and effective athletic training services. Core performance standards for the Athletic Training Program at East Stroudsburg University are listed below. These examples are not inclusive of all expected abilities.

## Candidates for selection to the ATEP must demonstrate:

1. The mental capacity to assimilate, analyze, synthesize, and integrate concepts and to problem solve to formulate assessment and therapeutic judgments and to be able distinguish deviations from the norm.
2. Sufficient postural and neuromuscular control, sensory function, and coordination to perform appropriate physical examinations using accepted techniques; and accurately, safely and efficiently use equipment and materials during the assessment and treatment of patients.
3. Communication abilities sufficient for interaction with others in verbal and written form.
4. The ability to communicate and function well during periods of high stress.
5. The tactile dexterity, visual and auditory abilities necessary to observe, monitor, assess and treat patients.
6. The appropriate affective skills, demeanor and conduct that relate to professional education and quality patient care.
Compliance with these core performance standards does not guarantee a student's admission into the program, or eligibility for the BOC certification examination. During the initial advising period, students must verify they understand and meet those core performance standards, or, that they believe with certain accommodations, they can meet these standards. The Office of Disability Services will review the student's documentation and discuss their/any accommodation requests. Students should contact the Office of Disability Services at 570-422-3390 for additional information or to schedule an appointment.

## Admission of Freshman and Transfers

Freshman and Transfer students are admitted to East Stroudsburg University as pre-professional Athletic Training Majors. The pre-professional phase of study represents a time (generally three semesters) during which the student must address the prerequisites to the professional phase. Admission into the professional phase of the ATEP at East Stroudsburg University is competitive among eligible candidates. A profile of the typical student who is admitted to the professional phase of the major and ESU and who is successful in becoming a certified athletic trainer would include SAT scores of 1000 or above, a class rank in the top one third, an outgoing personality, a solid work ethic, good "people" skills, and a sincere interest in sports and in athletes.

Formal admission into the professional phase of the Athletic Training Major is contingent upon the pre-professional student meeting the following standards and completing the following prerequisites:

## Standards For Progression to the Professional Phase of the Athletic Training Major:

1. Written application;
2. Recommendation by a member of the ESU Athletic Training Staff;
3. Completion of directed observation requirements;
4. Completion of forty (40) semester hours of course work (thirty (30) credits must have been completed at ESU unless all other criteria have been met);
5. Maintenance of a minimum quality point average of 2.50 overall and 3.00 in the major;
6. A grade of " C " or above is required in all prerequisites to athletic training courses;
7. A grade of " C " or above is required in all athletic training and corequisite courses;
8. Interview with a member of the Athletic Training Department Faculty Committee;
9. Approval of the Athletic Training Faculty as indicated by appropriate signatures on the student's Athletic Training Plan of Study;
10. Concurrent enrollment in clinical field experiences (ATEP 487/488/489/490) once admitted to the professional phase;
11. Successful completion of an approved summer pre-season clinical field experience assignment (credit or non-credit).

## Limited Enrollment Policy

Athletic Training Education is a limited enrollment program and therefore, admission is limited to the top twenty-five qualified students per year. Subsequent to their application, students will be ranked and selected for admission to the ATEP Professional Phase based upon:

- Overall Quality Point Average: Scale 6-1 (4.00-3.75=6; 3.74-3.5=5; 3.49-3.25=4; $3.24-3.00=3 ; 2.99-2.75=2 ; 2.74-2.50=1$ )
- Major Quality Point Average: Scale 4-1 (4.00-3.75=4; 3.74-3.50=3; 3.49-3.25=2; $3.24-3.00=1$ )
- Recommendation of sponsoring member of the ESU Athletic Training Staff: Scale 5-1
- Athletic Training faculty interview: Scale 5-1

A minimum score of " 8 " points is required for entrance into the Professional Phase of the ATEP. In the event that there are more than 25 qualified applicants or there are ties that must be broken, a 50 -question, multiple-choice exam covering cognitive and psychomotor competencies from Anatomy and Physiology, Acute Care of Athletic Injury and Illness, Kinesiology/Applied Anatomy, and Care and Prevention of Athletic Injuries will be administered. For these individuals, performance on the exam will determine placement status.

## Additional Information Pertaining to Admission into the ATEP

Failure to maintain the aforementioned standards or failure to demonstrate appropriate professional skills and conduct in any clinical experience is grounds for immediate dismissal from the program.

Students participating in intercollegiate athletics at East Stroudsburg University should, in concert with their academic adviser, plan a course of study that includes a minimum of one additional semester of academic and clinical work.

Transfers: Applicants with a 2.5 quality point average will be considered for admission. Transfer students must complete all prerequisite coursework and satisfactorily complete all other prerequisites for admission to the program. Transfers should schedule an interview with the Director of the ATEP as soon as possible after receiving notification of admission to the university.

Additional Cost: Additional expenses required of students enrolled in the Athletic Training Education Program as they progress include but are not limited to: professional liability insurance, travel expenses to clinical sites, ACT 34 clearance and ACT 141 child abuse clearance and school/institution uniforms.

## Course Descriptions

(Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title.)

## ATEP 100 Introduction to Movement Studies and Exercise Science (3:2:2)

This course is designed to enable the student to understand movement studies and exercise science as fields of academic study, programs, and professional applications and to discriminate among these contexts and relate them by applying relevant knowledge and appropriate theoretical perspectives. Students will demonstrate the intrapersonal and interpersonal skills important for becoming a professional.

## ATEP 120 Physical Conditioning (1:0:3)

This course provides for development of programs of exercise and activity and individual assessment of status, needs, and goals and is designed to enable each individual to determine realistic goals for his/her development and the use of activity throughout his/her life.

## ATEP 121 Aerobic Fitness Activities (1:0:3)

This course is designed to introduce the student to the various aerobic fitness activities for adult populations. Techniques of fitness assessment, aerobic dance, jogging and aquacizing activities will be emphasized.

## ATEP 122 Strength Training (1:0:3)

This course is designed to give the student a broad background in the area of strength training. Various strength training programs, techniques, and trends will be examined. Students will have the opportunity to set up and become involved in various strength-training methods. Recommended prerequisite: ATEP 120.

## ATEP 202 Kinesiology-Applied Anatomy (3:2:2)

Upon completion of this course, a student should be able to identify the structural characteristics, movements, and muscles acting as the major joints of the body. The student will be able to select movements or exercises which utilize specific muscle groups and analyze the joint actions, muscle actions, and mechanical principles which apply to the performance of a specific movement.

## ATEP 230 Prevention and Management of Sport and Fitness Injuries (3:3:0)

This course is an introduction to the principles and practices associated with sport and fitness injury management. The course emphasizes the development of competencies in the recognition and treatment of injuries appropriate for professionals working with active populations. Topics include injury mechanics, injury prevention strategies, and injury recognition and treatment.

## ATEP 235 Basic Athletic Training Laboratory (1:0:2)

This laboratory course is an introduction to the psychomotor skills associated with sport fitness injury recognition, evaluation and management. The course emphasizes the development of competency in essential entry-level athletic training skills. Topics include injury and illness assessment skills, injury prevention techniques, and prophylactic bracing, taping and support techniques. Concurrent enrollment in ATEP 230 is required.

## ATEP 240 Acute Care of Athletic Injuries and Illness (3:2:2)

This course focuses on the emergency management techniques that are commonly implemented when dealing with trauma and illnesses suffered during/through sport participation. Included will be field evaluation of medical emergencies, such as cessation of breathing or circulation, shock, concussion, and spinal injury to the athlete. Students will review policies and position statements issued by the NATA, NCAA, ACSM, AAP, and AMA regarding prevention, evaluation, and management of acute athletic injuries and illnesses. Prerequisite: HLTH 240 or current CPR certification.

## ATEP 286 Pre-Internship: Athletic Training Proficiencies (1-3:0:0)

This course is designed to provide students with the opportunity to observe and apply entry-level athletic training skills in selected clinical, educational, research or administrative settings. The emphasis is on the basic psychomotor proficiencies described in the CAAHEP Accreditation and NATA Education Council guidelines and specifically, those competencies previously addressed in ATEP 100, 230 and/or concurrently with ATEP 240. This course is designed for students officially enrolled in the undergraduate athletic training education program. Prerequisite: 30 semester hours; department approval.

## ATEP 330 Injury Prevention and Reconditioning Workshop (1:2:2)

This workshop focuses on the application of basic conditioning principles and concepts used in the development of athletic reconditioning and injury prevention programs. Students completing this workshop will analyze the theoretical basis for various training methods and gain experience in reconditioning program design, implementation, and documentation. Specific attention to how the program design is influenced by tissue healing and special considerations following an injury. Prerequisites: ATEP 120, 121, 122 and 230.

## ATEP 429 Measurement and Evaluation of Lower Extremity Injuries (3:2:2)

The primary focus of this course is to present a systematic process for accurately evaluating lower extremity musculoskeletal injuries and illnesses commonly seen in the physically active population. This course focuses on the athletic training competencies and proficiencies associated with lower extremity injury assessment and evaluation, risk management and injury prevention, and acute care of injuries and illnesses. Prerequisites: ATEP 100, 202, and 230.

## ATEP 430 Measurement and Evaluation of Upper Extremity Injuries (3:2:2)

The primary focus of this course is to present a systematic process for accurately evaluating upper extremity musculoskeletal injuries and illnesses commonly seen in the physical activity population. This course focuses on the athletic training competencies and proficiencies associated with upper extremity injury assessment and evaluation, risk management and injury prevention, and acute care of injuries and illnesses. Prerequisites: ATEP 100, 202 and 230.
ATEP 431 Organization and Administration in Athletic Training (3:3:0)
This course is a requirement for students in athletic training. It deals primarily with the administrative competencies necessary to accomplish the successful day-to-day operation of an athletic training program and facility. Prerequisites: ATEP 100, 202, and 230.

## ATEP 432 Therapeutic Modalities in Sports Medicine (4:3:2)

This course is required for students in athletic training. Information and experience are provided in the use of massage and in the use of the physical agents of heat, cold, light, sound, and electricity in the treatment and rehabilitation of athletic injuries. Prerequisites: ATEP 100, 202, 230, 301; PHYS 110,131 or 161.

## ATEP 433 Therapeutic Exercise in Sports Medicine (4:3:2)

This course is a requirement for students in athletic training. The focus of the course is the application of neuromuscular re-education, movement, and exercise specifically to achieve the detailed goals of rehabilitation and reconditioning for injured athletes. Prerequisites: ATEP 100, 202, 230, 301.
ATEP 436 Medical \& Surgical Aspects of Sport \& Fitness Injuries (3:3:0)
This course examines the current medical practices used in the treatment and rehabilitation of physically active individuals. An emphasis is placed on orthopedic surgical techniques, pharmaceutical interventions, and the implications of treatment and rehabilitation. Students and certified athletic trainers are introduced to a variety of medical and allied medical personnel. Prerequisites: Current National Athletic Trainers' Association-Board of Certification certification as an athletic trainer or ATEP 230 and 430.

## ATEP 440 Functional Rehabilitation and Sport Specific Conditioning (3:2:2)

This advanced therapeutic exercise course is designed specifically for students admitted into the professional phase of the athletic training education program. The course focuses on the final stage of the rehabilitation process and concentrates specifically on fundamental skills, sport specific training, progressions, and testing and evaluation techniques. Building on competencies and proficiencies acquired in ATEP 120, 122, and ATEP 433, this course facilitates a new understanding of reconditioning and injured athlete and other physically active populations. Prerequisites: ATEP 120, 122, 433 and concurrent enrollment in ATEP 486 or BOC certification.

## ATEP 445 Differential Assessment of Musculoskeletal Injuries (3:3:0)

This course is designed to differentiate between movement disorders and the diseases and disorders or pathologies diagnosed by a physician. Since some impairments are consequences of disease, the athletic trainer should be able to identify and recognize conditions which need to be referred to a physician. Prerequisites: EXSC 310, ATEP 433 and 436.
ATEP 450 Advanced Perspectives in Athletic Injury Recognition, Evaluation and Management (3:3:2)
This course is designed to explore the identification and treatment of athletic injuries. The information and skills are intended for those students with a relatively high level of sophistication in sports medicine. Prerequisites: ATEP 429, 430, 431, 432, 433, and 436.

## ATEP 485 Independent Study (Semester hours arranged)

This course deals with independent research and study under the direction of a faculty member and is designed to deepen the student's interest in a particular area of an academic field. The directing faculty member will be available exclusively to the student for a minimum of five hours per credit. Approval for enrollment must be obtained from the faculty member and from the Department Chair. Approval and granting of credit must be in accordance with procedures and standards established by departmental faculty. The student must present a study prospectus prior to approval. Prerequisites: ATEP 100, 15 credits in ATEP.

## ATEP 486 Field Experiences and Internships (Semester hours arranged)

Requirements for Approval: All internship sites must be approved by the department faculty. Each application for an internship must be approved by the faculty member in charge of the experience, the director/supervisor of the site where the internship will be done, and the department chair. Before application is made, students must meet the following requirements: 1) Have faculty recommendation based on qualities essential for success in the assigned environment; 2) Have successfully completed at least 45 hours of credit; 3) Have no incomplete grades in required courses; and 4) Have a minimum average of 2.5 GPA overall and 3.00 in major.

## ATEP 487 Athletic Training Field Experiences and Internships I (Semester Hours Arranged)

This course is designed to provide students with an opportunity to observe and apply entry-level athletic training skills. These are skills that have been instructed and assessed previously, or, are currently being instructed and assessed. The Level One internship involves opportunities to observe and apply fundamental skills in selected clinical, educational, research or administrative settings. The emphasis is on the basic psychomotor proficiencies described in the NATA Educational Athletic Training Competencies and specifically, those competencies previously addressed in ATEP 100, 120, 122, 230, 240. This course is designed for students officially enrolled in the undergraduate athletic training education program at East Stroudsburg University who, as part of the clinical education program, must demonstrate learning-over-time. Prerequisite: Admission into the Athletic Training Education Program.

## ATEP 488 Athletic Training Field Experiences and Internships II (Semester Hours Arranged)

This course is designed to provide students with an opportunity to observe and apply entry-level athletic training skills. These are skills that have been instructed and assessed previously, or, are currently being instructed and assessed. The Level Two internship involves opportunities to observe and apply fundamental skills in selected clinical, educational, research or administrative settings. The emphasis is on the basic psychomotor skills and proficiencies described in the NATA Educational Athletic Training Competencies and specifically, those competencies previously addressed in ATEP 100, 120, 122, 230, 240, 429. This course is designed for students officially enrolled in the undergraduate athletic training education program at East Stroudsburg University who, as part of the clinical education program, must demonstrate learning-over-time. Prerequisite: Admission into the Athletic Training Education Program.

## ATEP 489 Athletic Training Field Experiences and Internships III (Semester Hours Arranged)

This course is designed to provide students with an opportunity to observe and apply entry-level athletic training skills. These are skills that have been instructed and assessed previously, or, are currently being instructed and assessed. The Level Three internship involves opportunities to observe and apply fundamental skills in selected clinical, educational, research or administrative settings. The emphasis is on the basic psychomotor skills and proficiencies described in the NATA Educational Athletic Training Competencies and specifically, those competencies previously addressed in ATEP 100, 120, 122, 230, 240, 429, 430, 433 and EXSC 447. This course is designed for students officially enrolled in the undergraduate athletic training education program at East Stroudsburg University who, as part of the clinical education program, must demonstrate learning-over-time. Prerequisite: Admission into the Athletic Training Education Program.

## ATEP 490 Athletic Training Field Experiences and Internships IV (Semester Hours Arranged)

This course is designed to provide students with an opportunity to observe and apply entry-level athletic training skills. These are skills that have been instructed and assessed previously, or, are currently being instructed and assessed. The Level Four internship involves opportunities to observe and apply fundamental skills in selected clinical, educational, research or administrative settings. The emphasis is on the basic psychomotor skills and proficiencies described in the NATA Educational Athletic Training Competencies and specifically, those competencies previously addressed in ATEP 100, 120, 122, 230, 240, 429, 430, 433, 464 and EXSC 447. This course is designed for students officially enrolled in the undergraduate athletic training education program at East Stroudsburg University who, as part of the clinical education program, must demonstrate learning-over-time. Prerequisite: Admission into the Athletic Training Education Program.

## Bachelor of Science Major in Athletic Training

Program Curriculum Plan (Effective Fall 2007)

*ATEP 286 Pre-Internship: Athletic Training Proficiencies recommended
*Summer: Pre-Season Internship Post Session - 1 Credit

| Fall |  |  |  |
| :--- | ---: | :--- | ---: |
| ATEP 430 Measurement and Evaluation <br> of Upper Extremity Injuries 3 General Education from Humanities <br> or Social Science 3 <br> ATEP 433 Therapeutic Exercise <br> in Sports Medicine 4 ATEP 431 Organization and Administration <br> in Athletic Training 3 <br> ATEP 488 Athletic Training Field Experiences <br> and Internships II 3 ATEP 432 Therapeutic Modalities <br> in Sports Medicine 4 <br> EXSC or SMGT 302 Psycho-Social Aspects <br> of Activity 3 ATEP 489 Athletic Training <br> Field Experiences and Internships III 3 <br> General Education from Humanities <br> or Social Science 3 EXSC 447 Sports Nutrition 3 <br> Subtotal $\mathbf{1 6}$ Subtotal $\mathbf{1 6}$ |  |  |  |


| Fall |
| :--- |
| Senior Year |
| ATEP 436 Medical \& Surgical Aspects <br> of Sport \& Fitness Injuries 3 ATEP 445 Differential Assessment <br> of Musculosketal Injuries 3 <br> ATEP 440 Functional Rehabilitation <br> and Sport Specific Conditioning 3 ATEP 450 Advanced Perspectives <br> in Athletic Injury Recognition 3 <br> ATEP 490 Athletic Training Field Experiences <br> and Internships IV 3 General Education from Humanities <br> or Social Science 3 <br> General Education from Humanities <br> or Social Science 3 General Education from Humanities <br> or Social Science 3 <br> General Education from Humanities <br> or Social Science 3  $\mathbf{1 2}$ <br> Subtotal $\mathbf{1 5}$ Subtotal  |

*Summer: Pre-Season Internship Post Session - 1 Credit

## TOTAL CREDITS

*At least one pre-season Internship must be completed as part of the ATEP Program Requirements.

## Biochemistry

School of Arts and Sciences-The Faculty of Sciences
See Chemistry, Page 115

## Biological Sciences

School of Arts and Sciences<br>The Faculty of Science<br>Moore Biology Hall, Room 128

570-422-3725
www.esu.edu/biology

| Department Faculty |  |
| :---: | :---: |
| Professors: | Kathleen Brunkard (kbrunkard@po-box.esu.edu) |
|  | Jane Huffman (jhuffman@po-box.esu.edu) |
|  | Terry Master (tmaster@po-box.esu.edu) |
|  | Richard Pekala, chair (rpekala@po-box.esu.edu) |
| Associate Professors: | Abdalla Aldras (aaldras@po-box.esu.edu) |
|  | Jerilyn Jewett-Smith (jjsmith@po-box.esu.edu) |
|  | Thomas LaDuke (tcladuke@po-box.esu.edu) |
|  | Raymond Milewski (rmilewski@po-box.esu.edu) |
| Assistant Professors: | Maria Kitchens-Kintz (mkitchens@po-box.esu.edu) |
|  | John Smith (johnsmith@po-box.esu.edu) |
|  | Matthew Wallace (mwallace@po-box.esu.edu) |
|  | Howard Whidden (hwhidden@po-box.esu.edu) |
|  | Tracy Whitford (twhitford@po-box.esu.edu) |
|  | Paul Wilson (pwilson@po-box.esu.edu) |

Bachelor of Arts with a Biology major- $\mathbf{6 3}$ semester hours in sciences, $\mathbf{3 3}$ semester hours in biology

- Required major courses: BIOL 114, 115, 200, 331, 340 or $422,495,496$ and a minimum of thirteen additional semester hours in Biological Sciences. No more than six credits of internship may be applied toward Biology requirements for this degree.
- Corequisite courses: CHEM 121, 123, 124, 126, 233, 234, 235, 236; PHYS 131, 132; and two courses in mathematics or one course in mathematics and one course in computer science (Math 100, 101, or 105 not accepted).
- Please view the Foreign Language Competency Requirement in this catalog.
- Required quality point average: 2.25 or greater for courses in Biological Sciences. At least one half of the credit hours required in biology must be completed at East Stroudsburg University.
- Please view the university requirements in this catalog.


## Bachelor of Science with a Biology major-74 semester hours

- Required major courses: BIOL 114, 115, 200, 331, 340 or $422,495,496$, and a minimum of twenty-one additional semester hours in Biological Sciences. No more than six credits of internship may be applied toward Biology requirements for this degree.
- Corequisite courses: CHEM 121, 123, 124, 126, 233, 234, 235, 236; PHYS 131, 132; and three courses in mathematics or two courses in mathematics and one course in computer science (Math 100, 101, or 105 not accepted).
- Required quality point average: 2.25 or greater for courses in Biological Sciences. At least one half of the credit hours required in biology must be completed at East Stroudsburg University.
- Please view university requirements in this catalog.

Bachelor of Science with a Biology major (Secondary Education) - $\mathbf{6 6}$ semester hours

- Required major courses: BIOL 114, 115, 200, 331, 340 or 422,495 or 496,499 and a minimum of 14 additional semester hours in Biological Sciences. No more than six credits of internship may be applied toward Biology requirements for this degree.
- Corequisite courses: CHEM 121, 123, 124, 126, 233, 234, 235, 236; PHYS 131, 132; and three semester hours chosen from MATH 130, 131, 140, and three additional semester hours in mathematics or computer science (MATH 100, 101, or 105 not accepted).
- Required professional education courses: MCOM 262; PSED 161, 242, 346, 420, 421, 430, 431; REED 321.
- Required quality point average: 2.50 or greater for courses in Biological Sciences. At least one half of the credit hours required in biology must be completed at East Stroudsburg University.
- The Commonwealth of Pennsylvania has established new requirements for all candidates in teacher preparation programs. Please refer to the section The College of Education in this catalog for specific requirements for admission into teacher education programs.
- Please see the university requirements in this catalog.


## Bachelor of Science with a Biology major - 80-83 Semester hours <br> Concentration: Dental Medicine Transfer <br> Coordinators: Thomas C. LaDuke and John S. Smith

- Required major courses: BIOL 114, 115, 200, 315, 330, 331, 340, 449, 495, 496, and an additional 9 SH that will be transferred to ESU after the first year at TUSD.
- Corequisite courses: CHEM 121, 123, 124, 126, 233, 234, 235, 236; PHY 131 or 161, 132 or 162; 6 SH in Math from the following: MATH 110, 130, 135, 140 and 141; ENGL 203.
- A minimum grade of " $C$ " is required in all required and corequisite courses. Required quality point average: 3.5 QPA in basic sciences (see list below), 3.4 in all sciences, and 3.3 overall. At least one half of the credit hours required in geology must be completed at East Stroudsburg University. Field Experience, Internship, and Research courses will not be included in the QPA calculations to meet the requirements of this program. No more than six credits of Field Experience, Internship, and Research courses may be applied toward Biology requirements for this degree.

This is a seven-year cooperative degree program with Temple University School of Dentistry (TUSD). Students accepted into the program will spend three academic years at East Stroudsburg University enrolled in the program leading to a B.S. in Biology. Students will receive their B.S. degree in Biology from ESU after successfully completing their first year at Temple University School of Dentistry (TUSD). TUSD will award a Doctorate of Dental Medicine to students completing the four-year curriculum at TUSD. Entrance into this program is restricted to beginning freshman. Transfer students are ineligible. Freshman must meet the following requirements:

## Entrance requirements:

- Combined SAT score 1250, no score less than 550;
- High school GPA of at least 3.6;
- College-prep curriculum (preferably honors) that includes four years of English, four years of math, three years of dcience, including one year each of biology, chemistry and physics;
- Class ranking in top 10 percent; and
- Permission of the Pre-Medicine coordinators.

Accepted students will be evaluated in their fifth semester by the Pre-Medical Committee. The following are required to qualify for an interview at TUSD.

- Completion of basic science coursework: BIOL 114, 115, CHEM 121, 123, 124, $126,233,234,235,236$, PHYS 131 or 161 ;
- 3.5 QPA in basic sciences, 3.4 QPA in all sciences, 3.3 QPA overall;
- Dental Admission Test scores: at least 18 in Science and averaging 17 in all sections; The test must be taken no later than mid-October during the $5^{\text {th }}$ semester. Students must fill out a Supplementary Request for Score Reports to have their DAT scores reported directly to the Pre-Medicine coordinator.
- Signed Buckley Amendment Waiver;
- A favorable recommendation from the Pre-Medicine Committee; and
- Enrollment in Spring Semester to complete 99 SH of General Education and Biology requirements (except 9 SH Biology electives).

The deadline to apply for early admission at TUSD is Jan. 1 of the junior year. Students meeting these requirements will qualify for an interview with the TUSD Admissions Committee, who make final determination of admission. After successful completion of the first year of coursework at TUDS, ESU will accept transfer of TUSD credits to complete the B.S.

## Bachelor of Science with a Biology major - 80-83 Semester hours <br> Concentration: Integrative Animal Behavior

- Required major courses: BIOL $114,115,200,331,340$ or 422, 350, 351, 495, 496, and a minimum of 9 additional semester hours in biology at or above the 300 level.
- Corequisite courses: PSY 101, 201, 212, 311, 202 or 204; CHEM 121, 123, 124, $126,233,234,235,236$; PHY 131, 132; three courses in mathematics or two in mathematics and one course in computer science; MATH $110,130,131,135,140$, 141, 311, 411, CPSC 101 (one MATH must be 135, 140 or 141; MATH 090, 100, 101, and 105 are NOT ACCEPTED).
- A minimum grade of " $\mathbf{C}$ " is required in all required and corequisite courses
- Required quality point average: 2.5 or greater in Biology courses. At least onehalf of the credit hours required in biology must be completed at East Stroudsburg University.

This is an interdisciplinary concentration offered in conjunction with the Psychology Department.

## Bachelor of Science with a Biology major - 80-81 Semester hours <br> Concentration: Integrated Organismal Biology

- Required major courses: BIOL 114, 115, 200, 315 or 320, 331, 340 or 422, 407, 495, 496 plus 18 additional SH of biology electives distributed among 4 course clusters, as follows: Fundamental Cluster - 3 SH from BIOL 316, 428, 464; Organismal Cluster - 6 SH from BIOL 220, 221, 325, 350, 416, 421, 425, 442, 448,450, 451, 462, 466, 493, 494, BIOM 461, 462, 468, 471, 473, 479, 487, 488; Physio./ Pathological/Morph. Cluster - 3 SH from BIOL 311, 321, 322, 431, 452, 453, 458, BIOM 403, 464; Ecology Cluster - 6 SH from BIOL 413, 423, 426, 440, 443, 445, 457, 463, BIOM 460, 465, 483.
- Corequisite courses: CHEM 121, 123, 124, 126, 233, 234, 235, 236; PHY 131, 132; 3 courses in mathematics or 2 in MATH and 1 in computer science, from the following: MATH 110, 130, 131, 135, 140, 141, 311, 411, CPSC 101 (one MATH must be 135,140 or 141 ; MATH 090, 100, 101, and 105 are NOT ACCEPTED); GEOG 120.
- A minimum grade of " $\mathbf{C}$ " is required in all required and corequisite courses.
- Required quality point average: 2.5 or greater in Biology courses. At least onehalf of the credit hours required in biology must be completed at ESU.


## Bachelor of Science with a Biology major- 83 semester hours

Concentration: Laboratory Medicine
Coordinator: Professor Abdalla Aldras

- Required major courses: BIOL 111 and 112, 114, 115, 200 or 210, 280, 330, 331, $410,416,424,434,437,495$ or 496.
- Corequisite courses: CHEM 121, 123, 124, 126, 233, 234, 235, 236, 315, 317, 371 ; PHYS 131, 132; and two courses in mathematics or one course in mathematics and one course in computer science (Math 100, 101, or 105 not accepted).
- Required quality point average: 2.25 or greater for courses in Biological Sciences. At least one half of the credit hours required in biology must be completed at ESU.
- Please see the university requirements in this catalog.


## Bachelor of Science with a Biology major - 76 Semester hours <br> Concentration: Podiatric Medicine Transfer <br> Coordinators: Thomas C. LaDuke and John S. Smith

- Required major courses: BIOL 114, 115, 200, 315, 330, 331, 340, 449, 495, 496, and an additional 9 SH that will be transferred to ESU after the first year at TUSPM.
- Corequisite courses: CHEM 121, 123, 124, 126, 233, 234, 235, 236; PHY 131, or 161, 132 or 162; 6 SH in Math from the following: MATH 110, 130, 135, 140 and 141; ENGL 203.
- A minimum grade of " $\mathbf{C}$ " is required in all required in all required and corequisite courses.
- Required quality point average: 2.9 QPA in basic sciences (see list below) and 3.0 overall. At least one half of the credit hours required in biology must be completed at ESU. Field Experience, Internship and Research courses will not be included in the QPA calculations to meet the requirements of this program. No more than six credits of Field Experience, Internship, and Research courses may be applied toward Biology requirements for this degree.

This is a seven-year cooperative degree program with Temple University School of Podiatric Medicine (TUSPM). Students accepted into the program will spend three academic years at East Stroudsburg University enrolled in the program leading to a B.S. in Biology. Students will receive their B.S. degree in Biology from ESU after successfully completing their first year at TUSPM. TUSPM will award a Doctorate of Podiatric Medicine to students completing the four-year curriculum at TUSPM. Entrance into this program is restricted to beginning freshman. Transfer students are ineligible. Freshman must meet the following requirements.

## Entrance requirements:

- Combined SAT score 1100;
- High school GPA of at least 3.6;
- College-prep curriculum (preferably honors) that includes 4 years of English, 4 years of Math, 3 years of science including 1 year each of biology, chemistry and physics;
- Class ranking in top 20 percent; and
- Permission of the Pre-Medicine Coordinators

Students who do not meet the above requirements, but whose academic performance (after 30 SH minimum) meet the QPA requirements for the concentration may request permission to transfer into the concentration from the Pre-Medicine Coordinator. Accepted students will be evaluated in their fifth semester by the Pre-Medical Committee. The following are required to qualify for an interview at TUSPM.

- Completion of basic science coursework: BIOL 114, 115, CHEM 121, 123, 124, $126,233,234,235,236$, PHYS 131 or 161.
- 2.9 QPA in basic sciences, 3.0 QPA overall.
- MCAT scores: 21 minimum total, no scores less than 6.
- The test must be taken no later than April during the 6th semester (junior year). GRE scores: at least the 50th Percentile in all areas. The test must be taken no later than October prior to the TUSPM application deadline. Students must fill out Supplementary Request for Score Reports to have their MCAT and GRE scores reported directly to the Pre-Medicine coordinator.)
- Must have participated in TUSPM Summer Internship Program at the end of the sophomore year.
- Signed Buckley Amendment Waiver.
- A favorable recommendation from the Pre-Medicine Committee.
- Enrollment in Spring Semester to complete 99 SH of General Education and Biology requirements (except 9 SH biology electives).

The deadline to apply for early admission at TUSPM is Jan. 1 of the junior year. Students meeting these requirements will qualify for an interview with the TUSPM Admissions Committee, who make final determination of admission. After successful completion of the first year of coursework at TUSPM, ESU will accept transfer of TUSPM credits to complete the B.S. in Biology.

## Bachelor of Science with a Biology major- 63 semester hours Concentration: Pre-Medicine <br> Coordinators: Thomas C. LaDuke and John S. Smith

- Required major courses: BIOL 114, 115, 200, 315, 330, 331, 340, 449, 495, 496, and a minimum of nine additional semester hours at or above the 300 level.
- Corequisite courses: CHEM 121, 123, 124, 126, 233, 234, 235, 236; PHYS 131, 132 or PHYS 161, 162; 6 credits in mathematics from the following: MATH 110, 130, 135, 140, 141 (MATH 100, 101, 105, and 131 are not accepted); ENGL 203 or 204.
- A minimum grade of " $\mathbf{C}$ " is required in all required and corequisite courses.
- Required quality point average: 3.5 QPA in basic sciences (see list below), 3.4 QPA in all sciences, 3.3 QPA overall. At least one half of the credit hours required in biology must be completed at East Stroudsburg University. Field Experience, Internship, and Research courses will not be included in the QPA calculations to meet the requirements of this program. No more than six credits of Field Experience, Internship, and Research courses may be applied toward Biology requirements for this degree. This is a broad spectrum program designed to prepare the student for further training as medical professionals in the fields of Dentistry, Medicine, Optometry, Osteopathy, Podiatry, and Veterinary.


## Freshmen must meet the following requirements:

## Entrance requirements:

- Combined SAT score 1100, ACT Score of 24;
- High school GPA of at least 3.6;
- College-prep curriculum (preferable honors) that includes 4 years of English, 4 years of Mathematics, 3 years of science including 1 year each of biology, chemistry and physics;
- Class ranking in top 20 percent; and
- Permission of the Pre-Medicine Coordinator

Students who do not meet the above requirements, but whose academic performance (after 30 SH minimum) meet the QPA requirements for the concentration may request permission to transfer into the concentration from the Pre-Medicine Coordinator. Students will be evaluated after their junior year by the Pre-Medicine Committee. Students transferring from other schools or from other majors/concentrations should meet the same academic standards for college coursework.

## The following are required to remain in the concentration:

- Completion of basic science coursework: BIOL 114, 115, CHEM 121, 123, 124, $126,233,234,235,236$, PHYS 131 or $161,132,162$.
- 3.5 QPA in basic sciences, 3.4 QPA in all sciences, 3.3 QPA overall.
- Take the Medical College Admission Test.
- The test should be taken in April but may be taken in August. Students must fill out a Supplementary Request for Score Reports to have their MCAT scores reported directly to the Pre-Medicine coordinator.
- Interview with the Pre-Medicine Committee in the spring of the junior year, presenting a resume, transcripts, letters of recommendation, a signed Buckley Amendment Waiver.

Students who do not meet the minimal standards for evaluation will not earn a favorable recommendation from the Pre-Medicine committee and will be placed on probationary status and advised to withhold their applications to medical schools for one year, during which the student has the opportunity to remedy any deficiencies. Students wishing to earn a favorable Committee evaluation will limit the number of courses retaken to three with no more than one retake per course.

## Bachelor of Science with a Biology major-74 semester hours <br> Concentration: Pre-Physical Therapy <br> Coordinator: Professor Richard Pekala

- Required major courses: BIOL 111,112, 114, 115, 200, 331, 340, 410, 495, 496 and a minimum of eleven (11) additional semester hours in Biological Sciences. No more than six credits of internship may be applied toward Biology requirements for this degree.
- Corequisite courses: CHEM 121, 123, 124, 126, 233, 234, 235, 236; PHYS 131, 132; and three courses in mathematics or two courses in mathematics and one course in computer science (MATH 100, 101, or 105 not accepted).
- Required quality point average: 2.25 or greater for courses in Biological Sciences. At least one half of the credit hours required in biology must be completed at ESU.
- Please see the university requirements in this catalog.

Bachelor of Science with a Biology Major - 86 Semester hours<br>Concentration: Pre-Physician Assistant<br>Coordinator: John S. Smith

- Required major courses: BIOL 111, 112, 114, 115, 200, 330, 331, 340, 410, 495, 496; 5 semester hours of BIOL 486, and an additional 9 semester hours of biology electives is required.
- Corequisite courses: CHEM 121, 123, 124, 126, 233, 234, 235, 236; PHY 131 or 161, 132 or 162; ENGL 162 or 203 or 204; PSY 101; MATH 110 and 135 or 140.
- A minimum grade of " $\mathbf{C}$ " is required in all required and corequisite courses.
- Required quality point average: 3.3 or greater in required and corequisite courses, 3.0 or greater overall. At least one half of the credit hours required in biology must be completed at East Stroudsburg University. Field Experience, Internship, and Research courses will not be included in the QPA calculations to meet the requirements of this program. No more than six credits of field Experience, Internship, and Research courses may be applied toward Biology requirements for this degree.

Students will be evaluated at the end of their junior year (after the sixth semester). Transfer students must meet the same academic standards for acceptance and college coursework. An internship consisting of 200 hrs (the equivalent of 5 full-time work-weeks) of direct patient care in a hospital, clinic, senior care facility, etc. is required after the junior year and can be arranged by the student with the approval of the Pre-Physician Assistant coordinator. An articulation agreement with King's College guarantees a limited number of seats in the professional phase of the Master of Science Physician Assistant Program to successful graduates who also meet certain additional requirements.

## Freshmen must meet the following requirements: <br> Entrance requirements:

- Combined SAT score of 1100 or ACT Score of 24;
- High school GPA of at least 3.0;
- College-prep curriculum that includes of 4 years of English, 4 years of mathematics, 3 years of science including 1 year each of biology, chemistry and physics;
- Class ranking in the top 40 percent; and
- Permission of the Pre-PA Coordinator.

Students will be evaluated after their junior year by the Pre-PA coordinator.
The following are required to remain in the program:

- Completion of the following required coursework: BIOL 114, 115; CHEM 121, $123,124,126,233,234,235,236$; PHYS 131 or 161, 132 or 162; ENGL 162 or 203 or 204; PSY 101; MATH 110 and 135 or 140.
- A 3.3 QPA in required and corequisite coursework, 3.0 QPA overall.


## Qualified students choosing to remain in the concentration must:

- Enroll in 5 credit hours of BIOL 486 Field Experience and Internship: The internship must be completed prior to November 1 of the senior year.
- Take the Allied Health Professions Achievements TEST (AHPAT): The test can be taken as early as April of the junior year, but no later than September of the senior year. Students must request that their scores are reported directly to the Pre-PA coordinator.
- Interview with the Pre-PA coordinator in the fall of the senior year, presenting the AHPAT scores, transcripts, letters of recommendation, comments of internship sponsors, a signed Buckley Amendment Waiver, and registration for spring classes to complete graduation requirements.

Students may receive a favorable recommendation from the Pre-PA coordinator by the application deadlines of area PA programs if they adhere to the above schedule. At the discretion of the Pre-PA coordinator, a student who fails to meet the standards for retention after the junior year, may be placed on probationary status for one semester, during which all standards must be met for continuance.

## Bachelor of Science with a Biotechnology major- $\mathbf{8 5}$ semester hours <br> Coordinator: Professor Abdalla Aldras

- Required major courses: BIOL 114, 115, 200, 281, 330, 331, 340 or 422, 380, $430,437,439,465,477,495,496$, and a minimum of seven additional semester hours from BIOL 410, 411, 414, 419, 424, 429, 434, 449, 480.
- Corequisite courses: CHEM 121, 123, 124, 126, 233, 234, 235, 236, 315, 317; three courses in MATH or two courses in MATH and one in CPSC (MATH 090, 100, 101, or 105 not accepted); PHYS 131 and 132 or PHYS 161 and 162.
- Required quality point average: 2.50
- Please see the university requirements in this catalog.

Bachelor of Arts with an Environmental Studies major- 37 semester hours
Coordinator: Professor Jewett-Smith

- Required major courses: BIOL 104, 210, 484, 497, six additional courses in a single discipline approved by the adviser (three must be numbered 300 or higher).
- Corequisite courses: CHEM 108, CPSC 100 or 101, PHYS 117 or 118.
- Required quality point average: 2.25 or greater for courses in Biological Sciences. At least one half of the credit hours in biology must be completed at East Stroudsburg University.
- Please see the Foreign Language Competency Requirement.
- Please see the university requirements in this catalog.

Bachelor of Science with an Environmental Studies major - 57 semester hours
Coordinator: Professor Jewett-Smith

- Required major courses: BIOL 104, 114, 115, 210, 484, 497, and six additional courses in a single discipline approved by the adviser (three must be numbered 300 or higher).
- Corequisite courses: CHEM 121, 123, 124, 126, 373; CPSC 101; MATH 110 or 140; PHYS 117 or 118.

Note: Students planning to attend graduate school in this field should also take CHEM 233, $234,235,236$; PHYS 131, 132. These programs offer a unique opportunity to select individualized programs from a wide variety of electives in several disciplines. Each student is required to complete a field experience or internship in the senior year. Credits for internships are arranged individually with one credit earned for each full time ( 40 hour) work week. Interns have served with park departments, state and federal wildlife agencies, water and sewer treatment plants, and a variety of government conservation agencies both in the United States and abroad.

- Required quality point average: 2.25 or greater for courses in Biological Sciences. At least one half of the credit hours in biology must be completed at East Stroudsburg University.
- Please see the university requirements in this catalog.


## Bachelor of Science with a Marine Science major- $\mathbf{6 3}$ semester hours Coordinator: Professor Whitford

- Required major courses: BIOL 114, 115, 288 (two semester hours), 460, 466, $467,474,498$, and four courses in Marine Science at field station. No more than six credits of internship may be applied toward Biology requirements for this degree.
- Corequisite courses: CHEM 121, 123, 124, 126, 233, 235; GEOG 121; MATH 110; PHYS 131, 132. At least one half of the credit hours required in biology must be completed at East Stroudsburg University.
- Please see the university requirements in this catalog.

This is a directed degree program whereby students have an opportunity to acquire firsthand knowledge via field experiences at the Wallops Island Marine Station as well as in-depth training in the theoretical aspects of marine science.

## Bachelor of Science with a Medical Technology major-62 semester hours <br> Coordinator: Professor Abdalla Aldras

- Required major courses: BIOL 111 and 112; 114, 280, 330, 410, 416, 424, 434, 437.
- Corequisite courses: CHEM 121, 123, 124, 126, 233, 234, 235, 236, 315, 317; (one of the following courses, BIOL 312, 414, 419, 429, 435, 436, or 492 may be substituted for CHEM 315 and 317); PHYS 131, 132; and one course selected from CPSC 101, 111 or MATH 110, 130, 131, 140, 141. At least one half of the credit hours required in biology must be completed at East Stroudsburg University.
- Please see the university requirements in this catalog.

This degree program is designed for students who are preparing for careers in diagnostic laboratory medicine. It also prepares students for other roles in the health professions as well as the background necessary to pursue studies beyond the baccalaureate degree. A strong background in science as well as a personal interview is necessary for final admission. Enrollment is limited due to the availability of clinical facilities. Students are admitted to the program after completion of the freshman year with a quality point average of 2.5 . The curriculum includes three academic years at East Stroudsburg University and a twelve-month internship in a hospital laboratory approved by the American Society of Clinical Pathologists and the American Medical Association. The Bachelor of Science degree with a major in Medical Technology may be awarded upon completion of a minimum of 98 semester hours at East Stroudsburg University and the 12-month internship ( 32 semester hours allowed for this work).

## Course Descriptions

(Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title.)

## BIOL 104 GE: Human Ecology (3:3:0)

This course is an ecological study of human impact on the environment; how past and present practices by man will influence the planet's future; discussion of population, pollution, and attitudes affecting ecosystem balance and stability; special interest groups or action groups may be organized at the option of the instructor.

## BIOL 105 GE: General Biology (3:3:0)

This course is an introduction to a broad spectrum of biological topics and to the scientific methods used in studying biology. The course will investigate the structure and function of animals and plants and will include information on current topics such as genetics, ecology, and evolution. This course cannot be used for credit toward a biology major.

## BIOL 106 GE: Insects and Human Life (3:3:0)

This course is designed to teach the principles of biological science by utilizing examples of insects and their interactions with humans. Because humans encounter insects more than any other animal, insects provide many fascinating cases to choose from. Interesting examples of insects throughout the world will be cited in discussion of biological evolution, morphology, physiology, diversity, systematics, behavior, reproduction, and ecological interactions. Live and preserved specimens will be used. This course cannot be used for credit toward a Biological Sciences major.

## BIOL 111 GE: Human Anatomy and Physiology I (4:3:2)

This is an introductory course in Human Anatomy and Physiology for Physical Education, Nursing, and Pre-Med majors. Systems of the body will be covered from a structural and functional standpoint. The topics covered in lab and lecture will be epithelium, connective tissues, bones, muscles, nervous system, special senses, and the endocrine glands.

## BIOL 112 GE: Human Anatomy and Physiology II (4:3:2)

This is the continuation of the course Human Anatomy and Physiology I and is designed for Nursing, Physical Education, and Pre-Med majors. Additional systems of the body will be covered from a structural and functional standpoint. Topics covered will be the cardiovascular system, respiratory system, digestive system, urinary system, reproductive system, and the fetal systems. Prerequisite: BIOL 111.

## BIOL 114 GE: Introductory Biology I (4:3:2)

Introductory Biology I is a comprehensive course in biology which covers basic concepts in classical and modern biological thought. Topics focus on the central principles of structure and function of the cell, metabolism, genetics, protein synthesis, and concepts of evolution and ecology.

## BIOL 115 GE: Introductory Biology II (4:3:2)

Introductory Biology II is a continuation of Introductory Biology I. Topics to be discussed include classification schemes, plant and animal anatomy, and systemic physiology. The course has been designed to provide the student with a sound foundation in Biology for advanced studies in this field. Prerequisite: BIOL 114.
BIOL 200 General Ecology (3:2:3)
This course is a study of interrelationships of plants and animals and their environments; the influences of heat, light, air, soil, water, and biotic factors; associations and successions; habitat types; populations, equilibrium, and predator-prey relationships. Prerequisites: BIOL 114, 115.

## BIOL 210 GE: Environmental Biology (3:3:0)

This course is required for Environmental Studies majors and is also intended for those with concentrations in the field of medical studies. It will follow an ecosystems approach to ecology as related to humans. Emphasis will be placed on discrete ecological principles which affect local and global environments. Prerequisite: BIOL 104 or BIOL 114.

## BIOL 220 Field Botany (3:2:3)

This course includes field studies in identification and classification of native and cultivated plants
of the area and special instruction in the use and preparation of keys to the identification of herbs, shrubs, trees, ferns, bryophytes, and algae. Phylogenetic and taxonomic relationships of the plant groups will be explored.

## BIOL 221 Field Zoology (3:2:3)

This course is a general study of animal groups found in the region; field technique, trapping, tagging, and population studies; amphibia, reptiles, birds of prey, and mammals. Class discussion of wildlife conservation and man's role in nature are included. Prerequisites: BIOL 114, 115.

## BIOL 280 Laboratory Medicine Seminar (1:1:0)

Selected topics in Laboratory Medicine will be discussed and analyzed by the students. Emphasis is placed upon recent developments, and students are expected to orally report upon at least one contemporary aspect of Laboratory Medicine. Invited speakers as well as field trips to various laboratory facilities will be an integral part of the course. Prerequisites: BIOL 102, 114, 115.

## BIOL 281 Introduction to Biotechnology (3:3:0)

This course is intended to introduce the students to the fundamental concepts needed for a thorough understanding of biotechnology and its applications. It provides an overview of the objectives, techniques, and problems related to the application of biotechnology in different fields. Major subjects addressed include medical biotechnology, pharmaceutical development, agriculture applications, and environmental applications. Also discussed will be ethical issues and their implication in the new biotechnological advances. Updates to the new breakthroughs and discoveries will be emphasized. Prerequisites: BIOL 114, 115.

## BIOL 288 Investigations in Marine Science (1:1:0)

Selected topics in Marine Science will vary depending on the individual needs of the students and the relevant literature. The course may be repeated, for which additional work will be required.

## BIOL 290 Special Topics (Semester hours arranged)

These courses are designed to meet specific needs of groups of students or are offered on a trial basis in order to determine the demand for and value of introducing them as part of the college curriculum.

## BIOL 310 Histotechnology (3:2:3)

This is a laboratory course considering the preparation of animal tissues for microscopic study. Methods of sectioning and staining for both histological and cytological study are stressed. Prerequisites: BIOL 114, 115.

## BIOL 311 Embryology (3:2:3)

This course examines the processes involved in the development of animals through study of fertilization, cleavage, gastrulation, formation of appendages, origin of organs, and the process of differentiation. Prerequisites: BIOL 114, 115.

## BIOL 312 Principles of Neural Science (3:3:0)

Principles of Neural Science will provide an added dimension to students interested in knowing more about the nervous system of man. This course will complement the courses in Anatomy and Physiology as well as Mechanisms of Disease. Prerequisites: BIOL 111, 112, 114, 115; CHEM 233.

## BIOL 315 Comparative Vertebrate Anatomy (4:3:3)

This course deals with evolutionary and functional aspects of vertebrate anatomy. A series of vertebrates will be dissected in order to demonstrate the evolutionary development of anatomical systems. The physiological, ecological, and behavioral significance of anatomical characteristics observed in laboratory will be the topic of lecture sessions providing a synthesis of these biological disciplines within an evolutionary framework. Prerequisites: BIOL 114, 115.

## BIOL 316 Principles of Systematics (3:3:0)

An introduction to taxonomy and systematics, this course focuses on the history and practice of classifying organisms and the applications of taxonomy and systematics to modern organismal and molecular biology. Particular emphasis is placed on the reconstruction of the evolutionary histories of organisms and their impact on higher taxonomic groups. Topics include species concepts, delineation of taxonomic categories, methods of inferring phylogenies, methods and rules of taxonomic nomenclature, and problems associated with natural variation and fossil species.

## BIOL 320 Plant Morphology (3:2:3)

This course is primarily a study of the classification, general characteristics, and life cycles of the major plant divisions. The student becomes acquainted with representative mosses, liverworts, ferns, fern allies, and gymnosperms. The general ecology and economic values of the plant groups are investigated. Prerequisites: BIOL 114, 115.

## BIOL 321 Plant Pathology (3:2:3)

This course is an introduction to the study of plant disease. Discussion consists of the kinds of disease in plants, the agents causing them, and factors which influence disease development with special emphasis on symptomatology and disease control. Prerequisites: BIOL 114, 115.

## BIOL 322 Plant Responses to Environmental Stress (3:3:0)

As plants are developing and reproducing they are often subjected to environmental stress, which can be quite severe. Temperature extremes, drought, flooding, unavailability of nutrients, toxic minerals, and airborne pollutants are examples of such stress factors. This course deals with the symptoms of stress and the mechanisms by which some plants overcome these problems. Prerequisites: BIOL 114, 115.

## BIOL 323 Plant Responses to Environmental Stress Lab (1:0:3)

This laboratory course will accompany BIOL 322 (Plant Responses to Environmental Stress). Lab exercises will illustrate the consequences of environmental stresses such as drought, temperature extremes, and toxic chemicals on plant growth and development; and to examine the mechanisms plants use to survive these stresses. Students will learn appropriate lab and field techniques for the study of stress biology in plants. Prerequisites: BIOL 114, 115; CHEM 121, 122, 123, 124; corequisite BIOL 322.

## BIOL 325 Ornithology (4:3:3)

The emphasis in this course is introductory in nature; consequently, all aspects of ornithology will be discussed with an emphasis on evolution, ecology, behavior, and adaptation. In the laboratory, field identification and behavioral observation of birds of the eastern United States will be stressed through field trips to local and regional parks and refugees. Prerequisites: BIOL 114, 115.

## BIOL 326 Winter Birds of Florida (3:2:3)

Three weeks of intensive field study in Florida will provide undergraduate students with in-depth knowledge of Subtropical American fauna. The emphasis is placed on bird study with hundreds of species located in bays, rivers, and estuarine areas from Tampa Bay to Key West. Camping out will be the means of accommodation throughout the course. Students are expected to provide their own transportation and gear. Offered on demand. Prerequisites: BIOL 104 or 114 and 115.

## BIOL 330 Microbiology (4:3:3)

This course is a study of microscopic forms of life with emphasis upon bacteria. Special attention will be given to growth, metabolism, and control of microorganisms. Consideration is given to the relationship of microbes to health and disease. In the laboratory, techniques of isolation, staining, biochemical, characterization, and serology are stresses. Prerequisites: BIOL 114; CHEM 121, $123,124,126$, or equivalent.

## BIOL 331 Genetics (3:3:0)

This course includes a study of the principles of Mendelian genetics and theories of inheritance including the chemical nature, location, organization, and transfer of the information encoded in nucleic acids. Aspects of population and medical genetics are reviewed. Prerequisite: BIOL 114.

## BIOL 332 Genetics Laboratory (1:0:3)

This course is an introduction to the experimental basis of essential concepts in genetics, and will overview three main areas: classical genetics, population genetics, and molecular genetics. Students will learn about the methodology of modern genetics by experimentally investigating important genetic phenomena. Prerequisite: BIOL 114, 115; corequisite BIOL 331.

## BIOL 333 Invertebrate Zoology (4:3:3)

This course is a comprehensive survey of the major phyla of invertebrate animals. The morphology, functional biology, ecology, evolutionary history, and phylogeny of invertebrate taxa will be covered. The minor invertebrate phyla will be introduced. Laboratory is required. Prerequisite: BIOL 114, 115.

## BIOL 340 Animal Physiology (4:3:3)

This course is an introductory study of animal organ systems, their functions and mechanisms of function as related to whole organism homeostasis. Topics include energetics, temperature and fluid regulation, and nervous and hormonal controls. Prerequisites: BIOL 114, 115; CHEM 121, $123,124,126$.

## BIOL 350 Animal Behavior (3:3:0)

The Animal Behavior course will provide an introduction to the study of ethology. The course will begin with a historical account of the development of ethology as a science followed by discussions of the evolutionary, genetic, and physiological bases of various types of behaviors. Prerequisites: BIOL 114, 115, 200.

## BIOL 351 Animal Behavior Laboratory (1:0:3)

This course complements the Animal Behavior lecture course. Laboratory topics are chosen to facilitate an in-depth analysis of specific topics discussed in lecture. Emphasis will be placed on observing, measuring, analyzing, and reporting behavioral patterns observed in laboratory and field conditions. Prerequisites: BIOL 114, 115, 350 (concurrently), 200.

## BIOL 380 Cell Culture Techniques (2:1:3)

This course is designed to provide the students with theory and basic techniques of plant and animal cell cultures. These include aseptic techniques, media preparation, establishment of primary culture, maintenance and propagation, contamination control, transformation, transfection, cloning, and fusion of cultured cells. Prerequisites: BIOL 114, 115; CHEM 121, 123, 124, 126.

## BIOL 390 Human Gross Anatomy (4:3:2)

This course is designed to provide the student with an in-depth examination of the structure and function of the human body. Using a regional approach, students will examine through lecture/discussion and laboratory exercises systems including the musculoskeletal, nervous, endocrine, and cardiovascular. Prerequisites: BIOL 111, 112, 114, 115.

## BIOL 395 Applied Research Techniques (1:1:0)

Students will be provided the opportunity to review, apply and coordinate skills learned in a variety of classes including experimental design, and data collection, organization, interpretation, analysis and presentation, to conducting a formal research project. Prerequisites: BIOL 114, 115; CPSC 101; MATH 110.
BIOL 401 Human Genetics (3:3:0)
This course relates principles of both transmission and molecular genetics to the human organism. Particular stress will be placed on inborn errors such as Down's Syndrome, Kleinfelter's Syndrome, and Tay-Sach's Disease. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: BIOL 114, 331.

## BIOL 407 Organic Evolution (3:3:0)

This course develops a synthetic theory of evolution, describes the courses of variability, organizes genetic variability in the population, and evaluates isolation, hybridization, and pleidy. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: BIOL 114, 115.

## BIOL 410 Histology (4:3:3)

This course is a study of the microscopic anatomy of cells, tissues, and organs. Correlations between structure and function at the microscopic and submicroscopic levels are primary functions of the course. Laboratory experiences will supplement the lectures and provide students with the opportunity to develop the ability to recognize the microscopic anatomy of cells, tissues, and organs. Prerequisites: BIOL $114,115,230$ and 310 are recommended.

## BIOL 411 Introduction to Molecular Biotechnology (3:2:3)

The course will provide students with an overview of modern molecular biology and the growing field of biotechnology. The laboratory component will allow students to use some of the major techniques and instrumentation widely used in molecular biology research. Guest lecturers will present key projects that illustrate the application of biotechnology to problems of disease prevention and vaccine production. Prerequisites: BIOL 114, 115.

## BIOL 412 Introduction to Electron Microscopy I (3:2:3)

This course is an introduction to the techniques of electron microscopy. Methods of tissue preparation, theory of the electron microscope, as well as assigned readings are an integral part of the course. Practical experience in the methodology of tissue preparation is stressed. Prerequisites: 16 credits in biology and consent of instructor.

## BIOL 413 Predator-Prey Relationships (3:3:0)

Predator-prey relationships are prime examples of coevolution and evolutionary arms races. The study of such relationships provides insight into evolutionary and ecological mechanisms of animal interactions. These interactions will be looked at within the framework of Optimal Foraging Theory. Prerequisites: BIOL 114, 115, 200.

## BIOL 414 Pathogenic Microbiology (3:3:0)

This course is a study of the pathogenic microorganisms. The emphasis is on bacteria, rickettsia, and chlamydia. The morphological, biochemical, serological, and pathological characteristics of these organisms will be addressed. This course will focus on important nosocomial and outbreak associated etiological agents. Prerequisites: BIOL 114, 330.

## BIOL 416 Parasitology (3:2:3)

This is an introductory course consisting of a morphological study of selected parasites of man and animals with special attention to host-parasite relationships and the phenomenon of parasitism. Laboratory experience includes dissection of vertebrate hosts and fixation, staining, mounting, and identification of parasites recovered. Prerequisites: BIOL 114 and 115 or 111 and 112.

## BIOL 418 Cytology (3:3:0)

This course acquaints the student with the subject of cellular structure, gives the students an understanding of the more modern concepts of cellular organization, and brings to students the modern techniques of investigation of the detailed structure and processes of the cell. Since this course is also offered for graduate credit, a differentiation of requirements will be made. Offered on demand. Prerequisites: BIOL 114, 115.

## BIOL 419 Virology (3:3:0)

This course includes a study of the aspects of systematics, serology, immunology, vaccines and genetics of viruses. Representative viral diseases along with their mechanism for pathogenicity are studied. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: BIOL 114, 115, 330.

## BIOL 420 Biology of Aging (3:3:0)

This course covers the biological aspects of aging. Theories of aging as well as the actual physiological changes that occur on the molecular, cellular, and systemic levels are discussed. Biology majors may not use this course to fulfill their Biology major requirements. This course is one of the required courses for students in Gerontology. Prerequisites: BIOL 111, 112 (BIOL 114 may be substituted for BIOL 112).

## BIOL 421 Introductory Mycology (3:2:3)

This course is a survey of higher and lower fungi, including field collections of fleshy fungi with laboratory physiological studies and identification. Emphasis on fleshy basidiomycetes and fungi imperfecti. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: BIOL 114, 115.

## BIOL 422 Plant Physiology (4:3:3)

This course is a study of the functions of higher plants, including water relations, photosynthesis, respiration, nutrition, and the control of plant growth and development. The practical applications of plant physiology are also discussed. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: BIOL 114, 115.

## BIOL 423 Plant Ecology (3:2:3)

This course is designed to instill knowledge of the principles of fundamentals of plant ecology and the methods of vegetation analysis. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: BIOL 114, 115, and 200.

## BIOL 424 Mechanisms of Disease I (3:3:0)

This course will discuss the mechanisms contributing to disease and representative diseases affecting the various body systems. Readings, Kodachrome slides, and selected, preserved organs/tissues will be used to graphically illustrate the diseases. Prerequisites: BIOL 111, 112.
BIOL 425 Herpetology (3:2:3)
This course will review the biology of the vertebrate classes Amphibia and Reptilia from an organismic perspective. The topics of focus will include evolution, systematics, ecology, and behavior. Field research techniques will also be emphasized. Prerequisites: BIOL 114, 115.

## BIOL 426 Wildlife Biology (3:2:3)

A management approach to wildlife resource biology, the emphasis is on life histories, investigative techniques, and field research methods. Most North American game species are included. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: BIOL 114, 115.

## BIOL 427 Natural History of Western Fauna (6:0:12)

This program provides a graduate and undergraduate course that gives the student a unique opportunity for field study across the country. Although the focus will be on animal life in the Pacific Northwest, adequate attention will be given to wildlife on principal refuges found along the route both to and from the Northwest. Since this course also is offered for graduate credit, a differentiation of requirements will be made. (Offered during Main Summer Session) Prerequisites: BIOL $114,115$.

## BIOL 428 Biogeography (3:3:0)

This course deals with the geographical distribution of organisms. It examines the pattern of these distributions and the underlying causes for them. The question of what present distributions of organisms indicate about past climates and environments is considered. A secondary area of examination is ecology of invasions which include present day translocation of organisms from former to new habitats. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: BIOL 114, 115, 331.
BIOL 429 Human Physiology (3:3:0)
This course is an in-depth study of human physiology. Emphasis is placed on the function and interrelationship of the nervous, circulatory, respiratory, and excretory systems. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: BIOL 111, 112; CHEM 312 is recommended.

## BIOL 430 Applied Microbiology (4:3:3)

This course stresses the applications of principles learned in general microbiology. Emphasis will be placed on specific microbiological techniques as they apply to pathogenic microrganisms, agriculture, and the environment. Prerequisites: BIOL 114, 330.

## BIOL 431 Ecological Physiology (3:2:3)

Various physiological processes such as temperature control, and salt and water balance will be studied by examining the modifications that make specific animals better adapted for survival in a particular environment. Since this course is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: BIOL 114, 115.

## BIOL 432 Virology Laboratory (1:0:3)

This course includes the study of the handling and infection of laboratory animals with viruses. The use of cell or tissue cultures in virology will be reviewed. To study viral replication, laboratory exercises in phage activity, bacterial virus growth curves and animal virus growth curves will be performed. Since this course is also offered for graduate credit, a differentiation of requirements will be made. Prerequisites: BIOL 114, 115, 330, concurrent with 419.

## BIOL 435 Endocrinology (3:3:0)

This course is a study of the embryology, histology, and function of the chemical integrating system - the endocrine system - of animals, with particular emphasis on the vertebrates. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisite: CHEM 234.

## BIOL 436 Endocrinology of Sexual Reproduction (3:3:0)

Comparative anatomy and physiology of the vertebrate reproductive systems and the chemistry and action of hormones concerned with reproduction will be studied. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisite: BIOL 435.
BIOL 437 Immunology (3:3:0)
A course designed to develop a basic understanding of the immune system and its relationship to disease. Everyday immunologic problems, penicillin and ragweed allergy, myeloma and lymphomas, serologic tests involving antigen antibody reactions, immunization, etc. will be considered. Graduate students will be expected to write a paper and complete a project. Prerequisites: BIOL 111, 112.

## BIOL 438 Pathogenic Microbiology Laboratory (1:0:3)

This course includes the study of the handling and culturing of bacteria. Antimicrobial resistant mechanisms will be emphasized. Diagnostic, non-cultural, methods using probes and polymerase chain reaction techniques will be included. Prerequisites: BIOL 114, 115, 330, concurrent with 414.

## BIOL 439 Molecular Biology (3:3:0)

This course is intended to provide in-depth coverage of the principles of molecular biology. The structure of nucleic acids and proteins will be reviewed. The process of DNA replication, transcription, and translation in both prokaryotes and eukaryotes will be covered. The control of gene expression in several representative systems will be discussed in detail. Current methodologies in recombinant DNA research will be emphasized. Prerequisites: BIOL 114, 331; CHEM 121, 123, 124, 126.

## BIOL 440 General Aquatic Ecology (3:2:3)

This course is a study of the plants, animals, and microorganisms that interrelate within the aquatic environment. Local habitats are used to illustrate theoretical and applied principles of aquatic ecology; freshwater and marine ecosystems in relationship to various types of pollution are also considered. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

## BIOL 441 Ecology of Water Pollution (3:2:2)

This course is a study of the effect of various types of pollution on the freshwater, estuarine, and salt-water ecosystems. Monitoring of polluted and unpolluted situations will be conducted in the field, and bioassay techniques will be shown in the laboratory. Various indices of the extent of water pollution will be discussed. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

## BIOL 442 Biology of Aquatic Macrophytes (3:2:2)

This course considers the identification, ordination, morphology, physiology, and ecology of the larger vascular and non-vascular aquatic plants. Since this course is also offered for graduate credit a differentiation of requirements is made. Prerequisites: BIOL 114, 115.

## BIOL 443 Stream Ecology (3:2:3)

Stream Ecology is a course designed to study the biological parameters of rivers and streams with special emphasis on trophic dynamics, invertebrate-vertebrate communities, and seasonal changes. The effects of pollution on various aspects of streams will also be a major consideration. Field investigations will be used to examine differing streams and their particular characteristics. A variety of sampling techniques will be used in the field to give students experience with different methods of answering ecological questions. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: BIOL 114, 115, and 200.

## BIOL 445 Ecology of Fishes (3:2:3)

This course emphasizes the taxonomic, physiological, ecological, and behavioral aspects of fishes; laboratory and field trips are an integral part of the course. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with exception of laboratory courses only.

## BIOL 446 Limnology (3:2:3)

This course provides basic principles of physical limnology in relation to several types of communities in lakes and streams; laboratory and field trips are an integral part of the course. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

## BIOL 447 Biology of the Plankton (3:2:3)

This course covers the pelagic organisms in lakes and oceans and the factors that control their distribution and production. Planktonic plants and animals (e.g. algae, protozoa, rotifers, crustacea, and fish larvae) and the part they play in the economy of natural waters are studied; laboratory and field trips are an integral part of the course. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

## BIOL 448 Biology of Aquatic Insects (3:2:3)

This course covers the taxonomy, life history, and general biology of aquatic insects; laboratory and field trips are an integral part of the course. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

## BIOL 449 Cell Biology (3:3:0)

This course will provide an in-depth examination of cell structure and function and the interrelationship between the two. Special attention will be given to membranes, cytoskeleton, and cell surface structures. The function of these structures in the coordination of activities occurring within and among cells will be stressed. Prerequisites: BIOL 114, 115.

## BIOL 450 Field Entomology (3:2:3)

This course is an introductory taxonomic approach to insects, coupled with field collection and identification. Study includes ecology, morphology, systematics, and lab techniques. Since this course is also offered for graduate credit, a differentiation of requirements will be made. Prerequisites: BIOL 114, 115.

## BIOL 451 General Entomology (3:2:3)

This course is the study of insects with respect to morphology, physiology, taxonomy, and ecology; insects of economic importance are used as examples. This is a basic course leading to several aspects of entomology such as insect morphology, economic entomology, insect physiology, medical entomology, etc. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: BIOL 114, 115.

## BIOL 452 Insect Morphology (3:2:3)

This course studies the internal and external structure of insects utilizing specimens in the laboratory. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: BIOL 114 and 115, or 451.

## BIOL 453 Insect Physiology (3:2:3)

This course studies the functional aspect of insects. The course includes investigations of life processes such as digestion, nutrition, excretion, circulation, respiration, behavior, reproduction, development, and metamorphosis, and relates these life processes to anatomical structures. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: BIOL 114 and 115 or 451 with BIOL 453 if possible.

## BIOL 454 Medical Entomology (3:2:3)

This course is the study of arthropods that affect the health of man and animals. The study includes a brief account of introductory entomology and that of the ticks, insects, and sites of medical importance, both as vectors and as the causal agents of pathological conditions. Seeks understanding of the principle of the vector-host relationship. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: BIOL 114 and 115 or 451.

## BIOL 455 Economic Entomology (3:2:3)

This course studies the insects of economic importance including their identification, life history, biology, harmful and beneficial effects, and control. Insects included are important in agriculture, forestry, medicine, veterinary medicine, and often encountered in the family home. The principles of insect control with recent approaches are also considered. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: BIOL 114, 115, or 451.

## BIOL 456 Pest Control and Pest Management (3:2:3)

This course deals with identification, biology, damage, and control of structural, household, and commercial pests of insect and non-insect (including vertebrates) origin. Pesticide classification, chemistry, mode of action, and handling are studied. Preventive and non-chemical control methods using the Integrated Pest Management (IPM) principle are also discussed. Standard toxicological techniques with bioassay evaluations are administered. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: BIOL 114 and 115, or 451.

## BIOL 457 Behavioral Ecology (3:3:0)

Behavioral Ecology is designed to introduce students to animal behavior within an ecological and evolutionary context. The subject matter deals with ways in which an organism's behaviors are influenced by the environment, especially with regard to resource distribution. Since this course is also offered for graduate credit, a differentiation of requirements will be made. Course is offered regularly at ESU and occasionally at the Marine Science field station at Wallops Island, Virginia. Prerequisites: BIOL 114, 115.

## BIOL 458 Wildife Diseases (3:3:0)

This course includes a study of the occurrence, principles, concepts and significance of disease in wildlife. Representative diseases along with their mechanism for pathogenicity will be studied. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: BIOL 114, 115, 330.

## BIOL 459 Wildlife Disease Laboratory (1:0:3)

This course is designed to demonstrate the immunological and biochemical factors in disease diagnosis. Common laboratory tests in hematology, blood chemistry, and microbiology will be employed. Birds, fish, and mammals will be the subjects examined. Since this course is also offered for graduate credit, a differentiation of requirements will be made. Prerequisites: BIOL 114, 115, 330, 458 (concurrent).

## BIOL 460 Marine Ecology (3:2:3)

This course is a study of the physical constants of the marine environment as it interrelates with marine organisms. The ecological interactions of the organisms with each other will be emphasized. The effect of pollution and excessive exploitation on marine organisms will be discussed. Since this course is also offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

## BIOL 461 Mechanisms of Disease Laboratory (1:0:3)

This course focuses on basic mechanism of disease (the processes). The main thrust is directed toward identification of the changes in the human body at cellular, tissue, and system levels when insulted by a disease. Glass microscopic slides, 35 mm slides, organ and tissue specimens, images from the Internet and DC-ROM programs will be utilized in this course. Prerequisites: BIOL 111, 112. Corequisite: BIOL 424.

## BIOL 462 Mammalogy (4:3:3)

An overview of the vertebrate Class Mammalia, this course is designed to help the student develop a basic understanding of the anatomy, diversity, ecology, fossil record, and geographical distributions of mammals. Students will be exposed to the modern and fossil mammals of the world-with a focus on the regional fauna - through a combination of classroom discussion, lecture, laboratory work with preserved specimens, field trips, and field work. Prerequisites: BIOL 114, 115, 200.

## BIOL 463 Conservation Biology (4:3:2)

This course will synthesize topics relating to the conservation of animals and plants, including extinction, genetics, demography, insularization, threats to biodiversity, conservation economics, environmental ethics, and strategies for conservationists. Prerequisites: BIOL 114, 115.

## BIOL 464 Population Genetics (4:3:3)

This course will cover the basics of population genetics. Stress will be placed upon understanding the basic processes of evolutionary genetics. The initial part of the course will cover the basic models of population genetics; the second half will deal with contemporary controversies or problems. The laboratory will emphasize data analysis. Prerequisites: BIOL 114, 115, 331; MATH 131.

## BIOL 465 Immunology Laboratory (1:0:3)

This course is designed to provide the students with hands-on laboratory experimentation using basic immunological techniques. The course will include methods and techniques of: Immunization and bleeding of mice, antigen and antibody purification and characterization, immunoelectrophoresis, western blot, ELISA procedures, immunoprecipitation, immunocytochemistry, identification of cellular antigens by immunofluorescence, and isolation of mouse lymphoid tissue (spleen and thymus). Prerequisite: BIOL 330; corequisite: BIOL 437.

## BIOL 466 Marine Ichthyology (3:2:3)

This course is a study of the internal and external structure of fishes, their systematic and ecological relationships, and their distribution in time and space. This course is periodically offered at the Marine Science field station at Wallops Island, Virginia, only during a summer session. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

## BIOL 467 Fish Health Management (3:2:3)

The maintenance of fish health in enclosed, recycling water systems will be studied. The chemical, physical, and biological processes of these enclosed systems will be related to the health of various species of fish. Nutrition, fish handling, and diagnosis of diseases will also be emphasized. Prerequisites: BIOL 114, 115.

## BIOL 468 Principles of Systematics (3:3:0)

This course focuses on the practice of classifying organisms utilizing modern systematic techniques. Particular emphasis is placed on the reconstruction of evolutionary histories of organisms using both molecular and morphological characters. Topics include species concepts, deliniation of taxonomic groups, and methods of inferring phylogenies. Prerequisites: BIOL 114, 115, 331.

## BIOL 474 Introduction to Oceanography (3:2:3)

This course is designed to familiarize the student with the marine environment and current developments in the marine sciences. Topics for study will include the physical parameters of the ocean, ocean basis topography, life in the sea, and resources in the ocean. This course is periodically offered at the Marine Science field station in Wallops Island, Virginia, only during a summer session. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

## BIOL 477 Molecular Biology Lab (1:0:3)

This course is intended as an adjunct to BIOL 439 Molecular Biology. This course will provide students with hands-on experience using techniques for molecular biology research including DNA isolation, Southern blotting, and PCR (polymerase chain reaction). Prerequisites: BIOL 114, 331; CHEM 121, 123, 124, 126. Corequisite: BIOL 439.

## BIOL 479/579 Forensic Biotechnology (3:2:3)

This course is intended to familiarize the students with an understanding of scope and use of biotechnological techniques in forensic sciences, which include criminal investigation, civil cases (paternity testing), and wildlife conservation and management (endangered species), diagnosis of inherited diseases, tissue and organ transplantation, personal and organism identification. This course will be conducted as both lecture and laboratory exercises. The students will learn how to collect, preserve, analyze and interpret biological evidence in forensic contexts: (hair, blood, saliva, semen, tooth pulp, and other tissues). It provides an overview of the techniques and problems related to application of biotechnology in different fields. Major topics will be addressed, such as categories of biological evidence, DNA fingerprinting, blood and serology, hair and fiber analysis, fingerprinting, forensic pathology. Current and historical cases will be used to illustrate examples of good and poor quality investigations and updates to new technologies and breakthroughs will be emphasized. Prerequisites: BIOL 331; either BIOL 411 or BIOL 439 and BIOL 477 and permission of the course instructor.

This course introduces research methods in biotechnology including the scientific method, literature search strategies, collection and analysis of data and scientific writing and presentation skills. With assistance from instructors, students choose an independent research project in the area of biotechnology. Prerequisites: Junior standing and permission of instructor.
BIOL 484 Environmental Studies Field Experience and Internship (Semester hours arranged)
Environmental field experience is gained by on-the-job experience under direct professional supervision. Interns have served with state, local, federal, and overseas agencies. Opportunities continue to expand as present interns open new positions for future internships. Must be at least a second semester junior.

## BIOL 485 Independent Study (Semester hours arranged)

This experience is taken upon the initiative of a student who seeks to study with a knowledgeable faculty member in order to deepen a specific interest in a particular academic discipline. Independent study is a process through which a student either sharply increases his/her already advanced knowledge of a subject matter or increases his/her appreciation about an academic discipline that is correlative with a student's advanced knowledge of a subject. The proposed independent study must be submitted to the department for approval. The faculty member supervising the independent study must provide a minimum of five (5) hours of time per credit hour upon request of the student.
BIOL 486 Field Experience and Internship (Semester hours arranged)
BIOL 491 Behavioral Ecology Laboratory (1:0:3)
Laboratory topics will introduce students to experimental design, data acquisition, and behavioral observation techniques under laboratory and field conditions using a variety of invertebrate and vertebrate organisms and plants. Some Saturday laboratories will be required. Prerequisites: BIOL 114, 115, 457 or concurrent.

## BIOL 492 Mechanisms of Disease II (3:3:0)

This course is a continuation of Mechanisms of Disease I. The mechanisms of diseases affecting the organ system will be studied; namely, to provide a concise account of important aspects of the pathology of human disease. Prerequisite: BIOL 424.

## BIOL 493 Biology of Topical Ecosystems (3:1:4)

This course will impart a thorough understanding of tropical ecology through introductory lectures, student presentations, and an intensive two-week field experience. The field experience will provide research opportunities for students on ecological and behavioral aspects of selected organisms and/or concepts. Destinations include Costa Rica, Ecuador, or Kenya. The course will be offered on demand during appropriate winter, spring, or summer sessions. Prerequisites: BIOL $114,115,200$. Students will meet for a total of 15 hours prior to and after the field trip.

## BIOL 494 Research in Biology 494 (3:0:0)

This course is an experimental investigation selected by the student in consultation with a member of the faculty and carried out under the guidance of the faculty member. Instruction will be given on how to design, pursue, analyze, and report on independent research. This course seeks to enrich undergraduate learning, by promoting opportunities for students to experience firsthand the research experience. Prerequisites: At least junior standing and permission of instructor.

## BIOL 495 Seminar I (1:1:0)

This course is designed to lead senior students into current scientific literature. Students are assigned independent problems as well as readings in their areas and are expected to analyze the literature and orally report their findings to the class. Every attempt will be made to secure the services of experts in their field to present learned papers. This course is required of all Biology majors in the arts and sciences in their senior year and secondary education majors who are student teaching in the spring semester.

## BIOL 496 Seminar II (1:1:0)

This course is a continuation of Seminar I. It is required of all Biology majors in the arts and sciences in the second semester of their senior year and of secondary education majors who are student teaching in the fall semester.

## BIOL 497 Environmental Studies Seminar (1:1:0)

Seminar participants analyze selected environmental topics. Both individual and group efforts are encouraged. Prerequisites: Environmental Studies Majors Only; permission of instructor.
BIOL 498 Research in Marine Science (3:0:0)
This course is an individualized investigation of a research area in Marine Science. The specific research problem is formulated by the student and carried out under the direction of the professor. Prerequisites: 12 credits in Marine and Aquatic Science and senior standing.

## BIOL 499 Student Teaching Internships (1:0:TBA)

This course is designed to provide the student with an opportunity to work with a faculty member in the student's primary Arts and Sciences discipline during the student teaching experience. The course will enhance the student's ability to understand and maximize the relationship between disciplinary subject matter and pedagogy.

## Biology-Marine Science Courses

Courses taught with a BIOM rubric are those courses normally taught at the Marine Science Consortium field station at Wallops Island, Virginia. These BIOM courses are taught through the Department of Biological Sciences and, unless specified otherwise in the course description, BIOM courses will count as Biological Sciences courses toward a major within the Department.

## BIOM 352 Modeling Applications in the Environmental \& Biological Sciences (3:2:3)

This course includes an introduction to systems and modeling approaches as techniques for describing the behavior of nonpoint source (NPS) contaminants. Pollutant loading to ground and surface waters and wetlands will be explored. Students will use physically based models routinely used by the U.S. EPA, USDA-ARS, and state environmental agencies. A case study approach and "What-If Scenarios" will be used to investigate best practices to minimize environmental degradation. Emphasis is placed on simulation interpretation. Students will devote approximately 60 percent total class time to hands-on computer exercises and data collection. Prerequisites: CHEM 121, 123, 124, 126; MATH 130 or 135; GEOG 121 or BIOL 200; familiarity with any Windows system.

## BIOM 401 Biological Oceanography (3:2:3)

The interactions between biological communities and the oceanic environment are studied with emphasis on the distributions of coastal plankton, fishes, and bethnic invertebrates. This course is periodically offered at the Marine Science Consortium field station at Wallops Island, Virginia, only during a summer session. Since this course is also offered for graduate credit, a differentiation of requirements will be made. Prerequisite: Two courses in Biology. Recommended: Introduction to Oceanography.
BIOM 402 Marine Evolutionary Ecology (3:2:3)
This course will study the ecological mechanisms underlying evolutionary processes. It 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. This course is periodically offered at the Marine Science Consortium field station in Wallops Island, Virginia, only during a summer session. Since this course is also offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Courses in genetics and ecology.

## BIOM 403 Comparative Physiology of Marine Organisms (3:2:3)

This course is an introduction to the physiology of marine organisms utilizing a comparative approach. A wide range of marine organisms will be used to demonstrate the variety of mechanisms and strategies that allow them to physiologically adapt to their specific environments. This course is periodically offered at the Marine Science Consortium field station in Wallops Island, Virginia, only during the summer session. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisite: Two courses in Biology and Introductory Chemistry.

## BIOM 404 Research Diver Methods in Marine Science (3:2:3)

Students in this course will study the marine environment with the use of SCUBA as a research tool. SCUBA will be used to collect samples, to measure the distribution of the flora and fauna, and to evaluate the productivity and biomass of select benthic communities. This course is periodically offered at the Marine Science Consortium field station in Wallops Island, Virginia, only during a summer session. Prerequisite: Two courses in the biological sciences including a zoology type course. SCUBA certification.

## BIOM 405 Scanning Electron Microscopy: Marine Application (3:2:3)

This course trains the student in the use of a scanning electron microscope (SEM). Principles of operation and the preparation of marine geological and biological specimens are covered. Applications of the technique are performed on selected marine organisms and/or marine rocks and sediments. In addition, an energy dispersive X-ray spectrometer (EDX) is used to supplement the SEM analysis.

## BIOM 458 Coastal Environmental Oceanography (3:2:3)

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. Prerequisites: Two semesters of introductory biology, college algebra (or equivalent) and an ecology course. Recommended: statistics.

## BIOM 459 Advanced Methods in Coastal Ecology (3:2:3)

This course covers the wide array of methods of data collection, study designs, and analyses used in ecology. Emphasis is placed on understanding the strengths and weaknesses of different ecological methods and analyses in the study of coastal environments. Lecture, fieldwork, and laboratory are integrated, and students gain practical computer experience by analyzing ecology data from the field using software that performs analyses introduced in lecture. Prerequisites: Two semesters of introductory biology, college algebra (or equivalent) and an ecology course. Recommended: statistics.
BIOM 460 Marine Ecology (3:2:3)
This course is a study of the physical constants of the marine environment as it interrelates with marine organisms. The ecological interactions of the organisms with each other will be emphasized. The effect of pollution and excessive exploitation on marine organisms will be discussed. Since this course is also offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

## BIOM 461 Marine Botany (3:2:3)

The taxonomy, physiology, ecology, and economic importance of marine and coastal plants, as exemplified by those found in the Lewes, Delaware, area, will be considered. Laboratory techniques will include collecting, preserving, identifying, and analyzing plants and plant materials; appropriate instrumentation will be used. Emphasis will be given to both in-the-field studies and laboratory analyses. This course is periodically offered at the Marine Science field station at Wallops Island, Virginia, only during a summer session. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

## BIOM 462 Marine Invertebrates (3:2:3)

The course is a study of the life history, habits, origin, development, physiology, anatomy, and taxonomy of the main phyla of invertebrates. A phylogenetic sequence is followed to show interrelationships among the phyla. Special emphasis is given to the Atlantic marine invertebrates. Laboratory and fieldwork deal with collection, preservation, and identification of local species. This course is periodically offered at the Marine Science field station at Wallops Island, Virginia, only during a summer session. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

## BIOM 463 Marine Biology Cruise (3:2:3)

This course consists of a three-week session involving detailed planning and preparations for an oceanographic research cruise of approximately eight days, actual execution of the cruise plan aboard an ocean research vessel, and data-processing and reporting of the cruise results. Shipboard sampling techniques and instrumentation used by biological oceanographers are introduced. This course is periodically offered at the Marine Science field station at Wallops Island, Virginia, only during a summer session. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

## BIOM 464 Developmental Biology of Marine Organisms (3:2:3)

This course deals with the 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. This course is periodically offered at the Marine Science field station at Wallops Island, Virginia, only during a summer session. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

## BIOM 465 Management of Wetland Wildlife (3:2:3)

This course deals with the ecology and management of wetland wildlife with emphasis on the management of wetlands as ecological systems. This course is periodically offered at the Marine Science field station at Wallops Island, Virginia, only during a summer session. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

## BIOM 466 Marine Ichthyology (3:2:3)

This course is a study of the internal and external structure of fishes, their systematic and ecological relationships, and their distribution in time and space. This course is periodically offered at the Marine Science field station at Wallops Island, Virginia, only during a summer session. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

## BIOM 467 Marine Pollution Research Cruise (3:2:3)

Investigations are conducted before, during, and after a pollution episode; the fate and behavior (dispersion and degradation) of the pollutants are followed. Bioassays and other toxicity studies will also be conducted. Procedures, techniques, and equipment will be prepared and standardized prior to the cruise and a final project report prepared and submitted for the course grade. This course is periodically offered at the Marine Science field station at Wallops Island, Virginia, only during a summer session. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

## BIOM 468 Marine Ornithology (3:2:3)

Ornithology at the Wallops Island station introduces the student to the avian fauna of the seacoast and at the same time enables comparison with inland species to be found near the laboratory. In addition to the fieldwork providing visual and vocal identification, lecture material will include information on distribution behavior physiology and anatomy. This course is periodically offered at the Marine Science field station at Wallops Island, Virginia, only during a summer session. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

## BIOM 469 Field Methods in Oceanography (3:2:3)

This course provides students with a general background for a working knowledge of investigative techniques that are used to study the physical, biological, geological, and chemical parameters of the marine environment. Students learn to appreciate the scope of field studies through active participation in group projects and individual research efforts; those projects include planning and execution, analysis and interpretation of data, and presentation (written and verbal) of the results. This course is periodically offered at Wallops Island, Virginia, only during a summer session. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

## BIOM 470 Marine Biology (3:2:3)

This course is a study of plant and animal life in the marine environment. Emphasis will be placed upon physical and chemical factors that affect the marine environment and the ways in which various organisms have become adapted for exploiting marine resources. This course is periodically offered at the Marine Science field station at Wallops Island, Virginia, only during a summer session. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

## BIOM 471 Biology of Molluses (3:2:3)

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 ecological approach to studying this important group of organisms. This course is periodically offered at the Marine Science field station at Wallops Island, Virginia, only during a summer session. Prerequisite: One year of biology (with laboratories).

## BIOM 472 Coral Reef Ecology (3:2:3)

This course investigates coral reef structure, formation, types and the relationship of reef organisms to their environment. Emphasis will be given to species diversity/identification, symbiosis, and effects of temperature, salinity, light, nutrient concentration, current predation, and competition on the abundance and distribution on coral reef organisms. This course will be offered at the Marine Science Consortium at Wallops Island, Virginia, with a portion taught in Honduras. Since this course is also offered for graduate credit, a differentiation of requirements will be made. Prerequisite: One year of biology (with laboratories).

## BIOM 473 Marine Mammals of the Atlantic (3:2:3)

The distribution, population size, physiology, evolution, adaptation, and ecological relationships of marine mammals will be studied. Laboratory and fieldwork will include an off-campus field trip to facilities studying marine mammals (Baltimore Aquarium and Woods Hole). This course will be offered at the Marine Science Consortium at Wallops Island, Virginia, during a summer session. Since this course is also offered for graduate credit, a differentiation of requirements will be made. Prerequisites: One year of biology (with laboratories).

## BIOM 474 Introduction to Oceanography (3:2:3)

This course is designed to familiarize the student with the marine environment and current developments in the marine sciences. Topics for study will include the physical parameters of the ocean, ocean basis topography, life in the sea, and resources in the ocean. This course is periodically offered at the Marine Science field station in Wallops Island, Virginia, only during a summer session. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

## BIOM 475 Behavior of Marine Organisms (3:2:3)

Discussion and observations are conducted on the influences of external and internal factors on the regulation and coastal behavior of organisms living in the marine coastal environment. This course is periodically offered during the summer sessions at the Marine Science field station at Wallops Island, Virginia. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

## BIOM 476 Marine Microbiology (3:2:3)

This course provides 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. This course is periodically offered during summer sessions at the Marine Science field station at Wallops Island, Virginia. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

## BIOM 478 Anatomy of Marine Chordates (3:2:3)

The basic structures of marine chordates will be studied by dissection in order to trace the important trends (and their functional significance) in the evolution of these structures within the various groups of marine chordates. This course is periodically offered at the Marine Science field station at Wallops Island, Virginia, only during a summer session. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

## BIOM 479 Ecology of Marine Plankton (3:2:3)

This course is a study of the phytoplankton and zooplankton in marine and brackish environments. Qualitative and quantitative comparisons will be made between the planktonic population of various types of habitats in relation to primary and secondary productivity. This course is periodically offered at the Marine Science field station at Wallops Island, Virginia, only during a summer session. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

## BIOM 480 Oceanography (3:2:3)

This course is an introduction to the physical, chemical, biological, and geological processes and interactions in the oceans. Topics include history of oceanography, charts and navigation, the physical and chemical properties of seawater, instrumentation and at-sea measurements, marine geology, beach processes, theory of continental drift, air-sea interactions, waves and ocean circulation, tides, plant and animal life in the seas, and marine ecology. This course is periodically offered at the Marine Science field station at Wallops Island, Virginia, only during a summer session. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

## BIOM 481 Marine Micropaleontology (3:2:3)

This course is designed for students majoring in either biological or geological sciences. The course will deal with modern, living representatives of microorganisms important in the fossil record. Particular emphasis will be placed on the taxonomy, morphology, evolution, and ecologic affinities of the foraminifer (Sarcodina), but other groups, including the Radiolaria, Diatoms, and Ostracoda, will also be considered. Laboratory and field aspects of the course will include sample collection preparation and analysis. This course is periodically offered at the Marine Science field station at Wallops Island, Virginia, only during a summer session. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

## BIOM 482 Field Studies in Oceanography (3:2:3)

This is a three week session involving detailed planning and preparation for an oceanographic research cruise of approximately one week duration, the actual research cruise on board the R. V. "Annandale," and the data-processing and final reporting of results. Demonstration of various shipboard sampling techniques and instrumentation will be given. Each cruise will deal with different aspects of marine science, i.e., 1) general oceanography, 2) marine biology, 3) marine geology, and 4) marine pollution and waste disposal. This course is periodically offered at the Marine Science field station at Wallops Island, Virginia, only during a summer session. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

## BIOM 483 Wetland Ecology (3:2:3)

This structure and function of coastal wetland ecosystems are emphasized. The ecological impact of humans on these wetlands is interrelated with management strategies. Field exercises are stressed. This course is periodically offered at the Marine Science field station at Wallops Island, Virginia, only during a summer session. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.
BIOM 487 Tropical Invertebrates (3:2:3)
Tropical Invertebrates emphasizes the systematics and ecology of tropical communities. A variety of collection and observation methods are used to sample tropical inshore and reef areas. This course is periodically offered at the Marine Science field station at Wallops Island, Virginia, only during a summer session. Since this course also is offered for graduate credit, a differentiation of requirements will be made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

## BIOM 488 Coastal Vegetation (3:2:3)

The vegetation under the marine influence is identified, and the factors limiting and controlling the distribution of this vegetation is determined. This course is periodically offered during the summer at the Marine Science field station at Wallops Island, Virginia. Since this course also is offered for graduate credit, a differentiation of requirements is made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.
BIOM 489 Physiology of Marine Invertebrates (3:2:3)
Mechanisms and regulation of organ function in invertebrates with emphasis on homeostasis will be studied using live specimens from the marine environment. The unique adaptations of the marine invertebrates will be compared with general physiological principles. This course is periodically offered at the Marine Science field station at Wallops Island, Virginia, only during a summer session. Since this course also is offered for graduate credit, a differentiation of requirements is made. Prerequisites: Any two courses in biology with the exception of laboratory courses only.

## BIOM 490 Marine Aquaculture (3:2:3)

This course will include the theory and the practice of raising organisms for food and for the aquarium trade. Techniques of raising economically important organisms from the egg stage to marketable size and their food supplies will be studied. This course is periodically offered at the Marine Science field station at Wallops Island, Virginia, only during summer sessions. Prerequisites: Three courses in biology (minimum of nine total credits) with exception of laboratory courses only.

In addition to the courses listed previously, a number of courses are offered by the Marine Science Consortium at Wallops Island, Virginia, which a student may take and apply toward the requirements in biology. Interested students should contact Dr. David Trainer for further information.

## Biotechnology and Chemical Biotechnology Programs

School of Arts and Sciences<br>The Faculty of Sciences<br>See Biological Sciences, Page 83, and Chemistry, Page 116

## Business Management

| College of Business, Management and Economics |  |
| :---: | :---: |
| The Faculty of Business Management and Economics |  |
| Department of Business Management and Economics |  |
| 420 Normal Street | 570-422-3251 http:/busin |
| Department Faculty |  |
| Professors: | Seewoonundun Bunjun (sbunjun@po-box.esu.edu) |
|  | Constantinos Christofides, chair (cchristofides@po-box.esu.edu) |
|  | John Kercsmar (jkercsmar@po-box.esu.edu) |
|  | Pattabiraman Neelakantan (pats@po-box.esu.edu) |
|  | Richard Nyamwange (rnyamwange@po-box.esu.edu) |
| Associate Professors: | Kathleen Barnes (kbarnes@po-box.esu.edu) |
|  | Todd Behr (tbehr@po-box.esu.edu) |
|  | Michael DeCosmo (mdecosmo@po-box.esu.edu) |
|  | Mamadou Kane (mkane@po-box.esu.edu) |
|  | Alla Wilson (awilson@po-box.esu.edu) |
|  | Terry Wilson (twilson@po-box.esu.edu) |
| Assistant Professor: | Alvin Gibson (agibson@po-box.esu.edu) |

The Bachelor of Science in Management program provides students with the knowledge and skills necessary for successful careers in the areas of: Accounting, Business Management, Finance and Marketing. The program also supplies students with the foundation courses required for graduate degree programs in Business Administration and Management.
Recent graduates from our program report that they are enjoying successful careers as: Financial Specialists, Production Managers, Senior Accountants, Project Managers, Auditors, Bank Managers, Payroll Managers, etc.
Bachelor of Science with a Management major- 51 semester hours

- Required courses: ECON 111, 112, 312, 413; EMGT 200, 204, 211, 212, 225, 306, 352, 452.
- Specialization courses: Fifteen semester hours from one of the following areas: Accounting, Finance, Management, or Marketing.
- Corequisite courses: Three courses in MATH or equivalant Quantitative Management/ Economics, two courses in ENGL, and one course in each of CMST; CPSC; PSY.
- Please see the university requirements in this catalog.

Note: Management majors must (1) complete at least five courses at ESU with rubrics that begin with either EMGT or ECON and (2) attain a QPA of 2.5 or better in all Management courses taken at $E S U$.

## Management minor - 18 semester hours

- Required courses: Six EMGT courses ( 18 credits) including EMGT 200 and 204 or 211, and any four additional EMGT courses. A minimum of two courses ( 6 credits) must be 300 or 400 level.
- Corequisites: ECON 111 or 112. Additional requirements: A minimum of three (3) of the six (6) courses required for the Minor in Management must be completed at ESU.

Economics and Management Interdisciplinary Minor - 21 credits

- Required courses: Four Economics courses including ECON 111, 112 and any two additional ECON courses. Three Management courses including EMGT 200 and any two additional EMGT courses. A minimum of three courses (9) credits of the minor's total of seven courses must be 300 or 400 level.
- Additional requirements: At least four of the seven required courses for the minor must be completed at ESU. This minor is NOT available to Economics or Management majors.


## Course Descriptions

(Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title.)

## EMGT 200 Principles of Management (3:3:0)

This course is a survey of basic management theory and practice. The basic management processes of planning, organizing, leading, and controlling are presented. Systems theory is used to understand the challenges of managing organizations in environments that are subject to rapid and unpredictable change. Aptitudes and skills essential to managerial effectiveness are also considered. Concepts and skills are applied in case studies of real and fictitious organizations.

## EMGT 201 Decision Science I (3:3:0)

This course introduces students to the ways in which decision tools are used in business, economics, and management. Emphasis is placed on application areas and analyzing results. Numerous examples of practical decision-making techniques (in business and economic models) will be presented. Prerequisite: MATH 130.
EMGT 204 Principles of Marketing (3:3:0)
Marketing is studied as the management process of identifying and satisfying individual and organizational product wants and needs. The traditional marketing problems of product planning, pricing, promotion and distribution are considered. Problems and cases are utilized to illustrate and reinforce basic concepts. Prerequisite: EMGT 200.

## EMGT 211 Financial Accounting Fundamentals (3:3:0)

Financial accounting provides information about a firm's economic performance (revenues, expenses, income, cash flow) and condition (assets, liabilities, equity) to external constituencies such as creditors and investors. The fundamentals of how to measure, communicate, and utilize financial accounting information are covered.

## EMGT 212 Managerial \& Cost Accounting Fundamentals (3:3:0)

Managerial and Cost accounting provide decision-relevant information to internal managers of a firm which is useful in planning and controlling operations. Basic techniques and issues of cost measurement, cost behavior, budgeting, quality conformity, segment analysis, and information relevancy are covered in the context of evaluating, and improving the firm's efficiency and effectiveness. Prerequisites: EMGT 200 and 211 .

## EMGT 225 Business Law (3:3:0)

An introductory, yet comprehensive, survey of the fundamental topics in business law is presented to provide an understanding of the law and the ways in which it and the courts affect business activity.

## EMGT 250 Quantitative Business Analysis I (3:3:0)

This is an introduction to business data analysis and applications. Students will be exposed to economic data sources and techniques used for managerial decision-making. Managerial applications will include market research, sampling theory and quality control. Prerequisites: EMGT 201 or MATH 110.

## EMGT 306 Financial Management I (3:3:0)

This course is a survey of the foundational concepts and issues of financial management. Specific course content includes financial statement analysis, financial markets and institutions, interest rates, risk, return, stock and bond valuation, the cost of capital, and an introduction to capital budgeting. Prerequisites: MGT 211, MATH 130.

## EMGT 307: Financial Management II (3:3:0)

This course completes the basic survey of financial management begun in MGT 306 (Financial Management I). The primary topics are cash flow and risk analysis for long-term (capital) investing decisions, capital structure, dividend policy, working capital, and an introduction to the advanced topics of planning / forecasting, derivatives, multinational operations, preferred stock, leasing, warrants, convertible securities, and mergers / acquisitions. Prerequisites: MGT 200 and 306.

## EMGT 323 Organizational Theory (3:3:0)

A detailed, comprehensive analysis of organizations is presented at an intermediate level. Organizational linkage systems provide the framework in which the internal environment and organizational dynamics are studied. Topics covered include organizational goals, structure, design, size, complexity, culture, conflict, change, control, power, technology, and strategic planning. Emphasis is placed on understanding why organizations function as they do and how they should be designed and managed to achieve maximum effectiveness. Prerequisite: EMGT 200.

## EMGT 331 Intermediate Financial Accounting I (3:3:0)

In-depth study of Financial Accounting Standards Board body of principles of accounting recognition and measurement used to prepare financial statements for external reporting. Topics include: FASB conceptual framework, financial statement structure and content, time-value of money, current assets, non-current assets, and current liabilities. Prerequisites: EMGT 211 and 212.

## EMGT 332 Intermediate Financial Accounting II (3:3:0)

A continuation of the in-depth study of the Financial Accounting Standards Board body of principles of recognition and measurement for external reporting begun in EMGT 331. Topics include: long-term liabilities, stockholders' equity, earnings-per-share, investments, income taxes, pensions, leases, cash flows, financial statement analysis, and disclosure requirements. Prerequisites: EMGT 211, 212, and 331.
EMGT 333 Intermediate Managerial \& Cost Accounting (3:3:0)
An in-depth study of the analytical perspectives and tools of managerial/cost accounting with the objective of equipping the accountant to assist managers to improve organizational efficiency and effectiveness. Topics include: cost accounting systems, tools for planning and control, cost information for decision making, cost allocation, quality and JIT, capital budgeting and management control systems. Prerequisites: EMGT 211, 212.

## EMGT 335 Tax Accounting I (3:3:0)

This course presents a comprehensive examination of the federal income tax regulations that apply to individuals. Topics include: tax research, planning, compliance, deductions, property sales, non-taxable exchanges, shelters, credits, and computations. Prerequisites: EMGT 200, 211 and 212.

## EMGT 336 Tax Accounting II (3:3:0)

This course presents a comprehensive examination of the federal tax regulations that apply to corporations, partnerships, estates, and trusts. Topics include: acquisitions, reorganizations, consolidations, closely-held corporations, S-Corporations, liquidating and non-liquidating distributions, retirement plans, social security taxes, and gift taxes. Prerequisites: EMGT 211, 212, 335.
EMGT 342 Investment Analysis (3:3:0)
A detailed analysis of investment instruments is presented in the context of portfolio theory. Risk and return analyses, a security markets operation, and valuation models are reviewed. Emphasis is placed on asset pricing and investment strategies. Topics covered include equity and fixed-income securities, financial commodities futures, stock and index options, institutional operations, and international investment opportunities. Prerequisite: EMGT 200 or 306.

## EMGT 350 Quantitative Business Analysis II (3:3:0)

This is an intermediate course in business and economic data analysis. It is a formal introduction to research methods and techniques used in managerial and financial forecasting. Students will be introduced to basic time series analysis, decision analysis and regression. Prerequisite: EMGT 250.

## EMGT 351 Operations Management (3:3:0)

The primary focus of this course is to introduce how operations are carried out in real business today. The focus will be on the production/operations processes, the value chain, total quality management, resource planning and inventory control systems, facility planning and supply chain management. Students will be exposed to a wide variety of concepts, tools and applications that help them prepare for a career in business. Prerequisite: EMGT 200; EMGT 201 or MATH 130.

## EMGT 352 Human Resource Management (3:3:0)

The course is a survey of basic human resource management theory and practice. The processes of human resource recruitment, training, development, motivation, performance evaluation, and compensation are studied in contexts of the applicable theories and concepts of human behavior, ethics and fairness, and legal requirements. Prerequisite: EMGT 200.

## EMGT 353 Small Business Management (3:3:0)

A comprehensive survey of the challenges that confront the managers of small businesses is presented on an introductory level. Topics covered include the characteristics of small business, starting a small business, organizing the enterprise, marketing; production and operations management, and administrative and financial controls. Problem areas-e.g., financial planning, product strategies, pricing, credit policies, inventory control and capital budgeting-are emphasized via a case study approach. Prerequisites: EMGT 200 and 204.

## EMGT 354 Retail Management (3:3:0)

The structure, strategy, and changing environment of retail management are presented in a comprehensive survey. The topics analyzed include retail institutions, site location, merchandise planning, customer communications, and retail pricing. Emphasis is placed on case studies. Prerequisites: EMGT 200 and 204.

## EMGT 355 Business Ethics (3:3:0)

Managers will confront ethical issues in their organizational careers. This course seeks to prepare managers to incorporate an ethical dimension into their decision-making by recognizing and accommodating the legitimate claims of multiple organizational stakeholders (owners, employees, customers, suppliers, competitors, regulators, the ecological environment, and society). Concepts and models of ethical decision-making will be covered. Typical ethical issues encountered in organizational life and case examples of ethical and unethical behavior will be examined. Prerequisite: MGT 200.

## EMGT 359 Labor History and Industrial Relations (3:3:0)

This course examines the roles of labor and management in industrial relations with special references to labor history, wage rate determination, collective bargaining and government intervention into labor relations. The implications of the changing structure of the American economy are analyzed. Prerequisites: ECON 111 or 112 and any one of HIST $141,142,143,144$.

## EMGT 362 Globalization and International Management (3:3:0)

Economic, political, and technological forces are acting together to create a new system called globalization. This course will examine the forces of globalization and the new system they have created. After a brief survey of the economics of international trade and finance, the course will focus on the challenges of global management including understanding political, economic and cultural differences and adapting the organizational systems and strategies of research, product development, supply, manufacturing, marketing, finance, and human resource management to a global business environment. Prerequisites: MGT 200 and ECON 112

## EMGT 370 Consumer Behavior (3:3:0)

This course examines how individual and group behavior impact consumer choices in the marketplace. The individual processes of perception, learning, personality, attitudes, motivation, and decision-making are examined. The group influences of family, social class, culture, and subculture are also examined for their impact on consumer behavior. Prerequisites: EMGT 200, 204, ECON 112 and PSY 100.

## EMGT 371 Advertising Management (3:3:0)

A comprehensive survey of the principles of advertising is combined with advertising practices to introduce students to the functions that advertising performs in selling activities. Advertisers, advertising agencies, consumer behavior, and market research are analyzed in terms of their relationships to advertising media, market segmentation, and advertising strategies. While emphasis is placed on creative advertising and advertising testing, special types of advertising are also covered. Prerequisites: EMGT 200 and 204.

## EMGT 430 Internal/Operational Auditing (3:3:0)

Internal auditors act as agents of continuous organizational improvement through their analysis of information system integrity and reliability, resource security and productivity, policy compliance, and operational efficiency and effectiveness. This course is a comprehensive survey of Institute of Internal Auditor standards, procedures and practices for this important value-added activity. Prerequisites: EMGT 200, 211 and 212.

## EMGT 431 External/Financial Auditing (3:3:0)

Independent external auditors (CPA's) examine evidence regarding a firm's transactions and condition and report their conclusions about the fairness of the firm's financial reporting. This course is a comprehensive survey of American Institute of CPA auditing standards, procedures, and reports. Prerequisites: EMGT 211, 212, 331, 332. May be taken concurrently with EMGT 332.

## EMGT 451 Management Science I (3:3:0)

This is an intermediate course in Management Science. It is a survey of analytical techniques used by modern management to formulate and solve problems. Some of the topics covered are Linear and Integer Programming, Transportation Models, Inventory Theory, and Game Theory. Prerequisites: EMGT 200 or MATH $110,130$.

## EMGT 452 Organizational Strategy (3:3:0)

This course presents the tools and techniques of organizational strategic planning, including internal organizational analysis of strengths and weaknesses and external scanning of the stakeholders and trends in the environment that the organization inhabits. Students will practice strategic analysis and the formulation of appropriate strategies through comprehensive real organization and/or simulation cases in this capstone course that integrates all the functional areas of management. The course concludes with a consideration of strategy implementation issues and techniques. Prerequisites: EMGT 200, 204, 211, 225 and 306.

## EMGT 453 Organizational Leadership (3:3:0)

This course presents traditional (trait and behavioral theories) and contemporary models (contingency, participative, charismatic, transformational) of leadership. The course considers the sources and uses of power and influence as well as the phenomenon of leader emergence. The course includes leadership skills assessment and training exercises. Cases of effective and ineffective leadership will be utilized extensively throughout the course. Prerequisite: EMGT 200 and PSY 100.

## EMGT 454 Organizational Behavior (3:3:0)

This course examines the individual and group behaviors that impact organizational performance. Individual processes and attributes such as perception, learning, personality, emotional intelligence, ethics, motivation, and stress are examined in organizational settings. Team processes such as communications, decision-making, power, conflict, and negotiation are also considered. The course concludes with a consideration of the organization-wide processes of learning, change, and structural design. Prerequisite: EMGT 200 and PSY 100.

## EMGT 470 Marketing Research (3:3:0)

The marketing research alternatives of reliance upon existing secondary data sources (publications, data bases) versus development of primary sources (surveys, observations, and experiments) is considered. Data analysis techniques including hypothesis testing, association testing, correlation and regression, discriminant, canonical, factor, and cluster analysis are presented. The course concludes with the traditional, contemporary, and emerging applications of marketing research. Prerequisites: EMGT 204, 370, and MATH 110.

## EMGT 471 Marketing Management and Strategy (3:3:0)

This is a capstone course in Marketing that examines the role of the Marketing Manager. The development of an appropriate marketing strategy is given extensive consideration. The implementation of a marketing strategy and the general and specific management issues involved in the marketing function are covered. Exercises, problems, and cases will be used extensively in this integrative course where all the important aspects of marketing come together. Prerequisites: EMGT 204 and 370.

## EMGT 485 Independent Study (Hours to be arranged)

Independent study is an in-depth directed research into subject matter which is not covered in courses listed in the current catalog. It is open to an advanced student ( 90 credits) who discusses the research topic with an adviser before contacting the professor who will serve as the instructor. At least five (5) hours of student-professor conference time are required for each credit undertaken. Prerequisites: 90 credits and approval of the adviser, instructor, department chair and dean.
EMGT 486 Field Experience and Internship (Semester hours arranged)

## Bachelor of Science in Business Management



| Fall |  |  |  |
| :--- | ---: | :--- | ---: |
| EMGT 306 Financial Management 3 ECON 413 Managerial Economics <br> EMGT 352 Human Resource Management 3 Management Specialization Elective | 3 |  |  |
| Management Specialization Elective | 3 | General Education Elective -Science | 3 |
| General Education Elective - Arts and Let- <br> ters | 3 | General Education Elective - Arts and Letters | 3 |
| Free Elective | 3 | Free Elective | 3 |
| Subtotal | $\mathbf{1 5}$ | Subtotal | $\mathbf{1 5}$ |


| Sell |  |  |
| :--- | :---: | :---: |
| General Education Elective - Humanities 3 EMGT 452 Organizational Strategy 3 <br> Management Specialization Elective 6 Management Specialization Elective 3 <br> Free Electives 6 Free Electives 7 <br> Subtotal 15 Subtotal 13 <br> TOTAL CREDITS    <br> *Or equivalent courses    <br> Note: Substitute Accounting, Finance or Marketing for Management/Econ Electives, depending on the student's <br> concentration area.   120 |  |  |

## Chemistry

School of Arts and Sciences
The Faculty of Science
Gessner Science Hall
570-422-3342
www3.esu.edu/academics/chemistry.asp The Department of Chemistry is accredited by the American Chemical Society.

| Department faculty <br> Professors: | Conrad Bergo, Chair (cbergo@po-box.esu.edu) |
| :--- | :--- |
|  | Sharmaine Cady (scady@po-box.esu.edu) |
|  | Michael Doherty (mdoherty@po-box.esu.edu) |
|  | Dennis Erb (derb@po-box.esu.edu) |
|  | Jon Gold (jgold@po-box.esu.edu) |
|  | William Loffredo (wloffredo@po-box.esu.edu) |
| Associate Professors: | Robert Schramm (rschramm@po-box.esu.edu) |
|  | T. Michelle Jones-Wilson (mjwilson@po-box.esu.edu) |
|  | Richard Kelly (rskelly@po-box.esu.edu) |
| Assistant Professor: | Alan Shaffer (ashaffer@po-box.esu.edu) |
|  | John Freeman (jfreeman@po-box.esu.edu) |

## Bachelor of Arts with a Chemistry major- $\mathbf{3 0}$ semester hours

- Required major courses: CHEM 121, 123, 124, 126, 233, 234, 235, 236, 315, 353, 354, 371, 385, 495.
- Corequisite courses: CPSC 101; MATH 140, 141; PHYS 161, 162 (or equivalent courses).
- Please see the university requirements in this catalog.
- Please see the Foreign Language Competency Requirement in this catalog.
- Note: A 2.00 minimum quality point average in major courses is required for graduation.
- All 300 and 400 level courses required for the major must be completed at ESU, with the exception of courses taken as part of the Pharmacy Transfer Program.


## Bachelor of Science with a Chemistry major-51 semester hours

- Required major courses: CHEM 121, 123, 124, 126, 233, 234, 235, 236, 315, 353, $354,371,372,385,433,441,442,460,495$, and three additional semester hours in 300 to 499 numbered courses.
- Corequisite courses: CPSC 101; FLFR 116, or FLGR 116, or FLSP 116; MATH 140, 141; PHYS 161, 162.
- Please see the university requirements in this catalog.
- Note: A minimum quality point average of 2.00 in major courses is required for graduation. This degree program is approved by the Committee on Professional Training of the American Chemical Society. Graduates of this program with a minimum quality point average of 2.50 in major courses are eligible for certification by the society.
- All 300 and 400 level courses required for the major must be completed at ESU.

Bachelor of Science with a Chemistry major (Secondary Education) 34 semester hours
Coordinator: Professor Michael Doherty, Chemistry Department

- Required major courses: CHEM 121, 123, 124, 126, 233, 234, 235, 236, 315, 353, 354, 371, 385, 495, 499.
- Corequisites: BIOL 114 and BIOL 115; CPSC 101 (or MCOM 262); MATH 140, 141; PHYS 161, 162 (or equivalent courses).
- Required professional education courses: PSED 161, 242, 346, 420, 421, 430, 431; REED 321.
- The following are recommended courses: CHEM 373, 405, 493; GEOG 120 or 121; It is recommended that students take both CPSC and MCOM 262.
- Please see the university requirements in this catalog.
- Note: A minimum quality point average of 2.50 in chemistry major courses is required for certification.
- All 300 and 400 level courses required for the major must be completed at ESU.

The Commonwealth of Pennsylvania has established new and superseding requirements for all candidates in teacher preparation programs. Please refer to the section The College of Education in this catalog for specific requirements for admission into teacher education programs.

## Bachelor of Science in Chemical Biotechnology major

Coordinator: Professor Teresa Michelle Jones-Wilson, Chemistry Department

- Required major courses: BIOL 114, 281, 411 or 439/477; CHEM 121, 123, 124, 126, 233, 234, 235, 236, 315, 317, 350, 352, 371, 385, 415, 417, 420, 495.
- An additional three electives (minimum 8 credits) from CHEM 372, 418, 436, 461, 493 , BIOL $330,331,380,437,465$, including a laboratory component. At least one of these courses must be in Chemistry.
- Corequisite courses: PHYS 131, 132 or PHYS 161, 162; a minimum of 2 of MATH 110, 140, 141; CPSC 101
- Please see the university requirements in this catalog.
- Note: A minimum quality point average of 2.5 in chemistry courses is required for graduation. Students enrolling in this degree program are strongly encouraged to participate in undergraduate research or an internship opportunity.
- All 300 and 400 level courses required for the major must be completed at ESU.

Bachelor of Science with a Biochemistry major- 67 semester hours
Coordinator: Dr. Teresa Michelle Jones-Wilson, Chemistry Department

- Required major courses: CHEM 121, 123, 124, 126, 233, 234, 235, 236, 315, 317, 350 or 353, 352, 371, 385, 419, 495.
- Additional requirements: 5 credits (lab required) from CHEM 415, 417, 418, 420, 442; 6 credits (lab required) from BIOL $330,340,380,410,418,422,430,434,437$, 438, 439, 449, 465, 477.
- Corequisite courses: BIOL 114, 331, MATH 140, 141; PHYS 161, 162.
- Please see the Foreign Language Competency Requirement in this catalog.
- Please see the university requirements in this catalog.
- All 300 and 400 level courses required for the major must be completed at ESU, with the exception of courses taken as part of the Pharmacy Transfer Program.

Chemistry Minor- $\mathbf{2 3}$ semester hours

- Required courses: CHEM $121,123,124,126,(233,234,235,236)$ or $(353,354)$, and seven semester hours from chemistry major courses.
- Note: A minimum quality point average of 2.0 in chemistry courses is required. A student majoring in a program offered by the Department of Chemistry cannot qualify for this minor. The following are recommended courses: CHEM 315, 373, 405, 493.
- All 300 and 400 level courses required for the minor must be completed at ESU.


## Pharmacy Transfer Program

Coordinator: Professor William M. Loffredo, Chemistry Department.
The pre-pharmacy student spends their first 2-3 years at ESU taking the necessary core courses in order to satisfy the professional school entrance requirements. These core courses and other coreq-
uisite are unique for each professional school. The student applies to a pharmacy school as a transfer student. Students may indicate their intent to graduate with a Bachelor of Arts degree in either biochemistry or chemistry from ESU before transferring to the pharmacy school of choice. Upon completion of their second professional year at pharmacy school, they can transfer these credits from the pharmacy school back to ESU in order to fulfill the remaining credits for the Bachelor of Arts degree. Students may also declare a major in chemistry or related fields, finish the bachelor's degree at ESU, then transfer to a pharmacy school.

## Course Descriptions

(Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title.)

## CHEM 100 Chemical Problem Solving: (1:1:0)

This course is a review of the methods of obtaining and analyzing quantitative measurements with emphasis on the mass, energy, and chemical changes which occur during chemical reactions. It is intended primarily for students who require or desire additional work in solving chemical problems.

## CHEM 101 GE: Modern Chemical Science (3:3:0)

This course develops concepts of modern chemistry as a natural consequence of scientific thought and advancement. The atom is followed from its creation to its chemical reactivities. Inorganic chemistry is the main emphasis. It is primarily intended for students who wish to satisfy a general education requirement in science but is also an excellent preparatory course for General Chemistry I and General Chemistry II.

## CHEM 104 GE: Chemistry for the Consumer (3:3:0)

This course is an introduction to the basic chemical principles that underlie the composition, applications, and safety of common consumer products and everyday materials. Among topics to be discussed are plastics, laundry products, personal-care products, fertilizers, pesticides, food additives, and electrochemical processes, and batteries.

## CHEM 106 GE: Fingerprinting the Elements (3:3:0)

The periodic table will be used to introduce the descriptive chemistry of the elements. Periodic trends in chemical reactivity and physical properties provide the basis for predicting the inorganic behavior of an element. Computer software assignments are used to clarify periodic trends.

## CHEM 108 GE: Environmental Chemistry (3:3:0)

This course is an introduction to basic chemical principles that are used as the basis for discussion of environmental issues. Among the topics included are air and water pollution, waste disposal, food additives, and pesticides.

## CHEM 111 GE: Chemical Basis of Matter (3:3:0)

The fundamental concepts relating to matter, its properties, composition, structure, and reactions are presented. The student is introduced to the chemical elements, the periodic table, inorganic nomenclature, atomic theory and structure, chemical reactions and equilibria, solution chemistry, and nuclear chemistry. Applications to the health sciences of the principles presented will be emphasized. This course may be useful in preparation for CHEM 121. Some algebraic experience is desirable.

## CHEM 115 GE: Chemistry, Molecules and Life (3:3:0)

This course introduces the student to the principles and concepts of general, organic and biological chemistry and their applications to health-related issues. Intermolecular forces, acid-base theory, chemical reaction and equilibrium, and structural properties are used to explain metabolism, function, and causes of physiological changes at the molecular level.

## CHEM 117 GE: Chemical Basis of Life Laboratory (1:0:3)

This course is a compilation of laboratory experiences designed to introduce the student to basic experimental techniques and investigations in general, organic, and biological chemistry. Emphasis is given to the physical methods used to synthesize, purify, and identify various chemical compounds. Prerequisite: CHEM 212 or concurrent registration in CHEM 115.

## CHEM 121 GE: General Chemistry I (3:3:0)

This course presents language, principles, and applications of chemistry at a level designed for students majoring in the sciences. Topics include measurement, periodicity, stoichiometry, thermochemistry, atomic and electronic structure, bonding, and states of matter. Prerequisite: Intermediate algebra. Concurrent registration in CHEM 123 is required.

## CHEM 123 GE: General Chemistry I Laboratory ( $1: 0: 3$ )

This course offers students an opportunity to safely observe and measure chemical changes. Written work emphasizes data treatment and local interpretation. Principles include density, stoichiometry, atomic structure, and gas laws. Techniques include volumetric, gravimetric, and spectroscopic measurements. Concurrent registration in CHEM 121 is required.

## CHEM 124 GE: General Chemistry II (3:3:0)

This course is a study of the concepts of equilibrium, thermodynamics, acid-base chemistry, kinetics, electrochemistry, and nuclear chemistry. Prerequisites: CHEM 121, 123. Concurrent registration in CHEM 126 required.

## CHEM 126 GE: General Chemistry II Laboratory ( $\mathbf{1 : 0 : 3}$ )

This course introduces students to more sophisticated measurement tools such as spectrophotometers, pH meters, precision thermometers, voltmeters, ammeters, and computers. Experiments focus on principles studies in CHEM 124. Prerequisites: CHEM 121, 123. Concurrent registration in CHEM 124 required.

## CHEM 127 General Chemistry I Problem Solving (1:1:0)

This course will provide systematic, step-by-step approaches to problem solving in general chemistry, with emphasis on the factor label method as it is applied to stoichiometry, solution concentration terms, and thermochemistry. It is intended primarily for students who require or desire additional work in solving general chemistry problems. Concurrent registration in CHEM 121, General Chemistry I, is required.

## CHEM 128 General Chemistry II Problem Solving (1:1:0)

This course is a continuation of CHEM 127, General Chemistry I Problem Solving. Concurrent registration in CHEM 124, General Chemistry II, is required. Prerequisites: CHEM 121, 123.

## CHEM 212 GE: Chemical Basis of Life (3:3:0)

The fundamental concepts developed in CHEM 111 are applied to the study of organic molecules and functional groups and their importance to biochemical structures. The structure, properties, nomenclature, and reactions of the different classes of organic and biochemical compounds are discussed as well as isomerism and metabolism and their biochemical applications to the health sciences. Prerequisite: CHEM 111.

## CHEM 233 Organic Chemistry I (3:3:0)

The structure, nomenclature, preparation, and reactions of organic compounds will be studied using modern theories and reaction mechanisms as unifying bases. Prerequisites: CHEM 124, 126, and 235 concurrent or completed or with permission of department.

## CHEM 234 Organic Chemistry II (3:3:0)

This course is a continuation of CHEM 233, Organic Chemistry I. Prerequisites: CHEM 233, 236 concurrent or completed or with permission of department.

## CHEM 235 Organic Chemistry I Lab (1:0:3)

A series of experiments designed to introduce the student to the techniques and equipment used in the preparation and characterization of organic compounds will be undertaken. Prerequisite: CHEM 233 concurrent or completed.
CHEM 236 Organic Chemistry II Lab (1:0:3)
This course is a continuation of CHEM 235, Organic Chemistry Lab. Prerequisites: CHEM 234 concurrent or completed and CHEM 235.

## CHEM 237 Organic Chemistry I Problem Solving (1:1:0)

This course will present approaches to and the methods of problem solving in organic chemistry while utilizing the unifying theories of mechanism that are based upon classical and contemporary bond theories. It is intended primarily for students who require or desire additional work in solving organic chemistry problems. Concurrent registration in CHEM 233, Organic Chemistry I, is required.

## CHEM 238 Organic Chemistry II Problem Solving (1:1:0)

This course is a continuation of CHEM 237, Organic Chemistry I Problem Solving. Concurrent registration in CHEM 234, Organic Chemistry II is required. Prerequisites: CHEM 233, 235.

## CHEM 275 GE: Chemical Aspects of Drug and Alcohol Abuse (3:3:0)

This course is an introduction to the chemical aspects of alcohol and other drugs of abuse with emphasis on the pharmacological and physiological effects on the human organism. Prerequisite: CHEM 111 or 115 or 121.

## CHEM 290 Special Topics (Semester hours arranged)

These courses are designed to meet specific needs of groups of students are offered on a trial basis in order to determine the demand for and value of introducing them as part of the university curriculum.

## CHEM 315 Biochemistry (3:3:0)

This course is an introduction to the chemistry of living systems. Topics discussed include the chemistry of aqueous solutions; pH and buffer systems; the structure, functions and interactions of biomolecules; theories of ligand binding catalysis; the chemical reactions and regulation of major metabolic pathways; and introductory bioenergetics. Prerequisites: CHEM 234, 236.

## CHEM 317 Biochemistry Laboratory (1:0:3)

A series of experiments designed to introduce the techniques and instrumentation of biochemistry will be utilized in investigating biomolecules and biochemical processes. Statistical methods for data analysis and interpretation of data published in biochemical journals will be integral components of this course. Prerequisite: CHEM 315 concurrent or completed.

## CHEM 350 Physical Biochemistry (3:3:0)

This course introduces physical theory and methodology as applied to studies of biomolecules and biochemical processes. Topics covered include the importance of electrostatic interactions in determining structure and function of biomolecules; processes of denaturation; thermodynamics and bioenergetics; kinetics; solution properties of macromolecules; membrane dynamics; and the theories of a variety of physical methods of analysis. Prerequisites: CHEM 315, 317; MATH 140; PHYS 162.

## CHEM 352 Physical Biochemistry Laboratory (1:0:3)

Experiments to be performed will provide experience with advanced analytical and physical techniques used in the analysis of biomolecules and biochemical processes. Examples of techniques to be used include absorption spectroscopic analysis of structure and kinetics; centrifugation; electrophoresis; blotting; equilibrium dialysis; purification methods and affinity ligand chromatography; and computer assisted data analysis. Independent design of some experiments, critical evaluation, and statistical analysis of data are stressed. Prerequisite: CHEM 350 concurrent or completed or CHEM 353.

## CHEM 353 Physical Chemistry I (4:3:3)

This course is an introduction to theoretical physical chemistry including classical thermodynamics, statistical thermodynamics, and equilibrium. The use of computer techniques in the solving of problems and the treatment of laboratory data is an integral part of the course. Prerequisites: CHEM 124, 126; PHYS 162; MATH 141; CPSC 101.

## CHEM 354 Physical Chemistry II (4:3:3)

This course is a continuation of CHEM 353 with emphasis on the theory and applications of quantum mechanics to simple chemical systems, introduction to spectroscopy and statistical mechanics. Prerequisite: CHEM 353.

## CHEM 371 Analytical Chemistry I: Quantitative (4:2:4)

This course is a study of the theories and methods of gravimetic and volumetric analysis with a brief introduction to the use of some modern analytical instrumentation. Precision and accuracy in laboratory work and training in chemical calculations are emphasized. Prerequisites: CHEM 124, 126.

## CHEM 372 Analytical Chemistry II: Instrumental (4:2:4)

This course is a study of principles and applications of modern analytical methods with emphasis on physiochemical measurements. Topics include electrochemical, spectrochemical, chromatographic, and radiochemical methods. Prerequisites: CHEM 353, 371.

## CHEM 373 Environmental Quality: The Chemical Approach (4:3:3)

This course deals with the chemical aspects of environmental quality. Emphasis is placed on the identification, chemical characterization, and controls of pollutants. Topics include air, water, pesticides, food additives, heavy metals, and solid waste. Prerequisites: CHEM 124, 126.

## CHEM 385 Chemical Literature and Documentation (1:1:0)

This course is a study of the various classes of chemical literature, techniques of searching the literature, and the proper documentation of experimental observations and literature references. Prerequisites: CHEM 234, 236.

## CHEM 402 Contemporary Topics in Sciences (3:3:0)

This course deals with the nature and theoretical bases of recent noteworthy advances in science. Interdisciplinary in design, the course draws its content from the various disciplines of natural science. Emphasis is placed upon topics being reported upon in professional journals. This course is also listed as PHYS 402. Prerequisites: CHEM 353 and 354 and permission of instructor.

## CHEM 405 The Development of Modern Physical Science (3:3:0)

This course examines past works and philosophical thought of noted physical scientists. Emphasis is placed on the nature of scientific discovery and the processes of science. This course is also listed as PHYS 405. Prerequisites: PHYS 161 and 162 and permission of instructor.

## CHEM 412 Contemporary Topics in Biochemistry (3:3:0)

Topics presented in this course will cover a variety of advanced areas of biochemistry. Typically in one semester, the course will focus either on enzymes and regulation and integration of metabolism, or nucleic acids and recombinant DNA technology. Current journal articles will be used to supplement the textbook and provide the basis for discussions. The choice of focus and inclusion of other special topics will be determined by the needs of the students enrolled. Prerequisites: CHEM 315, 317, and 350 or 353.

## CHEM 415 Protein Chemistry (3:3:0)

Building upon principles in the introductory biochemistry course, this course will elaborate on protein structure and function, and cover theoretical and practical aspects related to the purification, quantification, characterization, and modification of proteins. Students will be introduced to the use of protein data banks, computer modeling and prediction of protein structure, and protein design. Prerequisites: CHEM 315; 317; and 350 or 353.

## CHEM 417 Protein Chemistry Laboratory (1:0:3)

Designed to accompany CHEM 415, this course focuses on laboratory protocols for the purification, quantification, and analysis of protein structure function used in industry and research. Computer-assisted structure prediction and analysis will also be used. Prerequisites: CHEM 315; 317; 350 and 352 or 353. Concurrent registration in CHEM 415 is required.

## CHEM 418 Molecular Toxicity (3:3:0)

This course introduces students to the fields of toxicity and risk assessment. Emphasis will be on the molecular basis of toxicity and the biochemical impact of exposure to toxic agents. Prerequisites: CHEM 234, 236, 315.

## CHEM 419 Biochemistry II (3:3:0)

This course explores the molecular logic of metabolism and protein synthesis and discusses how organic molecules function in biochemical processes and pathways. Biosynthetic reactions, the roles of cofactors and coenzymes, enzyme active sites, transcription and translation, regulation, advanced bioenergetics, and structure and patterns common to all biochemical transformations are explored and discussed. Prerequisites: CHEM 315, 317

## CHEM 420 Bioseparations (2:0:6)

This laboratory-intensive course focuses on methods used to isolate biological molecules and cellular structures. Theory, instrumentation and protocols of chromatography, dialysis, filtration, centrifugation, electrophoresis and cell sorting will be covered. Prerequisites: CHEM 315, 317.

## CHEM 433 Organic Chemistry III (3:3:0)

A study of the theoretical and practical aspects of the reactions, mechanisms and stereochemistry of organic compounds. Prerequisites: CHEM 234, 236, 354.

## CHEM 436 Medicinal Chemistry (3:3:0)

This course is a survey of the various classes of pharmacological agents being utilized in the treatment of various disorders. Included are considerations of mode of action, design and synthesis, and current efforts in the field of development of new drugs. Prerequisites: CHEM 234, 236, 353.

## CHEM 441 Inorganic Chemistry I (3:3:0)

This course is a study of the periodic properties and descriptive chemistry of the chemical elements and their inorganic compounds, ionic solids, equilibria in aqueous and nonaqueous systems, and acid-base concepts. Prerequisites: CHEM 123, 124, and 353 (concurrent registration in CHEM 353 permitted).

## CHEM 442 Inorganic Chemistry II (3:3:0)

This course is a continuation of CHEM 441 with emphasis on a study of the theories of bonding, structure, and reactivities of inorganic, coordination, and organometallic compounds. The magnetic and spectroscopic properties of coordination compounds and the descriptive chemistry of selected group elements will also be discussed. Prerequisites: CHEM 353, 441.

## CHEM 452 Introduction to Computational Chemistry and Molecular Modeling (3:3:0)

This course is a study of selected topics in theoretical chemistry including quantum mechanics, group theory and symmetry, and molecular orbital theory. The use of computer programs in the illustrations of chemical principles will be emphasized. Prerequisites: CHEM 353, 354.

## CHEM 460 Advanced Chemistry Laboratory (2:0:6)

This course is designed to expose students to various experimental techniques needed to conduct chemical research. The course integrates synthesis, separation, purification, analysis, and characterization techniques. Instrumental techniques used include UV-VIS, FT-IR, FT-NMR, spectroscopy, HPLC, GCMS \& various optical methods used for characterizing organic and inorganic compounds. Prerequisites: CHEM 372, 433, 442 (or concurrent).

## CHEM 461 Polymer Chemistry (3:3:0)

The basic concepts of polymer chemistry are introduced in this course. Topics included will be the mechanisms and kinetics of polymerization, the synthesis of polymers, and the relationships between molecular structure, conformation, and morphology of polymers and their chemical and physical properties. Prerequisites: CHEM 234, 236, 353.

## CHEM 485 Independent Study (Semester hours arranged)

This experience is taken upon the initiative of a student who seeks to study with a knowledgeable faculty member in order to deepen a specific interest in a particular academic discipline. Independent study is a process through which a student either sharply increases his/her already advanced knowledge of a subject matter or increases his/her appreciation about an academic discipline that is correlative with a student's advanced knowledge of a subject. The proposed independent study must be submitted to the department for approval. The faculty member supervising the independent study must provide a minimum of five (5) hours of time per credit hour upon request of the student.

## CHEM 486 Field Experience and Internships (Semester hours arranged)

Prerequisites: CHEM 123, 124.

## CHEM 493 Research in Chemistry (3:0:0)

This course is an experimental investigation selected by the student in consultation with a member of the faculty and carried out under the faculty member's guidance. Prerequisites: Senior standing and permission of the department.

## CHEM 495 Chemistry Seminar (1:1:0)

This course is a series of lectures and discussions on chemical topics by faculty, visitors, and students; each registered student is required to give a seminar during the semester. Prerequisites: Permission of the department; CHEM 236, 385.

## CHEM 499 Student Teaching Internships (1:0:TBA)

This course is designed to provide the student with an opportunity to work with a faculty member in the student's primary Arts and Sciences discipline during the student teaching experience. The course will enhance the student's ability to understand and maximize the relationship between disciplinary subject matter and pedagogy.

## Bachelor of Arts in Chemistry

| Fall | Freshman Year Spring |  | 3 |
| :---: | :---: | :---: | :---: |
| CHEM 121 General Chemistry I | 3 | CHEM 124 General Chemistry II |  |
| CHEM 123 General Chemistry I Lab | 1 | CHEM 126 General Chemistry II Lab | 1 |
| MATH 135 Pre-Calculus | 3 | MATH 140 Calculus | 4 |
| CPSC 101 PC's and Their Uses | 3 | PHYS 161 Physics I | 4 |
| ENGL 103 English Composition | 3 | GE Social Sciences | 3 |
| FIT 101 Lifetime Fitness/Phys Asm | 2 |  |  |
| Subtotal | 15 | Subtotal | 15 |
| Fall | Sophomore Year Spring |  |  |
| CHEM 233 Organic Chemistry I | 3 | CHEM 234 Organic Chemistry II | 3 |
| CHEM 235 Organic Chemistry I Lab | 1 | CHEM 236 Organic Chemistry II Lab | 1 |
| PHYS 162 Physics II | 4 | FLGR 116 German I | 3 |
| MATH 141 Calculus 2 | 4 | GE Social Studies | 3 |
| GE Arts and Letters | 3 | GE Arts and Letters | 3 |
|  |  | Elective | 2 |
| Subtotal | 15 | Subtotal | 15 |
| Fall | Junior Year | Spring |  |
| CHEM 353 Physical Chemistry I | 4 | CHEM 354 Physical Chemistry II | 4 |
| CHEM 371 Analytical Chemistry | 4 | FLGR 117 German II | 3 |
| CHEM 385 Chemical Literature and Documentation | 1 | GE Social Science | 3 |
| GE Social Science | 3 | GE Arts and Letters | 3 |
| GE Arts and Letters | 3 | Elective | 2 |
| Subtotal | 15 | Subtotal | 15 |

Fall Senior Year Spring

| GE Social Sciences | 3 | CHEM 495 Chemistry Seminar | 1 |
| :--- | ---: | :--- | ---: |
| Elective | 3 | Elective | 3 |
| Elective | 3 | Elective | 3 |
| Elective | 3 | Elective | 4 |
| Elective | 3 | Elective | 4 |
| Subtotal | $\mathbf{1 5}$ | Subtotal | $\mathbf{1 5}$ |

## Bachelor of Science in Chemistry

Fall
Freshman Year
Spring

| CHEM 121 General Chemistry I | 3 | CHEM 124 General Chemistry II | 3 |
| :--- | ---: | :--- | ---: |
| CHEM 123 General Chemistry I Lab | 1 | CHEM 126 General Chemistry II Lab | 1 |
| MATH 140 Calculus I | 4 | MATH 141 Calculus 2 | 4 |
| ENGL 103 English Composition | 3 | PHYS 161 Physics I | 4 |
| CPSC 101 PC's and Their Uses <br> in the Sciences | 3 | FL_116 French I or German I, or Spanish I | 3 |
|  |  | FIT fitness elective | 1 |
| Subtotal | $\mathbf{1 4}$ | Subtotal | $\mathbf{1 6}$ |

Fall
Sophomore Year
Spring

| CHEM 233 Organic Chemistry I | 3 | CHEM 234 Organic Chemistry II | 3 |
| :--- | ---: | :--- | ---: |
| CHEM 235 Organic Chemistry I Lab | 1 | CHEM 236 Organic Chemistry II Lab | 1 |
| PHYS 162 Physics II | 4 | Group C elective | 3 |
| Group A elective | 3 | Group C elective | 3 |
| Group C elective | 3 | Group A elective | 3 |
| FIT fitness elective | 1 | Group A elective | 3 |
| Subtotal | $\mathbf{1 5}$ | Subtotal | $\mathbf{1 6}$ |


| Fall | Sunior Year |  |  |
| :--- | ---: | :--- | ---: |
| CHEM 353 Physical Chemistry I | 4 | CHEM 354 Physical Chemistry II | 4 |
| CHEM 385 Chemical Literature <br> and Documentation | 1 | CHEM 372 Analytical Chemistry II | 4 |
| CHEM 315 Biochemistry | 3 | Group C elective | 3 |
| CHEM 371 Analytical Chemistry I | 4 | Group C elective | 3 |
| Group A elective | 3 |  |  |
| Subtotal | 15 | Subtotal | 14 |

Fall
*Senior Year
Spring

| CHEM 433 Organic Chemistry III | 3 | CHEM 442 Inorganic Chemistry II | 3 |
| :--- | ---: | :--- | ---: |
| CHEM 441 Inorganic Chemistry I | 3 | CHEM 460 Advanced Chemistry Laboratory | 2 |
| CHEM 3__or CHEM 4__ <br> Chemistry Elective Course** | 3 | CHEM 495 Chemistry Seminar | 1 |
| Elective*** | 3 | Elective | 3 |
| Elective | 3 | Elective | 3 |
|  |  | Elective | 3 |
| Subtotal | $\mathbf{1 5}$ | Subtotal | $\mathbf{1 5}$ |

TOTAL CREDITS

* Junior and senior level courses may be resequenced based on availability.
**This course must be taken from the list of chemistry department 300 or 400 elective courses.
**Only 13 credits of electives can be chemistry department 300 or 400 elective courses.


## Bachelor of Science in Chemistry/Secondary Education



Bachelor of Science in Chemical Biotechnology


## Bachelor of Science in Biochemistry

| Fall | Freshman Year | Spring |  |
| :---: | :---: | :---: | :---: |
| CHEM 121 General Chemistry I | 3 | CHEM 124 General Chemistry II | 3 |
| CHEM 123 General Chemistry I Lab | 1 | CHEM 126 General Chemistry II Lab | 1 |
| MATH 140 Calculus I | 4 | MATH 141 Calculus 2 or MATH 110 Statistics | 4 or 3 |
| BIOL 114 Introductory Biology I | 4 | ENGL 103 English Composition | 3 |
| General Education | 3 | General Education | 3 |
| Subtotal | 15 | Subtotal | $\begin{gathered} 13 \text { or } \\ 14 \end{gathered}$ |
| Fall | Sophomore Year Spring |  |  |
| CHEM 233 Organic Chemistry I | 3 | CHEM 234 Organic Chemistry II | 3 |
| CHEM 235 Organic Chemistry I Lab | 1 | CHEM 236 Organic Chemistry II Lab | 1 |
| Biology Elective | 3 or 4 | CPSC 101 PC's and Their Uses in Science | 3 |
| General Education | 3 | PHYS 161 Physics I | 4 |
| FIT I | 1 | General Education | 3 |
| General Education | 3 | FIT II | 1 |
| Subtotal | $\begin{gathered} 14 \text { or } \\ 15 \end{gathered}$ | Subtotal | 15 |
| Fall | Junior Year Spring |  |  |
| CHEM 315 Biochemistry | 3 | CHEM 350 Physical Biochemistry | 3 |
| CHEM 317 Biochemistry Lab | 1 | CHEM 352 Physical Biochemistry Lab | 1 |
| PHYS 162 Physics II | 4 | Biology Elective | $\begin{gathered} 3 \text { or } \\ 4 \end{gathered}$ |
| Elective | 6 | General Education | 6 |
| General Education | 3 | Elective | 3 |
| Subtotal | 17 | Subtotal | $\begin{gathered} 16 \text { or } \\ 17 \end{gathered}$ |
| Fall | Senior Year Spring |  |  |
| CHEM 371 Analytical Chemistry | 4 | CHEM 419 Biochemistry II | 3 |
| Chemistry/Biology Elective | $\begin{gathered} 3 \text { or } \\ 4 \end{gathered}$ | CHEM 495 Chemistry Seminar | 1 |
| CHEM 385 Chemical Literature and Documentation | 1 | Chemistry/Biology Elective | $\begin{gathered} 6 \text { or } \\ 7 \end{gathered}$ |
| General Education | 3 | General Education | 3 |
| Chemistry | $3 \text { or }$ | Elective | 3 |
| Subtotal | $\begin{array}{r} 14 \\ -16 \\ \hline \end{array}$ | Subtotal | $\begin{gathered} 16 \text { or } \\ 17 \\ \hline \end{gathered}$ |
| TOTAL CREDITS |  |  | 120 |
| Biology Electives - 9 credits; one must have lab 300+ level BIOL 330, 331, 422, 434, 449 |  |  |  |

## Communication Studies

School of Arts and Sciences<br>The Faculty of Arts and Letters<br>Department faculty Professors:<br>

Fine and Performing Arts Center, Room 202
570-422-3759
www.esu.edu/spch

Joseph Ashcroft (jashcroft@po-box.esu.edu)
Glenn Geiser-Getz, chair (ggetz@po-box.esu.edu)
Paul Lippert (plippert@po-box.esu.edu)
Robert McKenzie (mckenzie@po-box.esu.edu)
Charles Warner (cwarner@po-box.esu.edu)
Wenji Yan (wyan@po-box.esu.edu)
Marcia Godich (mgodich@po-box.esu.edu)
Patricia Kennedy (pkennedy@po-box.esu.edu)
Andrea McClanahan (amcclanahan@po-box.esu.edu)
Cem Zeytinoglu (czeytinoglu@po-box.esu.edu)
The mission of the Department of Communication Studies is to prepare students for civic participation in an increasingly complex world that requires sophisticated practical, critical, and theoretical understandings of human communication. The department offers coursework and degree programs which focus on the history, theory, and critical evaluation of mediated communication as well as the areas of broadcasting, applied speech performance, and rhetoric. Communication majors secure employment in a variety of fields after graduation including journalism, sales, advertising, public relations, media development, and broadcasting. Some graduates also pursue graduate degrees at the masters or doctoral level. The department offers a Minor in Communication Studies to students majoring in other disciplines.

## Bachelor of Arts with a Communication Studies major: $\mathbf{3 9}$ semester hours

Students must complete the Core Curriculum and the specified courses within one of three different tracks.

- Core Curriculum (18 semester hours): CMST 111, 126, 250, 310, 365, 495.
- Track I. Broadcasting ( 21 semester hours): CMST 219 (taken twice for a total of three semester hours), or MCOM 210, 229, 315, either 410 or 440, 486; and six semester hours chosen from the following: CMST 337, $342,348,364,410$ or 440 (either 410 or 440 can be taken as an elective if the other is chosen as a required course).
- Track II. Media Studies (21 semester hours): CMST 136, 163, 348, 367; and nine semester hours chosen from the following: CMST 267, 342, 364, 370, 410.
- Track III. Speech Communication (21 semester hours): CMST 253, 329; six semester hours chosen from the following: CMST 220, 230, 235; and nine semester hours chosen from the following: CMST 331, 333, 350, 363, 367, 415, 429, 465-H.
- Residency Requirement: The student's final 18 semester hours in the major must be completed in residence.
- Please see the university requirements in this catalog.


## Communication Studies minor- $\mathbf{2 1}$ semester hours.

Required courses: CMST 111, 126, 136 or 163; three semester hours chosen from the following: CMST 220, 230, 235, 253; and six semester hours of 300-400 level CMST coursework.

## Course Descriptions

(Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title.)
\#CMST 111 GE: Speech Communication (3:3:0)
This course includes an introduction to the study and application of some principles of dyadic communication, small group interaction, and public speaking, in addition to listening skills. Attendance requirement will be enforced.

## §CMST 126 GE: Introduction to Mass Media (3:3:0)

This course is a survey of the defining characteristics and histories of each of the media in mass communication. The focal point in each media is the relationship of the mass media to society.

## §CMST 136 GE: Popular Culture and Communication (3:3:0)

This introductory course affords the student an opportunity to systematically examine popular culture: the cultural environment in which virtually all Americans have lived during the twentieth century. Emphasis is placed upon the study of popular artifacts, arts, and rituals as communicators of cultural belief.
CMST 150 WS: Introduction to Women's Studies (3:3:0)
This course will provide an overview of the history, theories, and methodological approaches of Women's Studies; examine the implications of our cultural understandings of women, gender, race, and class; raise questions about the goals and direction of social change; and review the impact of Women's Studies on traditional disciplines and knowledge. Prerequisite: ENGL 103 (may be taken concurrently).
§CMST 163 GE: Introduction to Film Study (3:3:0)
This course is designed to provide the students with an understanding of the elements necessary for film analysis toward a development of an appreciation for film as art. Representative films are screened in order to study the impact of the art form on modern society and on the individual.

## CMST 219 Radio Practicum (1.5:0:3)

This course introduces students to basic operations of a radio station. Students will learn practical skills in policies, strategies, and broadcasting techniques of radio stations. The course may be repeated for a maximum of 3 credits. Pass/Fail course.
+CMST 220 GE: WS: Gender Differences and Human Communication (3:3:0)
This course is designed to examine the ways in which women and men communicate differently in interpersonal, work, and family settings and to discuss ways in which both men and women can improve communication and reduce conflict. Attendance requirement will be enforced. Prerequisite: CMST 111.
CMST 222 The Dynamics of Human Interpretation (3:3:0)
This course is an introduction to the process of interpretation as it relates to an overall understanding of the various forms of communication. Emphasis is placed upon the nature of meaning and language, the concept of text, and the assessment of the communicative act through various methods of criticism. Prerequisites: CMST 126 and completion of at least 30 credit hours.
CMST 229 Broadcast Journalism (3:3:0)
Radio and television are studied as media for news and information. Included are basic principles of newscasting, on-the-spot coverage, editing, writing, and delivery of news; use of wire copy; news policy and censorship codes; and theory and practice in station news operations. Prerequisite: CMST 126.
\$CMST 230 GE: Small Group Communication (3:3:0)
This course not only teaches skills useful for effective group interaction but also explores theories that describe and explain group dynamics in various contexts. Topics covered in this course typically include: 1) general systems theory; 2) analysis of group interaction; 3) group cohesion enhancing techniques; 4) critical and creative problem solving skills; 5) leadership skills; and 6) conflict management. Prerequisite: CMST 111.

[^2]
## \#CMST 235 GE: Interpersonal Communication (3:3:0)

This course introduces the processes and functions of communication in two-person and familial contexts. Emphasis is placed on the different types of interpersonal communication occurring in romantic relationships, friendships, and family relationships to help students improve their abilities as communicators throughout their daily interpersonal interactions.

## CMST 250 Analysis of Communication Theory (3:3:0)

This course analyzes the dominant theories of human interaction, both general theories and those specific to particular contexts. Prerequisites: CMST 111 or 126 and completion of at least 30 credit hours.
$\ddagger$ CMST 253 GE: Public Speaking (3:3:0)
This course deals with instruction and practice in selecting, analyzing, arranging, and delivering material for different types of public speeches; consideration of various methods of appeal, rhetorical devices, selected speeches, audience analysis and principles of criticism. Attendance requirement will be enforced.
§CMST 267 GE: Art and History of the Film (3:3:0)
This course studies the historical and aesthetic developments of the cinema, emphasizing the aesthetic aspects of film in an attempt to develop critical standards through surveying the methods and problems of film. Narrative, non-narrative, fictional, and documentary films are screened and discussed. Prerequisite: CMST 163.

## CMST 290 Special Topics (Semester hours arranged)

These courses are designed to meet specific needs of groups of students, or are offered on a trial basis in order to determine the demand for and value of introducing them as a part of the university curriculum.

## CMST 310 Intercultural Communication (3:3:0)

Intercultural Communication is communication between persons who share different patterns of thoughts (attitudes, beliefs, values, and opinions) and behaviors. This course will deal with communication between men and women, black and white, young and old, straights and gays, students and teachers, and other subcultures in conflict. Prerequisite: CMST 111 or 126.

## CMST 315 Voice for Broadcasting (3:3:0)

This course reviews the variables of the voice and their development as they pertain to the medium of radio and television. Students are given the opportunity to study and practice projecting their personalities through the medium of their respective voices as well as an opportunity to develop their vocal skills for broadcasting news, sports, interviewing, and educational programming. Prerequisites: CMST 111, 229.
\#CMST 329 GE: Rhetorical Perspectives (3:3:0)
This course is designed to provide the student with a general background in the area of persuasion and rhetorical theory. The course views rhetorical theory from a historical perspective and focuses on the uses of rhetoric in different oratorical situations. Attendance requirement will be enforced. Prerequisite: CMST 111.
+CMST 331 GE: Advanced Public Speaking (3:3:0)
Advanced Public Speaking builds upon a student's general knowledge of communication gained in Public Speaking. The course enables a student to gain more experience in composing, delivering, and criticizing public speeches. Students will refine techniques in their delivery in various modes of public speaking. Attendance requirement will be enforced. Prerequisite: CMST 253.
ұCMST 333 GE: Argumentation and Persuasion (3:3:0)
This course studies the ways beliefs are changed or instilled in an audience as a result of a message's argumentative or persuasive qualities. The principal mode of message studied is that of the public speech, but other messages will be examined critically to determine how those messages function argumentatively and persuasively. Attendance requirement will be enforced. Prerequisite: CMST 253.
§ Courses with the § symbol fulfill the requirements for Fine Arts.
$\neq$ Courses with the $\neq$ symbol fulfill the requirements for Performing Arts.

## CMST 337 Broadcast Management (3:3:0)

This course deals with the organization and management of radio and television stations: personnel, programming formats, sales, audience analysis, social and governmental responsibility. Prerequisite: CMST 126.

## CMST 342 Popular Music as Cultural Text (3:3:0)

This course will examine the importance of contemporary American popular music as a communicative medium and signifying practice which can affect cultural and subcultural identity. Prerequisite: CMST 136.

## §CMST 348 GE: Media Criticism (3:3:0)

This course develops a variety of methods for analyzing both the functions and the products of mass media. After examining the cultural contexts in which the media operate, the course will establish important critical methods and offer opportunities to apply these methods in critical practice. Prerequisite: CMST 126.

## CMST 350 Organizational Communication (3:3:0)

This course teaches theories that describe and explain the roles and functions of human communication within an organization. Communication is examined from such perspectives as human relations theory, system theory, theory of organizational culture and critical theory. In addition, this course links theory with practice by engaging students in observing and studying communication practices in actual organizational settings. Prerequisite: CMST 111.

## CMST 363 Psychology of Speech (3:3:0)

This course is a study of the secondary variables that influence communicational interaction. Emphasis is placed upon developing a concept of communicational context, situation, and circumstance, as well as developing skills of interpreting the unspoken messages which underlie communicational transactions. Prerequisite: CMST 250.

## §CMST 364 GE: Studies in Television Genre (3:3:0)

This course examines a variety of television genres, allowing the student to develop an understanding of the nature of American formulaic television through critical analysis of programming. Prerequisite: CMST 136.

## CMST 365 Communication Research (3:3:0)

This course will familiarize the student with the vast array of methods employed in the field of mass communication research and to provide him/her with a basic fluency in each of these methods. Prerequisite: CMST 111 or CMST 126, CMST 222, and Junior-Level Standing.
CMST 367 Advertising and Propaganda (3:3:0)
This course will provide an introduction to the special type of persuasive communication that characterizes both advertising and other forms of propaganda. Advertising, other forms of sociological propaganda, and political propaganda will be studied in terms of their relation to society, their techniques, and the ethical issues that they raise. Prerequisite: CMST 126.

## §CMST 370 GE: Film Genres (3:3:0)

These courses will analyze significant films of either one or two genres in an attempt to define the characteristics of each genre and understand their cultural meaning. Readings will focus on the genres' historical development with emphasis on their relation to the social currents of the times. Representative films will be screened. Selected genres will vary with each offering of the course. Genres studies will include: the comedy film, the science fiction film, the musical film, the documentary film, the film noir, and the horror film. Prerequisite: CMST 163.

## CMST 410 Comparative Media (3:3:0)

This course will expose students to media from around the world. Students will learn how to compare media content, formats, systems, and ownership structures in an effort to better understand underlying assumptions that help shape our perceptions of the world. Prerequisites: CMST 126, 310.

## CMST 415 Genres of Rhetoric (3:3:0)

This course will examine one or two rhetorical genres to define the characteristics of each and
§ Courses with the $\S$ symbol fulfill the requirements for Fine Arts.
$\neq$ Courses with the $\ddagger$ symbol fulfill the requirements for Performing Arts.
understand its nature, meaning, and influence within a particular cultural movement. Students will apply classical and contemporary rhetorical theories to genres such as presidential, war, feminist, and environmental rhetoric. Representative examples of speeches, letters, essays, advertisements, and demonstrations will be analyzed. Prerequisites: CMST 111, 329.
CMST 429 Criticism of Rhetoric and Public Address (3:3:0)
This course is designed to develop and enhance the student's critical response to rhetorical discourse in the area of public address. The course includes a survey of rhetorical theory and opportunity to evaluate critically examples of rhetorical discourse from these various theoretical points of view. Prerequisites: CMST 111, 329.
CMST 440 Ethical and Legal Issues in Broadcasting (3:3:0)
This course will cover ethical and legal issues that confront broadcasters in their daily routine. Topics include programming decisions, FCC regulation, community standards, personnel management and precedent-setting court cases. Prerequisites: CMST 126 or 229; PHIL 110 or 231.
CMST 465-H Scapegoats and Witchhunts (3:3:0)
This course is an interdisciplinary seminar which explores the phenomena of cultural scapegoating and witchhunting. The primary perspectives will be rhetorical, historical, and psychological. By focusing on various targeted individuals and groups, past and present, the seminar will culminate in a synthesized view based on the instructors' various disciplines. Prerequisite: Junior standing in Honors Program or permission of instructor and Honors Program Director.

## CMST 466-H Engendering Communication: Shaping Our Society and Selves (3:3:0)

Gendered identification shapes our sense of self, the way we communicate, the way we are perceived by others, and the manner in which we act in the world. Through a variety of readings, this seminar will explore the nature and implications of gender and the way it shapes our interactive lives. This course is designed as an interdisciplinary Honors Junior-level seminar. Prerequisite: Junior standing in Honors Program or permission of instructor and Honors Program Director.
CMST 485 Independent Study (Semester hours arranged)
This course consists of directed research and study on an individual basis. Open to a limited number of students who are juniors and seniors or who have completed 12 credit hours in Communication Studies and who receive departmental approval. A student engaging in Independent Study will complete a minimum of five (5) hours per credit of exclusive conference time with the faculty member in charge of the Independent Study relative to the design, consultation, and evaluation of the study. The student must demonstrate competencies appropriate to the level of the course. The standards shall include performance in the subject, explication of that work by written or oral reports, and evidence of a willingness to meet the commitments of the discipline.

## CMST 486 Field Experience and Internship (Semester hours arranged)

Field experience gained through placement in a practical on-the-job situation under professional supervision. Credits from an internship cannot be applied to the elective requirements of the department's degree programs. Prerequisite: completion of all basic courses required in the major. (Pass/Fail course).
CMST 487 WS: Fieldwork and Internship in Women's Studies (Semester hours arranged)
This course is designed to provide the student with a Women's Studies minor practical experience in a feminist agency or organization, and to analyze the connections between feminist theory and praxis, between Women's Studies curricula and social activism. Credits from an internship cannot be applied to the elective requirements of the Women's Studies Minor. Prerequisite: 9 credit hours of Women's Studies coursework, including Introduction to Women's Studies; Junior standing; minimum QPA of 2.0; permission of Coordinator of Women's Studies. (Pass/Fail course)

## CMST 495 Seminar in Communication Studies (3:3:0)

The course consists of discussion and research of selected topics in communication theory, criticism, and application. It is designed to further those research methods characteristic of professional competence in the field of Communication Studies. Prerequisite: Senior class standing.
§ Courses with the § symbol fulfill the requirements for Fine Arts.
$\neq$ Courses with the $\neq$ symbol fulfill the requirements for Performing Arts.

## CMST 498 WS: Seminar in Women's Studies (3:3:0)

This course is designed to enable students from various disciplines to analyze and synthesize data, ideas, and academic perspectives as they focus on the personal and societal dimensions of gender and roles as these differentiate and affect female experience and activities. Prerequisite: Completion of 9 credits of Women's Studies courses, including CMST/ENGL 150.

## CMST 499 Student Teaching Internship (1:0:TBA)

This course is designed to provide the student with an opportunity to work with a faculty member in the student's primary Arts and Sciences discipline during the student teaching experience. The course will enhance the student's ability to understand and maximize the relationship between disciplinary subject matter and pedagogy. Prerequisite: Qualification to student teach. Concurrent registration in PSED 430 or 431 required.
§ Courses with the § symbol fulfill the requirements for Fine Arts.
$\neq$ Courses with the $\ddagger$ symbol fulfill the requirements for Performing Arts.

## Bachelor of Arts in Communication Studies



| Sall |
| :--- |
| Senior Year |
| CMST 495 Seminar in Communication Studies <br> or 300-400 Level Track Elective 3 CMST 495 Seminar in Communication <br> Studies or 300-400 Level Track Elective 3 <br> 300-400 Level Track Elective 3 $300-400$ Level Track Elective 3 <br> *Elective Course 3 *Elective Course 3 <br> *Elective Course 3 *Elective Course 3 <br> *Elective Course 3 *Elective Course 3 <br> Subtotal $\mathbf{1 5}$ Subtotal $\mathbf{1 5}$ |

TOTAL CREDITS
*Students should use their electives to minor in departments such as English, Political Science, and Economics
**Students in the Broadcasting track should contact Dr. Rob McKenzie regarding their required Internship

## Computer Science

School of Arts and Sc
The Faculty of Scienc
Stroud Hall Room 310
e-mail: ksandt@po-box
Department faculty
Professors:
Professors: Richard Amori, chair (ramori@po-box.esu.edu)
Felix Friedman (ffriedman@po-box.esu.edu) Haklin Kimm (hkimm@po-box.esu.edu) N. Paul Schembari (nschembari@po-box.esu.edu)

Associate Professors: Mary DeVito (mdevito@po-box.esu.edu) Robert Marmelstein (rmarmelstein@po-box.esu.edu)
James Emert (jemert@po-box.esu.edu)

## Assistant Professor:

570-422-3666

|  | Felix Friedman (ffriedman@po-box.esu.edu) |
| :--- | :--- |
|  | Haklin Kimm (hkimm@po-box.esu.edu) |
|  | N. Paul Schembari (nschembari@po-box.esu.edu) |
| Associate Professors: | Mary DeVito (mdevito@po-box.esu.edu) |
| Assistant Professor: | Robert Marmelstein (rmarmelstein@po-box.esu.edu) |
| James Emert (jemert@po-box.esu.edu) |  |

www4.esu.edu/departments/cpsc/default.aspx

The degree programs closely follow the professional preparation recommendations of the ACM (Association for Computing Machinery) and National Security Agency. Some recent career placements have been as software developers for major computer manufacturers (e.g., IBM, UNISYS, AT\&T), computer science organizations, the defense industry, and software houses, among others. Admission standards are high, and extensive class work, laboratory and project involvement, motivation and commitment are required for successful development as Computer Science problem solvers. In recent years, the department has received more than $\$ 6.6$ million in research grants from outside sources. This has provided a very rich laboratory environment as well as research opportunities for select undergraduates.

Two baccalaureate degree programs are offered: a bachelor of science in Computer Science; a bachelor of science in Computer Security. We also offer a Computer Science Applications minor.

The course requirements and course descriptions for these programs are listed below, followed by a suggested plan for completing the Computer degree(s) in eight semesters.

## Bachelor of Science with a Computer Science major- 47 semester hours

- Required major courses: CPSC 111, 141, 151, 232, 240, 251, 321, 330, 430, 486; twelve semester hours of Computer Science electives numbered 220 and above.
- Mathematics corequisite courses: MATH 140, 141, 220, 311, 320.
- Distributive corequisite courses: ENGL 204; CMST 111; and one year of science courses that include laboratories: BIOL 114, 115, or CHEM 121, 123, 124, 126, or PHYS 161, 162; PHYS 240 may be substituted for PHYS 162.
Bachelor of Science with a Computer Security major - $\mathbf{5 5}$ semester hours
- Required major courses: CPSC 111, 141, 151, 232, 240, 251, 325, 326, 445, 448, 453, 460, 461, 487; nine semester hours of Computer Science electives numbered 220 and above.
- Mathematics corequisite courses: MATH 140, 141, 220, 311.
- Distributive corequisite courses: ENGL 204, CMST 111; and one year of science courses that include laboratories: BIOL 114, 115 or CHEM 121, 123, 124, 126 or PHYS 161, 162; PHYS 240 may be substituted for PHYS 162.


## Computer Science Applications minor - $\mathbf{2 0}$ semester hours

- Required concentration courses: CPSC 111, 141, 151 and three additional courses from among the following: either CPSC 100 or 101, but not both; CPSC 105,110 , or any CPSC courses number 200 or higher; ECON 332, 415; EMGT 451; HRTM 351; MATH 311, 325, 411, 416, 470, 480; MCOM 355, 475, PHYS 111; SMGT 346.
- Additional requirements: to complete the minor, the student must earn a "C" grade or better in all six courses applied to the minor, and must complete at least three CPSC courses at ESU with a "C" grade or better.
Notes:

1. All CPSC and MATH courses used to meet the requirements in the major must be completed with a grade of $\mathrm{A}, \mathrm{B}$, or C .
2. Students who have an interest in one of the following areas are strongly advised to include the listed courses in their program of studies:

- Scientific Computing - CHEM 121, 123, 124, 126; PHYS 161, 162.
- Business and Economics - ECON 111, 112, and Accounting courses.
- Graduate Studies - MATH 421, 440.

3. Students transferring into Computer Science or Computer Security, whether from off campus or on campus, must meet departmental admissions criteria. The criteria may be obtained from the department chair. Also, there is a maximum transfer of fifteen (15) semester hours of CPSC courses into the major (at most [3] three semester hours of courses numbered from 300 to 499).
4. Students desiring admission to the major in Computer Security must have attained sophomore standing and a minimum GPA of 2.5 . Also students majoring in Computer Security must maintain a minimum GPA of 2.5 for retention and graduation.
5. In a program intensive course, each student will be given a variety of assignments where he or she must create extensive, original and executable computer programs. The instructor will rigorously review each student's source code to determine its correctness, efficiency, originality, and adherence to documentation and style guidelines.

## Course Descriptions

(Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title.)

## CPSC 100 GE: Personal Computers and Their Uses (3:3:0)

This course is an introduction to personal computers (PCs) for non-science majors. The course teaches the use of standard PC software, including an operating system, a word processing program, a spreadsheet, a presentation package, and a database package. The course also provides a non-technical understanding of how computers function, and how society uses computers to obtain and manage information. Students may receive credit for either CPSC 100 or CPSC 101, but not both.
CPSC 101 GE: Personal Computers and Their Uses in the Sciences (3:3:0)
This course, which is similar in content to CPSC 100, emphasizes the use of personal computers to solve real world engineering and scientific problems. Topics particular to CPSC 101 include statistical analysis packages, computer-controlled scientific instrumentation, and very high performance computing. Students may receive credit for either CPSC 100 or CPSC 101, but not both.
CPSC 105 GE: PC Security and Privacy (3:3:0)
This course deals with the basic concepts of computer security and privacy: PC basics, networking basics, confidentiality, integrity, and availability of data, authentication, cryptography, threats to computer security such as viruses, computer security controls such as antivirus software and firewalls, and security and privacy on the Internet. These topics are discussed in a manner to promote awareness of computer security issues, not technical knowledge.
CPSC 111 GE: Introduction to Computer Programming and Problem Solving (4:4:0)
This course, a first course in computer science, is intended mainly for students who are either majoring or concentrating in computer science. It teaches algorithmic problem solving, emphasizing the use of top-down Object Oriented program development to design and implement programs in the Java programming language. No prior familiarity with computer programming is assumed. This is a programming intensive course.

## CPSC 141 Introduction to Computer Organization (3:3:0)

This course presents the organization and operation of the classic, single-processor digital computer. Topics include the central processing unit, primary and secondary memory, common peripheral devices, and computer-usable communications hardware. Also featured is an overview of parallel architectures. Prerequisite: CPSC 111.

## CPSC 151 GE: Linear Data Structures and Elementary Algorithm Analysis (4:4:0)

This course discusses the implementation and use of common one-dimensional data structures, including typed files, sets, strings, lists, queues, and stacks. Array-based and pointer-based implementations for these structures are developed, together with iterative and recursive algorithms for structure access and manipulation. Other topics covered include the concept of an abstract data type searching and sorting, and an introduction to algorithm analysis. This is a programming intensive course. Prerequisite: CPSC 111.
CPSC 200 GE: Advanced Personal Computers and Their Uses (3:3:0)
This course builds on CPSC 100. Advanced topics in word processing and spreadsheets will be covered. Integration of databases and spreadsheets as well as programming in an appropriate language will be studied. Students will learn how to use operating system commands and will write batch files. Prerequisite: CPSC 100 or 101.
CPSC 211 Scientific Computing with Fortran (3:3:0)
Scientific computing uses FORTRAN as a vehicle for numerical solutions to applied mathematical problems. Some techniques include polynomial curve fitting, roots of transcendental equations, numerical integration and differentiation, simulations, initial value and boundary value problems in differential equations, and simultaneous algebraic and differential equations. Corequisite: MATH 141. This course cannot be counted toward the elective requirements for computer science majors. This course is usually offered in alternate years.
CPSC 232 Introduction to Assembler Programming (3:3:0)
This course is an introduction to machine language and assembly language programming. Concepts discussed include techniques for encoding data as numbers, instruction set design, and the IEEE floating point standard. Assignments, which reinforce ideas covered in CPSC 141, teach assembly language programming techniques and allow students to practice assembler programming. This course is usually offered in the fall. This is a programming intensive course. Prerequisites: CPSC 141, 151.
CPSC 234 Object Oriented Programming (3:3:0)
This course is designed to teach the student how to effectively design efficient programs to solve real world problems using the techniques of Object Oriented Programming (OOP) rather than conventional functional programming. It has the student use and compare two popular OOP languages, $\mathrm{C}++$ and $\mathrm{C} \#$, to implement the design of their objects and build their application programs stressing good OOP techniques. Prerequisite: CPSC 111.
CPSC 236 Programming Using Visual Basic.NET (3:3:0)
This course teaches students how to design and rapidly build applications using the very popular and widely used programming language Visual Basic.NET. It will stress how to effectively use Visual Basic.NET to take advantage of existing and tested objects and programs such as Microsoft Access and Excel, so as to reduce program development time and provide the user familiar graphical interfaces and functionality. This is a programming intensive course. Prerequisites: CPSC 111, 151.
CPSC 237 Internet and Web Programming (3:3:0)
This course is designed to teach the students how to effectively design efficient web-based applications. This course covers XHTML, Cascading Style Sheets, JavaScript, DHTML Language and Model, XML, ADO.NET, ASP.NET and PHP. The goal is to teach skills and languages to build platform-independent code for Internet- and Intranet-based applications. This is a programming intensive course. Prerequisite: CPSC 151.
CPSC 240 Operating System Concepts and Design (4:4:0)
This course is an introduction to operating systems concepts and design principles. Topics will include all the major areas of operating systems such as process control, memory management, file systems, input/output and security. Theory will be demonstrated by hands-on experience. Students
will be required to complete operating system kernel projects where they will write and/or modify operating system code and demonstrate its impact on the performance of the system. Prerequisite: CPSC 232.
CPSC 251 Non-Linear Data Structures (4:4:0)
This course discusses the implementation and use of common non-linear data structures, including random access files, sparse arrays, trees, and graphs. Algorithms for accessing and updating structures are presented and analyzed. Topics covered include hashing, sorting and searching, and a selection of standard graph algorithms. This is a programming intensive course. Prerequisites: CPSC 111, 151.

## CPSC 290 Special Topics (Semester hours arranged)

This course is designed to meet specific needs of groups of students or courses to be offered on a trial basis in order to determine the demand for and value of introducing them as part of the university curriculum.

## CPSC 320 Topics in Computer Science (3:3:0)

This course focuses on special topics in computing selected from such areas as compiler construction, formal languages, information retrieval, graphics, artificial intelligence. This may be taken more than once, with permission in advance. Prerequisites: CPSC 141, 251.

## CPSC 321 Issues in the Practice of Computer Science (3:3:0)

This course examines concerns relating to the practice of computer science. Topics considered include uses of computers in professional environments, an introduction to software development practices, ethical and legal issues in computer science, and opportunities for continued professional development. Prerequisites: CPSC 111, 141, 151, 232, 251; Junior Standing.
CPSC 325 Fundamentals of Security Engineering I (3:3:0)
This course provides a comprehensive introduction to security engineering concepts and technologies. The core technologies of access control, cryptography, trusted computing bases, digital signatures, authentication, network firewalls, and secure network architecture are explained in detail. Legal issues, security policy, risk management, certification and accreditation are covered in their supporting roles. Case studies reinforce the lessons learned. Pre-requisites: CPSC 240, 251, Math 220.

## CPSC 326 Risk Analysis/Certification \& Accreditation (3:3:0)

Computer Certification and Accreditation (C\&A) teaches students to successfully perform US Government directed computer certifications leading to computer system accreditation. Department of Defense (DoD) 5200.28 and Federal Information processing Standard (FIPS) 102 guidelines are covered to ensure U.S. Government compliance. In-class exercises guide discussions while student projects reinforce the subject matter. Prerequisite CPSC 325

## CPSC 327 Introduction to Computer Forensics (3:3:0)

This course will provide a foundation in the field of Computer Forensics. The student will learn how to obtain and analyze digital information for possible use as evidence in civil, criminal or administrative cases. Topics include applications of hardware and software to computer forensics, computer forensics law, volume and file system analysis, computer forensics investigations, and computer forensics in the laboratory. Hands-on exercises guide discussions and reinforce the subject matter. Prerequisite: CPSC 325.
CPSC 328 Security in Web Programming (3:3:0)
This course covers Web safety and browser vulnerabilities, privacy concerns, issues with Java, JavaScript, ActiveX, and web plug-ins. Digital certificates are examined to see how they assure identity in networked environments and how server certificates work. The course also provides technical details about SSL (Secure Socket Layer), TLS (Transport Layer Security), host security, server access methods, and secure CGI/API programming. Prerequisites: CPSC 251 and 325.
CPSC 330 Programming Languages (4:4:0)
This course discusses the characteristics of programming languages, and surveys the features, strengths, and limitations of specific languages. Programming practice is provided in languages that emphasize diverse approaches to problem solving: e.g., Scheme, Prolog and a block-structured language. This is a programming intensive course. Prerequisites: CPSC 111, 141, 151, 251.

## CPSC 335 Building Graphical User Interfaces (GUIs With Visual.NET) (3:3:0)

This course teaches students to use Object-Oriented Design techniques to efficiently build effective Graphical User Interfaces (GUIs) for applications software. It teaches the student how to use two of the most popular tools, Visual C++.NET and Visual Basic.NET, and existing class libraries to rapidly build and maintain GUIs. All students will be required to demonstrate that they have learned how to build a GUI by completing a final class project. This is a programming intensive course. Prerequisite: CPSC 251.

## CPSC 362 Cryptographic Application Development (3:3:0)

In this course students will learn how to effectively design efficient, secure applications using the industry-strength Application Programming Interfaces from .NET and Java. This course covers fundamentals of Cryptography, .NET Symmetric Cryptography, .NET Asymmetric Cryptography, .NET Digital Signatures, XML Signatures, ASP.NET Security, Web Service Security, Java Cryptography Architecture (JCA), and Java Cryptography Extension (JCE). This is a programming intensive course. Prerequisite: CPSC 151, 251.
CPSC 421 Computer Graphics (3:3:0)
This course is an introduction to computer graphics. Basic principles for design, use, understanding of graphic systems will be studied. Algorithms for creating and manipulating graphic displays and a standard programming language for their implementation will be presented. There will be programming practice. This course is usually offered in alternate years. Prerequisites: CPSC 111, 251, MATH 320.
CPSC 425 Expert Systems (3:3:0)
This course is an introduction to knowledge based systems. Basic concepts, characteristics, architectures, and tools will be studied. Major paradigms for synthesis and analysis class systems, and exact and inexact reasoning systems will be discussed. Computational and knowledge engineering issues will be treated by case studies, and there will be programming practice. This course is usually offered in alternate years. Prerequisites: CPSC 111, 251, 330.
CPSC 428 Artificial Intelligence and Heuristic Programming (3:3:0)
A study of symbolic processing and intelligent applications; major models, state-space, problem-subproblem, automated deduction will be applied to solve problems in heuristic programming and artificial intelligence. This course is usually offered in alternate years. Prerequisites: CPSC 111, 251.
CPSC 429 Machine Learning (3:3:0)
This course is an introduction to techniques which enable software to improve its performance over time. History and classic experiments will be presented. Programs will be studied which perform rote learning, learn by being told, learn by analogy, learn from examples (induction), and learn by observation and discovery. There will be some programming practice. This course is usually offered in alternate years. Prerequisites: CPSC 111, 251; CPSC 428 is recommended.
CPSC 430 Software Engineering (3:3:0)
This course is a study of the principles of software engineering and various programming methodologies as applied to the development of large, complex software systems. Top-down, structured design and programming will be emphasized. There will be practice in the construction of a large software system. This course is usually offered in the fall. This is a programming intensive course. Prerequisites: MATH 311, CPSC 111, 251, 330.

## CPSC 432 Natural Language Processing (3:3:0)

This course is an introduction to natural language processing in Computer Science. There will be a review of elementary text, tree, and graph processing and an introduction to syntactic and semantic processing. Syntax: Backus-Naur grammars, sentence generation, recognition, augmented transition networks, parsing strategies. Semantics: case grammar theory, frame theory. There will be case studies of current systems as well as programming practice. This course is usually offered in alternate years. Prerequisites: CPSC 111, 141, 251, 330.

## CPSC 433 Compiler Construction (3:3:0)

This course introduces the student to the methods and techniques involved in translating highlevel languages such as Ada and C into executable machine code. Topics include study of lexical scanning, parsing, symbol table construction, object code generation, and optimization. The bulk of the student activity is spent writing a compiler for a substantial subset of the Ada or C language. This course is usually offered in alternate years. Prerequisites: CPSC 111, 232, 240, 251.

CPSC 442 Introduction to Computer Game Development (3:3:0)
This course provides students with a comprehensive introduction to computer game design principles, techniques, and algorithms. It covers the following areas of computer game design: game concept development, user interface design, graphics (2D, 3D, animation, and advanced techniques), game physics, real-time interaction, intelligent characters, and software engineering considerations. During the course, each student will develop a functional, live-action computer game for the PC/Windows-XP platform. Prerequisites: CPSC 240, 251.
CPSC 444 Realtime Systems (3:3:0)
This course is an introduction to the problems, concepts and techniques involved in computer systems which must monitor and control external devices or events. This includes techniques and hardware for data collection and control functions. Applications discussed will include microprocessor controlled intelligent devices and process control. This course is usually offered in alternate years. Prerequisites: MATH 141, CPSC 111, 141, 232, 240.
CPSC 445 Networking and Data Communication (3:3:0)
This course gives students a foundation in the study of data communications and computer networking. Topics covered will include basic data communications, Open Systems Interconnect (OSI) Model, Local Area Networks (LAN), and common communications standards. This course is usually offered in alternate years. Prerequisites: CPSC 111, 141, 232, 240.
CPSC 447 Distributed Object Programming (3:3:0)
This course is intended for students who are interested in understanding and developing application projects with an object-oriented programming language such as Java in distributed computing environments. The course begins with a brief introduction to object technology with programming and introduction to computer networking, and is followed by understanding and developing programs in the server/client model, Remote Method Interface (RMI), and Common Object Request Broker Architecture (CORBA). Prerequisites: CPSC 335, 445.
CPSC 448 Applied Network Security (3:2:2)
This course builds on the foundation laid in CPSC 445 by providing in-depth laboratory and classroom exercises using commercial-off-the-shelf (COTS) technology. Students will configure network servers, routers, hubs, firewalls and intrusion detection devices to discover the effect each device can have on overall system security. In-class exercises guide discussions while student projects reinforce subject matter. Prerequisites: CPSC 325, 445.
CPSC 450 Algorithmic Graph Theory (3:3:0)
This course is an algorithmic approach to the mathematical theory of graphs and their applications. Path problems, covers, network flows and other problems will be formulated in graph theoretical terms and solutions will be programmed. This course is usually offered in alternate years. This is a programming intensive course. Prerequisites: CPSC 111, 251.
CPSC 453 Database Systems (3:3:0)
This course is an introduction to the management of large volumes of interrelated data through integrated database management software. Topics discussed will include relationships between data items, effect of redundancy, and database design. Representative examples of the relational and network approaches to database management will be examined. Prerequisites: CPSC 111, 251. Corequisites: CPSC 232, 240.
CPSC 460 Applied Computer Cryptography (3:3:0)
The focus of this course is developing computer algorithms for generating random numbers, symmetric and asymetric ciphers and cryptographic keys. Programming assignments of stream and block ciphers will reinforce ideas covered in CPSC 325 . Students will be required to write basic public-key cryptography code as a final project. Prerequisites: CPSC 325, 251, MATH 220.
CPSC 461 Legal Impacts on Computer Security Solutions (3:3:0)
This course in computer security focuses on the foundation laid in CPSC 325 and CPSC 326. Students are presented with the legal rationale behind the technical solutions studied in CPSC 325 and CPSC 326. Criminal, civil, regulatory and intellectual property law will be discussed in the context of professional computer environments. Federal and State computer security statutes will guide discussions. Student reports will reinforce the subject matter. Prerequisites: CPSC 325, 326.

## CPSC 485 Independent Study (Semester hours arranged)

This experience is taken upon the initiative of a student who seeks to study with a knowledgeable faculty member in order to deepen a specific interest in a particular discipline. Independent study is a process through which a student either sharply increases his/her already advanced knowledge of a subject matter or increases his/her appreciation about an academic discipline that is correlative with a student's advanced knowledge of a subject. The proposed independent study must be submitted to the department for approval. The faculty member supervising the independent study must provide a minimum of five hours of time per credit hour upon request of the student.

## CPSC 486 Computer Science Internship (Semester hours arranged)

This course consists of in-depth involvement in ongoing programming projects under direct professional supervision. This course may not be used as an elective in either the Computer Science major or the Computer Security major. Prerequisites: CPSC 111, 141, 151, 232, 240, 251, 321, 330.

## CPSC 487 Security Engineering Internship (Semester hours arranged)

This course consists of involvement in ongoing network security tactics, techniques and procedures under direct professional supervision. This course may not be used as an elective in either the Computer Security major or the Computer Science major. Prerequisites: CPSC 111, 141, 151, 325, 330, 445.

## Bachelor of Science in Computer Science

## Suggested Program Curriculum Plan



Fall
Senior Year
Spring

| CPSC 430 Software Engineering | 3 | CPSC 486 Computer Science Internship | 3 |
| :--- | ---: | :--- | ---: |
| Computer Science Elective | 3 | Computer Science Elective | 3 |
| Elective | 3 | Elective | 3 |
| Elective | 3 | Elective | 3 |
| Elective | 3 |  |  |
| Subtotal | 15 | Subtotal | $\mathbf{1 2}$ |

## Bachelor of Science in Computer Security Suggested Program Curriculum Plan

| Fall | Freshman Year |  |  |
| :--- | ---: | :--- | ---: |
| CPSC 111 GE: Introduction to Computer <br> Programming and Problem Solving | 4 | CPSC 141 Introduction to <br> Computer Organization | 3 |
| ENGL 103 English Composition | 3 | CPSC 151 GE: Linear Data Structures and EI- <br> ementary Algorithm Analysis | 4 |
| MATH 140 GE: Calculus 1 | 4 | MATH 141 GE: Calculus 2 | 4 |
| General Education Course | 3 | General Education Course | 3 |
| FIT Elective | 1 | FIT Elective | 1 |
| Subtotal | $\mathbf{1 5}$ | Subtotal | $\mathbf{1 5}$ |


| Fall Spring |  |  |  |
| :--- | ---: | :--- | ---: |
| CPSC 232 Introduction to <br> Assembler Programming | 3 | CPSC 240 Operating System <br> Concepts and Designs | 4 |
| CPSC 251 Non-Linear Data Structures | 4 | MATH 311 Statistics I | 3 |
| MATH 220 Discrete Mathematical Structures | 3 | ENGL 204 Technical Writing | 3 |
| Science Sequence | 4 | Science Sequence | 4 |
| CMST 111 GE: Speech Communications | 3 | General Education Course | 3 |
| Subtotal | $\mathbf{1 7}$ | Subtotal | $\mathbf{1 7}$ |


| Fall | Junior Year |  |  |
| :--- | ---: | :--- | ---: |
| CPSC 325 Fundamentals of <br> Security Engineering I 3 CPSC 326 Risk Analysis/Certification <br> \&Accreditation <br> CPSC 445 Networking and Data Communi- <br> cations 3 CPSC 448 Applied Network Security | 3 |  |  |
| Computer Science Elective | 3 | Computer Science Elective | 3 |
| General Education Course | 3 | General Education Course | 3 |
| Elective | 3 | General Education Course | 3 |
| Subtotal | $\mathbf{1 5}$ | Subtotal | $\mathbf{1 5}$ |


| Fall |  |  |  |
| :--- | ---: | :--- | ---: |
| CPSC 453 Database Systems 3 CPSC 460 Applied Computer Cryptography 3 <br> CPSC 461 Legal Impacts on <br> Computer Security Solutions 3 CPSC 487Security Engineering Internship 3 <br> Computer Science Elective 3 Elective 3 <br> Elective 3 Elective 3 <br> Elective 3   <br> Subtotal $\mathbf{1 5}$ Subtotal $\mathbf{1 2}$ |  |  |  |

## Criminal Justice Administration

School of Arts and Sciences<br>The Faculty of Social Sciences<br>Stroud Hall, Room 414

570-422-3453
www.esu.edu
The goal of the Criminal Justice Administration program is to provide students with the educational background necessary to pursue careers in Criminal Justice, and/or to pursue graduate study in criminology, criminal justice, law, or other related fields.

This program is offered by the Sociology Department. Please refer to the Sociology section of the cata$\log$ for additional information about the Sociology major.

Criminal Justice Administration concentration-24 semester hours

- Required concentration courses: SOC 341, 342, 486; SOCJ 150, 250 or 352, 350.
- Electives: Three additional semester hours selected from the following recommended courses: CHEM 275; FLSP 234; PHYS 251, 252, 253; SOC 441; SOCJ 151, 251, 252, 253, 351; PSY 271.


## Transfer Policy:

1. No upper level ( 300 and 400 level) courses will be accepted from community or junior colleges for the CJA Concentration.
2. For CJA concentration-a minimum of 15 credits must be taken at East Stroudsburg University, and 300 and 400 level courses from four-year colleges are accepted only with permission of the department.

| Suggested Plan of Study |  |  |
| :---: | :---: | :---: |
| Second Year |  |  |
| SOCJ 150: | Intro to Criminal Justice | 3 credits |
| SOCJ 250: | Corrections | 3 credits |
|  | OR |  |
| SOCJ 352: | Police and Community Relations | 3 credits |
| Subtotal |  | 6 credits |
| Third Year |  |  |
| SOC 342: | Juvenile Delinquency | 3 credits |
| SOC 341: | Criminology | 3 credits |
| SOCJ 350: | The Criminal Process | 3 credits |
| Subtotal |  | 9 credits |
| Fourth Year |  |  |
|  | Criminal Justice elective | 3 credits |
| SOC 486: | Field Work \& Observation | 6 credits |
| Subtotal |  | 9 credits |
| TOTAL |  | 24 Credits |

(See Sociology course listings Page 325-326 for details on above courses.)

## Dance

School of Health Sciences and Human Performance<br>The Faculty of Human Performance<br>Koehler Fieldhouse 570-422-3231 www3.esu.edu/academics/hshp/fit/dancehomepage.asp<br>Department faculty<br>Associate Professor: Elizabeth Gibbons (lgibbons@po-box.esu.edu)<br>Instructor:<br>Catherine Culnane (cculnane@po-box.esu.edu)

Dance classes may be taken as FIT or Performing Arts. For more dance classes please see also Physical Education Teacher Education Department and FIT General Education Activity Courses.

The following dance classes fulfill the General Education Performing Arts requirement:
DANC 114 Modern Dance Theory
DANC 210 Elementary Ballet
DANC 215 Elementary Lyrical Modern Dance
DANC 314 Creative Experiences in Dance
DANC 315 Dance Performance \& Production (May be repeated)
The following dance classes are part of the ELED Dance Concentration and PETE Dance Concentration

DANC 115 Introduction to Dance
DANC 216 Teaching Creative Dance for Children
DANC 316 Dance Teaching Practicum
DANC 342 Seminar in Dance Education

## Course Descriptions

(Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title.)

## $\ddagger$ DANC 114 GE: Modern Dance Theory (3:2:2)

This course is designed to introduce the student to the study of dance as the most fundamental of the arts, involving a direct expression of oneself through the body. The student will explore fundamental movement concepts including time, weight, space, and flow. Contextualization of historical, theoretical, and aesthetic principles will be emphasized.

## DANC 115 Introduction to Dance (3:3:0)

This course examines the universal human need to celebrate life through dance. It is a survey of dance style forms designed to introduce the student to the energies and mysteries of dance throughout the ages and cultures of the world. Emphasis is on the role of dance as an expression of cultural mores, social order, religious worship, cultural identity, and individuality.

## DANC 210 GE: Elementary Ballet (2:1:3)

This course will include technique in elementary ballet including alignment, barre, center work, basic enchainementss, and room and body directions, with emphasis on developing the physical and expressive potential of the human body. The class will enable students to understand and synthesize the kinesiological and anatomical, historical and theoretical, and aesthetic aspects of dance. Prerequisites: FIT 140, PETE 110, or equivalent dance training.

## \#DANC 215 GE: Elementary Lyrical Modern Dance (2:1:3)

This is an elementary level modern dance technique course. It explores a variety of axial and locomotor techniques and simple combinations characteristic of contemporary dance. The ability to apply skills in the art form is implied in any study of technique; this ability will be realized through improvisational and compositional experiences. Prerequisite: FIT 140, or PETE 110, or equivalent dance training.

## DANC 216 Creative Dance for Children (2:1:3)

This course is designed to introduce students to the fundamentals of teaching creative dance for children including a conceptual approach to dance and fostering children's growth through a creative, child-centered dance curriculum. It will include information on the nature of dance for children, choosing age-appropriate topics, strategies for facilitation of dance experience, and group discussions as well as guided practical experiences. Prerequisite: PETE 110.

## $\ddagger$ DANC 314 GE: Creative Experiences in Dance (1:0:3)

This course provides the student with intermediate to advanced dance experience (minimum 3 years of study) guidance in individual and group experiences in dance. Using a related arts approach, it examines the expressive quality of movement in the use of time, space, and energy factors. Improvisation and choreography are included. Fulfills GE requirement for Performing Arts. Prerequisites: PETE 110 or FIT 140; PETE or DANC 114; PETE or DANC or FIT 210; PETE or DANC or FIT 215.

## DANC 315 GE: Dance Performance and Production (1:0:3)

This course consists of performance, choreography, and production work involved with dance as a performing art. Work in performance and technical areas is included, and participation in production is required. This course may be elected more than once for credit (maximum of 3 times). Prerequisite: FIT 140, PETE 110, or equivalent dance instruction.

## DANC 342 Seminar in Dance Education: (2:2:0)

This course is designed to provide a cohesive overview of the field of dance education. Emphasis is placed on discussions of readings concerning the philosophical and practical approaches to teaching children and adults, aesthetic theory of the major genres of dance, and application of scientific theory of movement to the field of dance. Concepts and issues raised by students are reviewed and/or further discussed by the professor. Integration of courses in motor learning, kinesiology, and pedagogy is a major course objective of this seminar. This course is required for the dance focus. Prerequisites: PETE 200, 202, 203, 340.

## Early Childhood Education

College of Education
Stroud Hall, Room 209
Department faculty
Professors:
Professors:
Associate Professors:

## Assistant Professors:

## Secretary:

570-422-3356
www.esu.edu/eled

| Associate Professors: | Margaret Benson (mbenson@po-box.esu.edu) |
| :--- | :--- |
|  | Susan Harlan (sharlan@po-box.esu.edu) |
|  | Martha Kellow (mkellow@po-box.esu.edu) |
|  | Denise LePage (dlepage@po-box.esu.edu) |
|  | Linda Rogers (lrogers@po-box.esu.edu) |
|  | Margot Vagliardo (mvagliardo@po-box.esu.edu) |
|  | Craig Wilson (cwilson@po-box.esu.edu) |
| Assistant Professors: | Alberto Alegre (aalegre@po-box.esu.edu) |
|  | Janet Ferguson (jferguson@po-box.esu.edu) |
|  | Marilyn Narey (mnarey@po-box.esu.edu) |
|  | Alison Rutter (arutter@po-box.esu.edu) |
|  | Sharon Switzer (sswitzer@po-box.esu.edu) |
|  | Andrew Whitehead (awhitehead@po-box.esu.edu) |
| Secretary: | Andrea Briller (abriller@po-box.esu.edu) |

The four-year programs in Early Childhood Education are designed to offer students a curriculum of general education and professional and early childhood education theory, application, and practice in teaching children from birth through grade three. The curriculum is designed to develop a community of learners who are competent and reflective professionals able to teach any child in any setting.
The courses and extensive field based component develops beginning educator's knowledge, skills, and dispositions relevant to content, the learner and the learning environment, teaching and learning process, and professionalism. Graduates of the ECED major will be certified to teach in pre-school to grade three, the ELED/ECED dual major will be certified preschool through grade six, within the schools of the Commonwealth of Pennsylvania. Changes made at the State certification level may impact the following requirements.

## Bachelor of Science with an Early Childhood Education major <br> - 57 semester hours plus 12 concentration hours

- Required General Education courses: English 103 and an English Literature course, six credits of Mathematics.
- Required Professional Education courses: PSED 161, PSED 242, SPED 105, MCOM 262
- Required major courses: ELED 132, ECED 262 (PRAXIS I required), 363, 464, 465, 466, 489, 495, REED 211, 212, MSES 242.
- Student teaching semester: ELED 430.
- Required concentration: Student selects a minimum of 12 semester hours of indepth work in Early Intervention, Organization and Administration, or Curriculum and Instruction as outlined in the Concentration Handbook.

Bachelor of Science with a dual Early Childhood and Elementary Education major - $\mathbf{7 4}$ credits

- Required General Education courses: English 103 and an English Literature course, Math 105 (a grade of "C" or higher is required) and another three credits of Mathematics.
- Required Professional Education courses: PSED 161, PSED 242, SPED 105, MCOM 262
- Required major courses: ELED 132, ELED 264 (PRAXIS I required).
- Early Childhood courses: ECED 262 (PRAXIS I required), 363, 464, 465, 466, 489, 495, REED 212 MSES 242.
- Elementary Education courses - Apprentice I: ELED 342, 343, 346, 351.
- Apprentice II semester in a PDS cohort: ELED 311, 344, 345, REED 313, SPED 351 (optional).
- Resident student teaching semester: ECED 430, ELED 430


## Dual or Multiple Certification

Opportunities for dual or multiple certifications are available in early childhood, elementary, secondary, or special education. Careful advisement should be obtained from the department chair or academic adviser.

## Department Admission

The Commonwealth of Pennsylvania has established specific requirements for all candidates in teacher preparation programs. For admission into the initial teacher certification program, students are required to have a 3.0 QPA , pass the Praxis I academic skills assessments prior to taking ECED 262 or ELED 264, and complete 6 credits of math and 6 credits of English (English Composition and Literature) along with various clearances. Please refer to the section The College of Education in this catalog for specific requirements for admission into teacher education. Majors in Early Childhood Education should meet regularly with their academic adviser so they are oriented to their major program and the requirements and procedures for admission into each program. Students must be admitted into the department prior to taking any 300 or 400 level ECED major courses. A description of the Admittance Process for admittance into Early Childhood Education is available in the department office. Transfer credits are evaluated by the department chair for equivalent university courses.

## Experiences in the Field

There are multiple opportunities throughout each program to gain experience in early childhood and elementary school classrooms including urban and inclusive settings and community based experiences. These various field experiences are connected to courses and are an integral, required part of the respective programs. Two unique opportunities are listed below.

## Professional Development Schools (PDS)

Part of the ECED/ELED Dual Major, involvement in a Professional Development School cohort occurs the semester prior to the resident student teaching semester. The Apprentice II semester in a Professional Development School integrates five courses (ELED 311, 344, 345, REED 313, SPED 315) along with weekly fieldwork in an elementary classroom and involvement in a professional learning community. For more information see your academic adviser or contact the field experience office at 570-422-3471.

## Student Professional Program

The program offers a full year of field experience in early childhood and elementary schools. (Refer to ELED 497 and ELED 498 Student Professional Programs at the end of the course descriptions.)

## Student Teaching

A full semester of student teaching is required for certification in ECED and ECED/ELED. Passing scores for the Praxis II Fundamental Subjects Content Knowledge test must be submitted to your advisor during the Student Teaching Review process prior to Student Teaching. Students must have a 3.0 or higher GPA overall and in their major prior to student teaching and for certification in the State of Pennsylvania.

## Course Descriptions

(Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title.)

## ECED 262 Introduction to Early Childhood Education (3:3:0)

This course includes the study of infants, toddlers, nursery school, kindergarten and primary school-aged children; a historical perspective of early intervention models, materials, equipment, and developmentally appropriate practices for use in a pre-school center, primary school, and the home; an evaluation of current trends and issues related to guiding and educating young children including the exceptional child. This course is directed toward prospective teachers and parents. Prerequisite: ELED 132.

## ECED 363 Creativity in Childhood Education (3:3:0)

This course is designed to facilitate the exploration of the creative process on two levels. Students are encouraged to develop their own creative process while studying methods and theories that encourage creative behaviors in the classroom for children. Emphasis is placed on the development of procedures that will ensure a climate conducive to creativity in pre-school and primary classrooms. Prerequisite: ELED 132, ECED 262, and admittance to department.

## ECED 430 Student Teaching in Early Childhood Education (12:0:30)

This course is a semester of guided teaching in two settings: a pre-school or kindergarten and a primary grade in an elementary school. This field experience is designed to provide the student teacher with the opportunity to demonstrate the competencies and understanding of the teach-er-learning process necessary to work effectively with children from pre-school to 3rd grade. Prerequisites: students must have Department approval which is obtained when all requirements described under the Student Teaching section on page 4665 and 4766 of this catalog have been completed. In addition to these requirements, early childhood education majors must satisfy the following prerequisites: admission to the teacher education program; completion of all early childhood education major courses with no grade lower than a C; passing the appropriate Praxis II content knowledge test (Praxis II Fundamental Subjects Content Knowledge); Act 34 and/or FBI clearance and Act 151. Students must have a 3.0 GPA prior to graduation from ESU to be certified in the State of Pennsylvania.

## ECED 464 Early Childhood Curriculum I—Birth to Age 3 (3:3:0)

This course uses observations and interactions with children, teachers, and families to examine typical and atypical development of infants and toddlers. Students observe and participate in programs to examine appropriate physical and psychological environments, learn to construct appropriate curriculum, gain practice in responsive teacher-child interactions, engage in systematic observations and begin to establish collaborative professional relationships with families and other early childhood educators. Prerequisites: ECED 262; ELED 132 and admittance to department.

## ECED 465 Early Childhood Curriculum II-3 to 6 Years (3:3:0)

This course uses observations and interactions with children, teachers, and families to examine typical and atypical development of preschoolers. Students observe and participate in programs to examine appropriate physical and psychological environments, learn to construct appropriate curriculum, gain practice in responsive teacher-child interactions, engage in systematic observations and begin to establish collaborative professional relationships with families and other early childhood educators. Prerequisites: ECED 262; ELED 132 and admittance to department.

## ECED 466 Early Childhood Curriculum III -6 to 8 Years (3:3:0)

This course uses observations and interactions with children, teachers, and families to examine typical and atypical development of primary grade children. Students observe and participate in programs to examine appropriate physical and psychological environments, learn to construct appropriate curriculum, gain practice in responsive teacher-child interactions, engage in systematic observations and begin to establish collaborative professional relationships with families and other early childhood educators. Prerequisites: ECED 262; ELED 132 and admittance to department.

ECED 489 Organization and Administration of Early Childhood Programs (3:3:0)
This course emphasis is on organization and administration of high quality pre-school programs, including supervising, staffing, housing, equipment, programs, records, financing and budgeting, and parent involvement. The course is directed toward prospective early childhood teachers and day care center personnel. Prerequisites: ECED 262, ELED 132 and admittance to department.

## ECED 495 Seminar in Early Childhood Education (3:3:0)

This course emphasizes current trends, issues, and problems related to educating young children. It includes a survey of the many resources available as well as opportunities to meet with and benefit from the experiences of several practicing professionals. Prerequisites: ECED 262, ELED 132 ; and admittance to department.

## Bachelor of Science <br> With a Major in Early Childhood Education Concentration in Early Intervention, Administration or Curriculum

| Fall | Freshman Yea | ar Spring |  |
| :---: | :---: | :---: | :---: |
| PSED 161 Foundations of Education | 3 | ELED 132 Child Growth and Development | 3 |
| ENG 103 English Composition | 3 | General Education | 6 |
| General Education | 9 | Mathematics | 3 |
| Fitness | 1 | SPED 105 Foundations of Special Education | 3 |
| Take PPST Praxis I Reading, Writing and Math Tests |  |  |  |
| Subtotal | 16 | Subtotal | 15 |
| Fall | Sophomore Year Spring |  |  |
| PSED 242 Educational Psychology | 3 | MCOM 262 Educational Communications and Technology | 3 |
| ECED 262 Introduction to Early Childhood Education (PRAXIS I required) | 3 | General Education | 12 |
| General Education | 3 | Free Elective | 1 |
| Mathematics | 3 |  |  |
| English Literature | 3 |  |  |
| Fitness | 1 |  |  |
| Subtotal | 16 | Subtotal | 16 |

Fall
Junior Year
Spring
Admittance to department between 48-60 credits.

| General Education | 3 | ECED 464 Curriculum I | 3 |
| :--- | ---: | :--- | ---: |
| PETE 242 Movement Experiences in ECE | 3 | General Education | 3 |
| REED 212 Emergent Literacy | 3 | ECED 466 Curriculum III | 3 |
| ECED 363 Creativity in Childhood Education | 3 | REED 211 Teaching of Reading <br> in Elementary School | 3 |
| ECED 464 Curriculum II | 3 | ECED Concentration \#1 | 3 |
|  |  | Praxis II: Fundamental Subjects Content <br> Knowledge Test |  |
| Subtotal | $\mathbf{1 5}$ | Subtotal | $\mathbf{1 5}$ |


| Senior Year |  |  |  |
| :--- | :---: | :---: | :---: |
| ECED Concentration \#2, \#3 and \#4 9 Student Teaching 12 <br> ECED 489 Organization \& Administration 3   <br> ECED 495 Seminar in ECE 3 Praxis II: ECED Specialty Test  <br> Subtotal 15 Subtotal 12 <br> TOTAL CREDITS $\mathbf{1 2 0}$   |  |  |  |

## Earth and Space Science

School of Arts and Sciences<br>The Faculty of Science<br>Gessner Science Hall

570-422-3341 www.esu.edu/physics

Bachelor of Science with an Earth and Space Science major - 53 semester hours
Coordinator: Professor David Buckley, Department of Physics.

- Required major courses: BIOL 114, 474; CHEM 121, 123; GEOG 120, 121, 220, PHYS 121, 122, 124, 161, 162; 2 courses from (PHYS 304, 305, 404; BIOM 469, 480; GEOG 321); 12 additional credits related to the major, approved by the adviser.
- Corequisite courses: MATH 110 (or 311), 140, 141; 1 course in CPSC.
- Additional requirements: At least 9 credits of required courses (not corequisites), 300 -level or above must be completed at ESU. A minimum of a C must be obtained in each of the required courses.
- Please see the university requirements in this catalog.


## Bachelor of Science with an Earth and Space Science major (Secondary Education) 48 semester hours

Coordinator: Professor Robert Cohen, Department of Physics.

- Required major courses: BIOL 114, 474; CHEM 121, 123; GEOG 120, 121, 220; PHYS 121, 122, 124, 131 (or 161), 132 (or 162), 495; 2 courses from (PHYS 304, 305, 404; BIOM 469, 480; GEOG 321); 1 course from (BIOL 200, 210; CHEM 108, 373); 3 additional credits related to the major, approved by the adviser.
- Corequisite course: MATH 135, 140; 1 course in CPSC.
- Required professional education courses: MCOM 262; PSED 161, 242, 346, 420, 421, 430, 431; REED 321, PHYS 499.
- Recommended course: CMST 111.

The Commonwealth of Pennsylvania has established new requirements for all candidates in teacher preparation programs. Please refer to the section The College of Education in this catalog for specific requirements for admission into teacher education programs.

- Additional requirements: At least nine credits of required courses (not corequisites), 300-level or above must be completed at ESU. A minimum of a "C" must be obtained in each of the required courses.
- Please see the university requirements in this catalog.


## Bachelor of Science in Earth and Space Science (Secondary Education)

| Fall | Freshman Year | an Year Spring | Spring |
| :---: | :---: | :---: | :---: |
| PSED 161 Foundations of Education | 3 | GEOG 121 Physical Geology | 3 |
| GEOG 120 Physical Geography | 3 | PHYS 122 Astronomy II: Stars and Galaxies | 3 |
| PHYS 121 Astronomy I: Sky and Solar System | 3 | CPSC 101 PC's and Their Uses in Science | 3 |
| *General Education (A) | 3 | MATH 135 Pre-Calculus | 3 |
| ENGL 103 English Composition | 3 | General Education (C) | 3 |
| PHYS 124 Observational Astronomy Lab | 1 |  |  |
| Subtotal | 16 | Subtotal | 15 |
| Fall | Sophomore Year Spring |  |  |
| MATH 140 Calculus 1 | 4 | PHYS 131 Fundamental Physics I | 4 |
| BIOL 114 Introductory Biology I | 4 | GEOG 220 Meteorology | 3 |
| PSED 242 Educational Psychology | 3 | MCOM 262 Educational Communication and Technology | 3 |
| General Education (A; ${ }^{\text {nd }}$ English) | 3 | General Education (A) | 3 |
| FIT elective | 1 | General Education (C) | 3 |
| Subtotal | 15 | Subtotal | 16 |


| Fall |  |  |  |
| :--- | ---: | :--- | ---: |
| REED 321 Teaching of Reading in Secondary <br> Schools 3 PSED 420 Seminar in Secondary Education I | 3 |  |  |
| PHYS 132 Fundamental Physics II | 4 | BIOL 474 Introduction to Oceanography | 3 |
| CHEM 121 General Chemistry I | 3 | Environmental Science elective | 3 |
| CHEM 123 General Chemistry I Laboratory | 1 | General Education (A) | 3 |
| Earth and Space Science elective | 3 | Earth and Space Science elective | 3 |
| FIT elective | 1 | PHYS 495 Seminar | 1 |
| Subtotal | $\mathbf{1 5}$ | Subtotal | $\mathbf{1 6}$ |


| Fall |  |  | Spring |
| :--- | ---: | :--- | ---: |
| PSED 421 Seminar in Secondary Education II | 2 | PSED 430 Student Teaching in Secondary <br> Education/Middle School/Junior High School | 6 |
| PSED 446 Teaching of Science in the <br> Secondary School | 3 | PSED 431 Student Teaching in Secondary <br> Education/Senior High School | 6 |
| ESPS-related elective | 3 | PHYS 499 Student Teaching Internship | 1 |
| General Education (C) | 3 |  |  |
| General Education (A) | 3 |  | $\mathbf{1 3}$ |
| Subtotal | $\mathbf{1 4}$ | Subtotal | $\mathbf{1 2 0}$ |
| TOTAL CREDITS |  |  |  |
| *CMST 111 Speech Communication is recommended |  |  |  |

## Economics

| College of Business, Management and Economics |  |
| :---: | :---: |
| The Faculty of Business Management and Economics |  |
| The Department of Business Management and Economics |  |
| 420 Normal Street | 570-422-3251 www.esu.ed |
| Department faculty |  |
| Professors: | Seewoonundun Bunjun (sbunjun@po-box.esu.edu) |
|  | Constantinos Christofides, chair (cchristofides@po-box.esu.edu) |
|  | John Kercsmar (jkercsmar@po-box.esu.edu) |
|  | Pattabiraman Neelakantan (pats@po-box.esu.edu) |
|  | Richard Nyamwange (rnyamwange@po-box.esu.edu) |
| Associate Professors: | Kathleen Barnes (kbarnes@po-box.esu.edu) |
|  | Todd Behr (tbehr@po-box.esu.edu) |
|  | Michael DeCosmo (mdecosmo@po-box.esu.edu) |
|  | Mamadou Kane (mkane@po-box.esu.edu) |
|  | Alla Wilson (awilson@po-box.esu.edu) |
|  | Terry Wilson (twilson@po-box.esu.edu) |
| Assistant Professor: | Alvin Gibson (agibson@po-box.esu.edu) |

The Economics degree program at ESU prepares students for careers in management, finance or administration in the Public Sector. In addition, students majoring in Economics are well-prepared for graduate programs in both Management and Economics and are also provided with the basic research skills used in business and economics. Students who have graduated from our Economics programs report that they are involved in successful careers as: actuaries, accountants, bank managers, data analysts, financial advisors, government statisticians, etc.

Bachelor of Arts with an Economics major- $\mathbf{3 9}$ semester hours

- Required theory courses ( $\mathbf{1 5}$ credits): ECON 111, 112, 311, 312, 495.
- Required foundation courses (12 credits): EMGT 250 or MATH 110, EMGT 201 or MATH 130, EMGT 306, ECON 321.
- Professional electives ( $\mathbf{1 2}$ credits): Students are required to select four more courses from any of the following groups: (These courses may be selected from one specific group or from all three)
- Group A Quantitative: ECON 332, 332, 413, 415, EMGT 350, 451.
- Group B Global Economics: ECON 313, 314 432, EMGT 362
- Group C Financial and Monetary: ECON 122, 336, 411, 412, EMGT 307, 342.
- Please see the university requirements.
- Note: Economics majors must (1) complete at least five courses at ESU with rubrics that begin with either EMGT or ECON and (2) attain a QPA of 2.25 or better in all Economics courses taken at ESU. The quantitative requirements should be completed as early as possible.


## Economics minor - $\mathbf{1 8}$ semester hours

- Required courses: Six Economics courses (18) credits including ECON 111 and 112 and ECON 311 or 312, and any three additional ECON courses. A minimum of three courses must be 300 or 400 level.
- Additional requirements: At least three of the six required courses for the Minor in Economics must be completed at ESU.


## Economics and Management Interdisciplinary minor - 21 semester hours

- Required courses: Four Economics courses including ECON 111, 112 and any two additional ECON courses. Three Management courses including EMGT 200 and any two additional EMGT courses. A minimum of three courses (9) credits of the minor's total of seven courses must be 300 or 400 level.
- Additional requirements: At least four of the seven required courses for the Minor must be completed at ESU. This minor is NOT available to Economics or Management majors.


## Course Descriptions

(Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title.)

## ECON 111 GE: Principles of Macroeconomics (3:3:0)

This course is an introduction to the theory of income determination. It covers the topics of national income accounting, inflation, unemployment, fiscal policy, and monetary policy. A survey of consumption, investment, and multiplier theory is also provided.

## ECON 112 GE: Principles of Microeconomics (3:3:0)

This course is an introduction to price theory, including theory of consumer behavior, production theory, and cost analysis; the study of commodity pricing under conditions of perfect competition, monopoly and imperfect competition; a survey of distribution theory, factor pricing, and international trade and finance.

## ECON 121 GE: Consumer Education (3:3:0)

This course consists of an analysis of human wants in the process of maximizing satisfactions; consumption and patterns of family life cycle are explored. Emphasis is on the individual and the principles and techniques which govern successful consumer behavior in the areas of budget planning, consumption expenditures, and credit transactions. Recent changes in consumerism are explored.

## ECON 122 GE: Personal Finance (3:3:0)

This course applies the theoretical tools of microeconomics and business management techniques to the problems of consumer choice. Emphasis is placed on formulating and managing an investment portfolio. This course includes a review of elementary accounting principles and an introduction to federal income tax preparation techniques as well as retirement and estate planning.

## ECON 221 GE: Contemporary Economic Problems (3:3:0)

This course is a survey of selected problems in the production, exchange, and distribution of wealth; i.e. attempts to quantify the empirical dimensions, assumptions and value judgments associated with each problem. Economic theory and analytical techniques are applied to current problems.

## ECON 236 Money and Capital Markets (3:3:0)

A comprehensive analysis of capital markets is presented via the flow of funds from saver-lender to borrower-spender. The development of financial markets, their present structure and operations techniques, and the merits of the innovative investments they have created are examined in detail. Topics covered include money and credit instruments; risk analysis; determination of interest rates; structure and operations of money, debt, capital and Euro markets; government regulations of financial markets; behavior of depository, contractual and investment intermediaries; and an evaluation of the changing roles of financial institutions.

## ECON 290 Special Topics (Semester hours arranged)

These courses are designed to meet specific needs of groups of students or are offered on a trial basis in order to determine the demand for and value of introducing them as part of the curriculum.

ECON 311 GE: Intermediate Macroeconomics (3:3:0)
Reviews and extends the theory of income determination, surveys consumption theories, and analyzes problems of inflation and unemployment. It includes critical evaluations of fiscal, monetary, and income policies, as well as a brief introduction to modern theories of growth. Prerequisite: ECON 111.

## ECON 312 GE: Intermediate Microeconomics (3:3:0)

This course reviews and extends the analysis of value and distribution: it covers traditional price theory techniques in production, exchange, and distribution for firms in markets of perfect and imperfect competition. It includes an introduction to general equilibrium analysis, linear programming, and welfare economics. Prerequisite: ECON 112.

## ECON 313 GE: International Trade (3:3:0)

This course examines the development of international trade and finance; it includes a survey of classical, neoclassical, and modern theories and analyzes balance-of-payments techniques and principles. It includes critical evaluation of the arguments for protection, the economic effects of tariffs and quotas, U.S. trade policy, international financial institutions, and international liquidity. Prerequisites: ECON 111, 112.

## ECON 314: International Finance (3:3:0)

This course considers the monetary and financial flows between nations that results from the international trade of goods and services. Specific topics include a detailed examination of payments among nations, the foreign exchange markets, exchange rates and their determinants, government policies with respect to foreign exchange markets and the choice between fixed versus floating exchange rates. Prerequisites: ECON 111, 112.

## ECON 321 GE: History of Economic Thought (3:3:0)

This course is brief survey of the life and times of the major economic thinkers. It includes a critical evaluation of the contributions of each school of thought. Emphasis is on the evolution of economic analysis and its methodology. Prerequisites: ECON 111, 112.

## ECON 322 Labor Economics (3:3:0)

Labor economics applies macroeconomics and microeconomic theory, forming a critical part of the core of analytical economics. This course explores topics such as educational choice, wage determination, employment discrimination, labor law, collective bargaining, etc. with special emphasis on international labor trends. Prerequisites: ECON 111, 112.
ECON 332 Forecasting Methods (3:3:0)
Time series, multiple regression, qualitative, Box-Jenkins, and other techniques are explained and applied in the forecasting of industrial production, sales, and financial variables. Emphasis is placed on the construction, utilization, and evaluation of computer generated forecasting models. Prerequisites: ECON 112; MATH 110.

## ECON 411 Public Finance (3:3:0)

This is one of the two major macro-policy oriented courses for economics majors designed to familiarize students with government budgets; i.e. the course examines the structure of expenditures and revenue, fiscal incidence, project analysis, and the problems encountered in the performance of fiscal stabilization techniques to attain given policy targets. Prerequisites: ECON 111, 112, 311.
ECON 412 Money and Banking (3:3:0)
This course deals with the development of money types and banking systems; examination of techniques and operations of the banking system of the U.S.; survey of monetary theory and policy. Prerequisites: ECON 111, 311.

## ECON 413 Managerial Economics (3:3:0)

This course is a survey of mathematical techniques useful in constructing economic and managerial models, which help the student identify and systematically formulate managerial problems. The course concentrates on pricing decisions, demand theory, production and cost analysis, and the empirical problems involved in managerial decision making. Prerequisites: ECON 112; MATH 110.

## ECON 414 Macroeconomics for Managers (3:3:0)

This course deals with national economic activity from a manager's perspective and with how government policies affect economical performance. The course offers practical explanation of the short-term linkages that impact the performance of the overall economy. Emphasis is placed on the empirical underpinnings and managerial implications of macroeconomics. Issues of how business managers and executives can use macroeconomics data and information to improve the performance of their businesses are addressed. Prerequisites: ECON 111, 112.

## ECON 415 Econometrics (3:3:0)

This course is an introduction to the theory of econometrics and its applications. The course will concentrate on determining and measuring the relationship between economic variables. Simple regression, correlation, multiple regressions, and the nature of econometric models will be discussed. A series of applications will conclude the course. Prerequisites: ECON 112; MATH 110.

## ECON 432 Economic Growth and Development (3:3:0)

Critical evaluation of the historical and theoretical development of laissez-faire, centralized planning, and mixed economies; emphasis is placed on capital accumulation, industrialization, and economic expansion in the developed and underdeveloped nations, current problems, and alternative policies. Prerequisites: ECON 111, 112.

## ECON 442 Comparative Economic Systems (3:3:0)

The purpose of this course is the study of the different economic systems from the "free enterprise system" to the "command economies," with the Third World economic system in between. An attempt is made to analyze the institutional structure of each economic system and the factors underlying it. The universality of economic principles is brought out. Prerequisites: ECON 111, 112.

## ECON 485 Independent Study (Semester hours arranged)

A student wishing to take independent study either on the undergraduate or graduate levels (other than under 571) should discuss the plan with a member of the department. If the faculty member agrees to sponsor the project, the proposal should be submitted to the department chair. The chair, after approving the independent study project, shall bring it to a departmental meeting for confirmation. The dean of the school gives final approval after receiving the minutes of the departmental meeting which identifies the students who were approved by the department to do independent study.

## ECON 486 Field Experiences and Internships (Semester hours arranged)

## ECON 495 Senior Seminar (3:3:0)

The course consists of a series of lectures and discussions on economic topics designed to lead senior students into current scientific literature and research methodology. Prerequisite: Permission of the department.

## Bachelor of Arts in Economics

| Fall | Spring |  |  |
| :--- | ---: | :--- | ---: |
| ECON 111 Principles of Macroeconomics | 3 | ECON 112 Principles of Microeconomics | 3 |
| ENGL 103 English Composition | 3 | ${ }^{*}$ MATH 110 General Statistics | 3 |
| ${ }^{*}$ MATH 130 Applied Algebraic Methods | 3 | CPSC 100 PC's and Their Uses | 3 |
| General Education Elective - Humanities | 3 | General Education Elective - Humanities | 3 |
| General Education Elective- Social Science | 3 | General Education Elective - Social Science | 3 |
| PE Elective | 1 | PE Elective | 1 |
| Subtotal | 16 | Subtotal | $\mathbf{1 6}$ |

Fall Sophomore Year Spring

| ECON 311 Intermediate Macroeconomics | 3 | ECON 312 Intermediate Microeconomics | 3 |
| :--- | ---: | :--- | ---: |
| General Education Elective - Humanities | 3 | General Education Elective - Humanities | 3 |
| General Education Elective - <br> Natural Science | 3 | General Education Elective - Social Science | 3 |
| General Education Elective - <br> Social Science | 3 | General Education Elective - Natural Science | 3 |
| EMGT 306 Financial Management I | 3 | Economics Elective | 3 |
| Subtotal | $\mathbf{1 5}$ | Subtotal | $\mathbf{1 5}$ |


| Fall |  |  |  |
| :--- | ---: | :--- | ---: |
|  Junior Year  <br> ECON 321 History of Economic Thought 3 Free Electives <br> General Education Elective - Humanities 3 Economic Elective <br> General Education Elective - <br> Social Science 3  <br> General Education Elective - <br> Social Science 3  <br> Economics Elective 3  <br> Subtotal $\mathbf{1 5}$ Subtotal |  |  |  |


| Fall Spring |  |  |  |
| :--- | ---: | :--- | ---: |
| Economics Elective | 3 | ECON 495 Senior Seminar | 3 |
| Free Electives | 12 | Economic Elective | 3 |
|  |  | Free Electives | 7 |
| Subtotal | $\mathbf{1 5}$ | Subtotal | $\mathbf{1 3}$ |

TOTAL CREDITS
*Or Equivalent Quantitative Management and Economics Courses
Note: Economics Majors are encouraged to take additional courses in Mathematics such as Differential Calculus, Integral Calculus and Linear Algebra and Statistics.
Students interested in Management careers should take two courses in Accounting and additional courses in Management, Finance and Marketing.

## Elementary Education

College of Education
Stroud Hall, Room 209
570-422-3356
www.esu.edu/eled

Department faculty
Professors:
Professors:

Associate Professors:

Assistant Professors:

> Paula Kelberman (pkelberman@po-box.esu.edu)
> Pamela Kramer (pkramer@po-box.esu.edu)
> Patricia Pinciotti, chair (ppinciotti@po-box.esu.edu)
> Margaret Benson (mbenson@po-box.esu.edu)
> Susan Harlan (sharlan@po-box.esu.edu)
> Martha Kellow (mkellow@po-box.esu.edu)
> Denise LePage (dlepage@po-box.esu.edu)
> Linda Rogers (lrogers@po-box.esu.edu)
> Margot Vagliardo (mvagliardo@po-box.esu.edu)
> Craig Wilson (cwilson@po-box.esu.edu)
> Alberto Alegre (aalegre@po-box.esu.edu)
> Janet Ferguson (jferguson@po-box.esu.edu)
> Marilyn Narey (mnarey@po-box.esu.edu)
> Alison Rutter (arutter@po-box.esu.edu)
> Sharon Switzer (sswitzer@po-box.esu.edu)
> Andrew Whitehead (awhitehead@po-box.esu.edu)
> Andrea Briller (abriller@po-box.esu.edu)

## Secretary:


#### Abstract

The four-year programs in Elementary Education are designed to offer students a curriculum of general education and professional and elementary education theory, application, and practice in teaching children in grades K through six. The curriculum is designed to develop a community of learners who are competent and reflective professionals able to teach any child in any setting. The courses and extensive field based component develops beginning educator's knowledge, skills, and dispositions relevant to content, the learner and the learning environment, teaching and learning process, and professionalism. Graduates of the ELED major will be certified to teach in kindergarten to grade six or in a middle school, the ELED/ECED dual major will be certified birth through grade six, the ELED/SPED integrated major will be certified K through 6 in ELED and K through 12 in special education within the schools of the Commonwealth of Pennsylvania. Changes made at the State certification level may impact the following requirements.


## Bachelor of Science with an Elementary Education major - $\mathbf{5 7}$ semester hours plus 12 concentration credits

- Required General Education courses: English 103 and an English Literature course, Math 105 (a grade of "C" or higher is required) and another three credits of Math
- Required Professional Education courses: PSED 161, PSED 242, SPED 105, MCOM 262
- Required major courses: ELED 132, 264 (PRAXIS I required)
- Apprentice I courses: ELED 342, 343,346, 351
- Apprentice II semester in a PDS cohort: ELED 311, 344, 345, REED 313 SPED 351 (optional)
- Resident Student teaching semester: ELED 430
- Required concentration: Student selects a minimum of twelve semester hours of in-depth work in an academic field of study or an approved interdisciplinary field as outlined in the Concentration Handbook.


## Bachelor of Science with a Dual Early Childhood and Elementary Education major - 84 credits

- Required General Education courses: English 103 and an English Literature course, Math 105 (a grade of "C" or higher is required) and another three credits of Math
- Required Professional Education courses: PSED 161, PSED 242, SPED 105, MCOM 262
- Required major courses: ELED 132, ELED 264 (PRAXIS I required)
- Early Childhood courses: ECED 262 (PRAXIS I required), 363, 464, 465, 466, 489, 495, REED 212 MSES 242
- Apprentice I courses: ELED 342, 343, 346, 351
- Apprentice II semester in a PDS cohort: ELED 311, 344, 345, REED 313, SPED 351 (optional)
- Resident Student teaching semester: ELED 430, ECED 430


## Bachelor of Science with an Integrated Elementary Education and Special Education major -

 77 credits- Required General Education courses: English 103 and an English Literature course, Math 105 (a grade of "C" or higher is required) and another three credits of Math.
- Required Professional Education courses: PSED 161, PSED 242, SPED 105, MCOM 262
- Required major courses: Elementary Education courses - ELED 132, 264 (PRAXIS I required)
- Apprentice I courses: ELED 342, 343, 346, 351
- Apprentice II semester in a PDS cohort: ELED 311, 344, 345, SPED 351, REED 313 or REED 315 and REED 211
- Special Education courses: SPED 201, 210, 214, 215, 314
- Student teaching semester: ELED 430, SPED 421, 420


## Department Admission

The Commonwealth of Pennsylvania has established specific requirements for all candidates in teacher preparation programs. For admission into the initial teacher certification program, students are required to have a 3.0 QPA , pass the Praxis I academic skills assessments prior to taking ELED 264 or ECED 262, and complete 6 credits of math (Math 105 grade of "C" or higher and another 3 credits of Math) and 6 credits of English (English Composition and Literature course) along with various clearances. Please refer to the College of Educations section in this catalog for specific requirements for admission into teacher education. Majors in Elementary Education or Integrated ELED/SPED majors should meet regularly with their academic adviser so they are oriented to their major program and the requirements and procedures for admission into each program. Students must be admitted into the department prior to taking any 300 or 400 level major courses. A description of the Admittance process is available in the department office. Transfer credits are evaluated by the department chair for equivalent university courses.

## Experiences in the Field

There are multiple opportunities throughout each program to gain experience in early childhood, elementary education, and middle school classrooms including urban and inclusive settings. These various field experiences are connected to courses and are an integral, required part of the respective programs. Two unique opportunities are listed below.

## Professional Development Schools (PDS)

The Professional Development School Apprenticeship is taken the semester prior to the Resident student teaching semester. The Apprentice II cohort semester in a Professional Development School integrates five courses (ELED 311, 344, 345, REED 313, SPED 315) along with weekly fieldwork in an elementary classroom and involvement in a professional learning community. For more information see your academic adviser or contact the field experience office at 570-422-3471.

## Student Professional Program

The program offers a full year of field experience in early childhood and elementary schools. (Refer to ELED 497 and ELED 498 Student Professional Programs at the end of the course descriptions.)

## Resident Student Teaching

A full semester of student teaching is required for certification in ELED. Passing scores for the Praxis II Fundamental Subjects Content Knowledge test must be submitted to your adviser during the Student Teaching Review process prior to student teaching. Students must have a 3.0 or higher GPA overall in their major prior to student teaching and for certification in the State of Pennsylvania.

## Course Descriptions

(Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title.)

## ELED 100 Success Oriented Education (1:1:0)

This course is designed to prepare students majoring in Education to meet successfully the challenges of academic life.

## ELED 132 Child Growth and Development (3:3:0)

This course presents the development of the child from conception through pre-adolescence, interaction between heredity and environment, parent-child relations, development and stabilization of the personality, attitudes toward self and others - physical, social, emotional, and cognitive development. Completion of ENGL 103 is recommended. This course is a prerequisite to all methods courses.

## ELED 264 Principles and Practices of Teaching (3:3:0)

This course advances the ESU Educators: Reflective and Deliberate Decision-Makers conceptual framework. This course explores current research and practice related to the learner and the learning environment, the teaching and learning process, content, and professionalism including planning, organization, management, instructional strategies, evaluation, and assessment. Opportunities for field experiences in diverse school settings are included. The beginning educator portfolio is begun in this course. Prerequisites: ELED 132 Child Growth and Development. Corequisites: PSED 161, 242.

## ELED 290 Special Topics (Semester hours arranged)

Courses designed to meet specific needs of groups of students or offered on a trial basis in order to determine the demand for and the value of introducing them as a part of the university curriculum.

## ELED 311 Art in Childhood Education (3:2:2)

This course examines the unique role of the visual arts and art standards in education, learning and development. Weekly field experiences in a Professional Development School will emphasize the course content and instructional theories to teaching. Artistic literacy and behaviors are developed along with the teaching competencies to organize, assess and integrate the visual arts into the curriculum. Prerequisites: ELED 132, 264 and department admittance.

## ELED 342 Language Arts in Childhood Education (3:3:0)

This course is designed to familiarize students with the theoretical constructs, standards, and the methods and materials for teaching language arts in the elementary school. Through hands-on experiences students will explore ways to effectively plan, assess and implement language arts experiences and integrate them throughout the curriculum. Prerequisites: ELED 132, 264 and admittance to department.

## ELED 343 Mathematics in Childhood Education (3:3:0)

This course places emphasis on how theory and research shape practice in mathematics education. Additional emphasis will be placed on a variety of teaching techniques and assessment methods and how they can be integrated in a mathematics program. Course participants will also become familiar with the use of technology and how to integrate it appropriately in an elementary mathematics program. Prerequisites: ELED 132, 264; MATH 105; and admittance to department.

## ELED 344 Science in Childhood Education (3:2:2)

This course engages students in developing their understandings of concepts, standards, methods, and materials for teaching science in elementary schools. The primary focus is on the use of inquiry and activity-based methods. Weekly field experience in a Professional Development School will emphasize the application of course content and instructional theories to teaching. Prerequisites: ELED 132, 264 and department admittance.

## ELED 345 Social Studies in Childhood Education (3:2:2)

This course engages students in the use of standards, methods, and materials for teaching social studies in the elementary school. Weekly field experiences in a Professional Development School will emphasize the application of course content and instructional theories to teaching. Students will develop knowledge and skill in planning, selecting teaching strategies, integrating curriculum, and implementing instruction. Students will be expected to engage in productive self-reflection. Prerequisites: ELED 132, 264 and department admittance.

## ELED 346 Children's Literature (3:3:0)

This course studies the great variety of literature available for children and the literary materials of more recent times, which have been written expressly for children. The course offers varied ways to get children interested in books for their appropriate reading levels and interests. Implementation of Children's Literature into the elementary curriculum will be stressed. Prerequisites: ELED 132, 264 and admittance to department.

## ELED 351 Music in Childhood Education (3:3:0)

This course introduces the student to the importance of music in the elementary school curriculum. It focuses on establishing a role for the classroom teacher in fostering children's growth through music and providing the prospective teacher with musical understanding and skills for developing student-centered learning environments through music. Emphasis is on the encouragement of creative teaching of all content through the integration of music into the total elementary curriculum. Strategies for facilitation of music experiences to meet the needs of culturally and academically diverse students are included. Prerequisites: ELED 132, 264 and admittance to department.

## ELED 356 Urban Education and Classroom Diversity (3:3:0)

This course will give students the opportunity to learn about teaching in an urban setting. Students will be provided with a strong theoretical knowledge base and practical field experience in order to prepare them to teach in a variety of settings. Students will explore their own beliefs and attitudes as it relates to diversity in the classroom. Prerequisites: ELED 132 and ELED 264 or PSED 161 or PSED 242.

## ELED 415 Individualizing Instruction in Elementary Education (3:3:0)

This course examines the process of individualizing instruction and strategies, which lend to its development. Students will work on individualized projects, which will help them meet their goals. Although emphasis is placed on elementary education, some topics will apply on a K-12 basis. Prerequisites: ELED 132; PSED 242.

## ELED 427 Second Language Acquisition: Theories for ESL Teachers (3:3:0)

This course focuses on historical and current theories of second language acquisition and development for the Pre-K-12 limited-English student. Topics addressed include cognitive, psychological, sociocultural, and political factors for second language learners, content area instruction, models of bilingual education, assessment options, and technology resources. Prerequisites: ELED 132; 264.

## ELED 428 Linguistics for ESL Teachers (3:3:0)

This course focuses on linguistics for ESL teachers and their students, covering phonology, morphology, syntax, semantics, and pragmatics. Additional emphasis is given to sociocultural linguistics and language contact. Connections to classroom applications are explored, with a review of idiosyncratic elements of English grammar as they pertain to second language learning. Prerequisites: ELED 132; 264.

## ELED 429 Methods and Materials for Teaching ESL (3:3:0)

This course focuses on pedagogical techniques, tools, resources and activities that can enable Pre-K-12 ESL students to improve their proficiency in reading, writing, listening, and speaking. Participants learn to plan methods and materials for the ESL classroom creating various activities and assessments and incorporating technology when appropriate. Communication about the purpose of ESL education to colleagues, parents and community is also covered. This class requires a field experience working with students acquiring English as their second language. Prerequisites: ELED 132; 264.

## ELED 430 Student Teaching in Elementary Education (12:0:30)

This course includes a semester of guided teaching in elementary schools and an accompanying on-campus seminar. This field experience is designed to provide the student teacher with the opportunity to develop further competencies and an understanding of the teaching-learning process necessary for effective teaching in the elementary schools. Prerequisites: Students must have Departmental approval which is obtained when all requirements described under the Student Teaching section on page 65 and 66 of this catalog have been completed. In addition to these requirements, elementary education majors must satisfy the following prerequisites: admission to the teacher education program; completion of all elementary education major courses with no grade lower than a "C"; passing the appropriate Praxis II content knowledge test (PRAXIS: Fundamental Subjects Content Knowledge); Act 34 and/or FBI clearance and Act 151. Students must have a 3.0 or higher GPA prior to graduation from ESU to be certified in the State of Pennsylvania.

## ELED 444 International Collaborative Learning Project (1-3: 1-3: variable)

This course enables students to participate in unique learning events in a foreign country. Students will have the opportunity to experience different styles in teaching and learning, how reflective teaching practice can become an integral part of the teaching process, and how teacher education reform occurs in different contexts through seminars and observations. The class will deal with exploring differences and similarities between cultures and philosophies. Pre-requisites: Permission of instructor.

## ELED 485 Independent Study (Semester hours arranged)

This course consists of directed research and study on an individual basis.
ELED 497 \& 498 Student Professional Program (12:1:34) (13:1:34)
Designed as another route to teacher certification, the program offers a full year of field experience in elementary and middle schools. Student professionals in the program are assigned to schools as full-time interns and in addition participate in group seminars, field trips, and a program of various assignments planned in cooperation with the program coordinator. Prerequisites: A 3.0 QPA; completion of General Education requirements; completion of all methods courses required of Elementary Education majors with no grade lower than a "C," approval of the Elementary Education Department; Act 34 and/or FBI clearance and Act 151. This course satisfies the area of concentration requirement. It is also possible for students who have satisfied the coursework requirements in another certification to obtain dual certification with the Student Professional year.

## Bachelor of Science

With a Major in Elementary Education
Required Concentration of 12 Credits


# Bachelor of Science <br> With a Major in Early Childhood and Elementary Education Dual Certification Program 

| Fall | Freshman Year | Spring |  |
| :---: | :---: | :---: | :---: |
| PSED 161 Foundations of Education | 3 | ELED 132 Child Growth and Development | 3 |
| ENG 103 English Composition | 3 | General Education | 9 |
| General Education | 9 | MATH 105 Problem Solving for ELED (a grade of " C " or better is required) | 3 |
| Fitness | 2 | SPED 105 Foundations of Special Education | 3 |
| PPST Praxis Tests Taken |  |  |  |
| Subtotal | 17 | Subtotal | 18 |
| Fall | Sophomore Year Spring |  |  |
| PSED 242 Educational Psychology | 3 | ELED 264 Principles and Practices of Teaching (PRAXIS I required) | 3 |
| ECED 262 Introduction to Early Childhood (PRAXIS I required) | 3 | MCOM 262 Educational Communications and Technology | 3 |
| General Education | 3 | General Education | 9 |
| Mathematics | 3 | ECED 363 Creativity in Childhood Education | 3 |
| English Literature | 3 |  |  |
| Subtotal | 15 | Subtotal | 18 |

# Bachelor of Science <br> Major in Elementary and Special Education 

Integrated Program
Fall
Freshman Year
Spring

| PSED 161 Foundations of Education | 3 | ELED 132 Child Growth and Development | 3 |
| :---: | :---: | :---: | :---: |
| ENGL 103 English Composition | 3 | MATH 105 Problem Solving for El.Ed | 3 |
| General Education | 3 | SPED 105 Foundations of Special Education | 3 |
| General Education | 3 | General Education | 3 |
| General Education | 3 | General Education | 3 |
| PPST Praxis I Tests Taken |  | Fitness | 1 |
| Subtotal | 15 | Subtotal | 16 |


| SPED 201 Assessment and Evaluation <br> in Special Education | 3 | ELED 264 Principles and Practices <br> of Teaching | 3 |
| :--- | ---: | :--- | ---: |
| SPED 214 Behavior Management With <br> Individuals with Exceptionalities | 3 | MCOM 262 Educational Communications and <br> Technology | 3 |
| PSED 242 Educational Psychology | 3 | SPED 210 Learning Disabilities: Theory Into <br> Practice | 3 |
| English Literature | 3 | General Education | 3 |
| Mathematics | 3 | General Education | 3 |
| General Education | 3 | Fitness | 1 |
| Subtotal | $\mathbf{1 8}$ | Subtotal | $\mathbf{1 6}$ |

Fall
Junior Year
Spring
Admittance to department between $48-60$ credits. Must be admitted to take $300 / 400$ level courses

| SPED 215 Instructional Strategies <br> for Individuals with Exceptionalities | 3 | SPED 314 Curriculum and Materials for Indi- <br> viduals with Severe Disabilities | 3 |
| :--- | ---: | :--- | ---: |
| ELED 342 Language Arts in Childhood Ed | 3 | ELED 343 Mathematics in Childhood Ed | 3 |
| ELED 346 Children's Literature | 3 | ELED 351 Music in Childhood Education | 3 |
| General Education | 3 | General Education | 3 |
| General Education | 3 | General Education | 3 |
| Free Elective | $\mathbf{3}$ | PRAXIS II Fundamental Subjects Content <br> Knowledge Test |  |
| Subtotal | $\mathbf{1 8}$ | Subtotal | $\mathbf{1 5}$ |


| Fall |  |  |  |
| :--- | ---: | :--- | ---: |
| SPED 351 Inclusionary Practices | 3 | Student Teaching in Elementary Education | 6 |
| ELED 311 Art in Childhood Education | 3 | Student Teaching in Special Education | 6 |
| ELED 344 Science in Childhood Education | 3 | SPED 421 Professional Practicum | 2 |
| ELED 345 Soc. Studies in Childhood Educ | 3 |  |  |
| REED 313 Foundations in Reading | 6 | Praxis II: ELED and SPED Specialty Tests |  |
| Apprentice II Semester in a PDS cohort | 0 |  |  |
| Subtotal | $\mathbf{1 8}$ | Subtotal | $\mathbf{1 4}$ |

## Engineering Transfer Program

## School of Arts and Sciences

The Faculty of Science
Gessner Science Hall
570-422-3341
www.esu.edu/physics
Bachelor of Arts with a Physics major- $\mathbf{2 2}$ semester hours in physics with $\mathbf{3 8}$ semester hours of corequisites

Concentration: Engineering Transfer program

- *Required major courses: PHYS 111, 161, 162, 201, 202, 261, 262.
- *Corequisite courses: CHEM 121, 123, 124, 126; MATH 140, 141, 240, 320, 341; CMST 111; ENGL 204; ECON 111 or 112; CPSC 111 or 211.
- Other requirements: Completion of a bachelor's degree in engineering at Penn State University or any other institution approved by the coordinator of the program.
- Please see the university requirements in this catalog.

Coordinator: Professor Tyler Morgus, Department of Physics.
This degree program which also is called the " 3 -2 engineering program" encompasses three years of study at East Stroudsburg University and two years of study in an approved engineering program at Penn State University. The student receives the Bachelor of Arts degree from ESU upon completion of the engineering program at the cooperative university.
*Please see cooperative agreement at www.engr.psu.edu/ProspectiveStudents/Undergraduate/ transfer3-2.asp or coordinator for specific requirements of specific engineering disciplines.

## Bachelor of Arts in Physics <br> (Engineering Transfer Program)

Fall
Freshman Year
Spring

| PHYS 111 Engineer Graphics | 2 | PHYS 161 Physics I | 4 |
| :--- | ---: | :--- | ---: |
| MATH 140 Calculus 1 | 4 | MATH 141 Calculus 2 | 4 |
| CHEM 121 General Chemistry I | 3 | CHEM 124 General Chemistry II | 3 |
| CHEM 123 General Chemistry I Laboratory | 1 | CHEM 126 General Chemistry II Laboratory | 1 |
| ENGL 103 English Composition | 3 | ENGL 204 Technical Writing | 3 |
| ECON 111 Principles of Macroeconomics | 3 | CMST 111 Speech Communications | 3 |
| Subtotal | 16 | Subtotal | 18 |

Soll

| PHYS 162 Physics II | 4 | PHYS 261 Physics III | 3 |
| :--- | ---: | :--- | ---: |
| MATH 240 Multivariate Calculus | 4 | MATH 320 Linear Algebra | 3 |
| *PHYS 201 Statics | 3 | ${ }^{*}$ PHYS 202 Dynamics | 3 |
| General Education | 3 | **CPSC 211 Scientific Computing <br> with Fortran | 3 |
| General Education | 3 | General Education | 3 |
| Subtotal | $\mathbf{1 7}$ | Subtotal | $\mathbf{1 5}$ |


| Fall |  |  | Spring |
| :--- | ---: | :--- | ---: |
| MATH 341 Differential Equations | 3 | General Education | 3 |
| General Education | 3 | General Education | 3 |
| General Education | 3 | General Education | 3 |
| General Education | 3 | General Education | 3 |
| General Education | 3 | General Education | 3 |
| Subtotal | $\mathbf{1 5}$ | Subtotal | $\mathbf{1 5}$ |

TOTAL CREDITS 96
*Course offered every other year and should be taken in the $2^{\text {nd }}$ or $3^{\text {rd }}$ years.
**Take the course whenever it is offered.
NOTE: Some elective slots must be used to fill individual engineering concentration requirements.

## English

School of Arts and Sciences
The Faculty of Arts and Letters
Stroud Hall, Room 309
570-422-3398
www3.esu.edu/academics/salenglish.asp
Department faculty

| Professors: | Lesliee Antonette (lantonette@po-box.esu.edu) |
| :--- | :--- |
|  | Allan Benn (abenn@po-box.esu.edu) |
|  | Ronald Meyers (rmeyers@po-box.esu.edu) |
|  | Fred Misurella (fmisurella@po-box.esu.edu)Chinese202 |
|  | Rhonda Ray (rray@po-box.esu.edu) |
| Associate Professors: | Nancy VanArsdale, chair (npva@po-box.esu.edu) |
|  | Kathleen Duguay (kduguay@po-box.esu.edu) |
|  | Richard Madigan (rmadigan@po-box.esu.edu) |
|  | Kim McKay (kmckay@po-box.esu.edu) |
|  | Victor Walker (vwalker@po-box.esu.edu) |
| Assistant Professors: | William Broun (wbroun@po-box.esu.edu) |
|  | Sandra Eckard (seckard@po-box.esu.edu) |
|  | Cynthia Leenerts (cleenerts@po-box.esu.edu) |
|  | Elizabeth Leigh Smith (lsmith@po-box.esu.edu) |
|  | Lucy Stanovick (lstanovick@po-box.esu.edu) |
|  | Craig Strete (cstrete@po-box.esu.edu) |
|  | Daniel Tripp (dtripp@po-box.esu.edu) |

## Bachelor of Arts with an English major (Concentration: Writing)-39 semester hours

- Required major courses: ENGL 163, 203, 260, 264, 490; one of the following: 261, 265, 272, 273; two 300-400 literature courses; five of the following (three of which must be $300-400$ level): 204, 205, 215, 218, 220, 225, 231, 302, 303, 305, 306, 307, $316,317,319,332,334,415,486$.
- Other requirements: Six semester hours in a foreign language or its equivalent; ex-tra-curricular writing requirements from among the following options: two semesters in an editorial position on Stroud Courier or Calliope; or 15 articles, short stories, poems, scripts published in the Courier, Calliope, or other agreed-upon publication; or a combination of these requirements, as agreed to by the student, the Department Chair, and the student's adviser.
- A minimum of $\mathbf{1 8}$ credits in English (beyond Composition) must be earned at ESU. A minimum of 9 credits in English coursework at the 300-400 level must be earned at ESU.
- Please see the university requirements in this catalog.


## Bachelor of Arts with an English major (Concentration: Professional and Media Writing)- $\mathbf{4 5}$ semester hours

- Required major courses: ENGL 163, (or 162 with Chair's permission), 203, 204 or $205,215,225,231,490$; three of the following, at least two of which must be at the 300 -level or above: ENGL 200, 218, 220, 305, 306, 307, 316, 317, 319, 415; one Literature course at the 200 -level and one at the 300 -level or above; nine additional credits from the following ENGL 486 (Internship from 3-9 credits), other English offerings, or related courses from other departments: MCOM 255, MCOM 262, MCOM 355, CMST 299, CMST 410, ART 229, ART 280.
- Other requirements: Extra-curricular writing Requirements from among the following options: two semesters in an editorial position on The Stroud Courier or Calliope; or a portfolio of published writing, portfolio of writing conducted for one or more
agencies in the context of service learning or internship, as agreed to by the student, the Department Chair, and the student's advisor; or a combination of these options, as agreed upon by the student, the Department Chair, and the student's adviser.
- A minimum of $\mathbf{1 8}$ credits in English (beyond Composition) must be earned at ESU. A minimum of 9 credits in English coursework at the 300-400 level must be earned at ESU.
- Please see the university requirements in this catalog.


## Bachelor of Arts with an English major (Concentration: Literature)- $\mathbf{3 9}$ semester hours

- Required major courses: ENGL 163, 260, 261, 264, 265, 374, 390, 495; one course in major writers ( 391,392 , or 393 ); two courses in literary movements (356-358, 378$388)$, one course in linguistics $(332,334)$.
- Other requirements: Six semester hours in a foreign language or its equivalent.
- A minimum of 18 credits in English (beyond Composition) must be earned at ESU. A minimum of 9 credits in English coursework at the 300-400 level must be earned at ESU.
- Note: Semester hours should be distributed equally among British and American literature courses.
- Please see the university requirements in this catalog.


## Bachelor of Science with an English major (Secondary Education) - 46 semester hours

- Required courses: ENGL 104, 163, 231, 260, 264, 261 or 265,334 or $332,360,390$, $412,466,499$; one of $203,215,220,225,302$, or 303 ; two of $356,357,358,378,379$, $380,381,382,383,384,385,386,387,388$; one of $391,392,393$.
- Note: ENGL 104 will fulfill the university composition requirement for English education Majors.
Students who transfer in a composition class from another institution will be strongly advised to take CMST 126. English will also permit two English course requirements from this B.S. program to apply toward the General Education requirements in the Arts and Letters category.
- Required professional education courses: MCOM 262; PSED 161, 242, 406, 420, 421, 430, 431; REED 321.
- Other requirements: One of CMST 111 or 253; one of THTR 100, 101, or 102.
- A minimum of 18 credits in English (beyond Composition) must be earned at ESU. A minimum of 9 credits in English coursework at the 300-400 level must be earned at ESU.
- Please see the university requirements in this catalog.

QPA: All students pursuing a Bachelor of Science Degree in English or post-baccalaureate certificate in English must maintain a minimum QPA of 2.8 in the major and grades of $\mathrm{A}, \mathrm{B}, \mathrm{C}$ must be earned in all of the required English courses.

The Commonwealth of Pennsylvania has established new requirements for all candidates in teacher preparation programs. Students are required to have a 3.0 overall QPA, pass the Praxis I academic skills assessments, and complete 6 credits of college mathematics for admission into the initial teacher certification program. Please refer to the section The College of Education in this catalog for specific requirements for admission into teacher education programs.

## English minor-18 semester hours

- Required courses: ENGL 162 or 163, one (1) 200 level Writing course, one (1) 200 level Literature course, three (3) courses at the 300 level or above.
- Nine (9) of the 18 credits for the minor must be taken at ESU.


## Prerequisites for Literature Courses

The last two digits of the course number indicate the classification of 100-300 level English courses, i.e.: writing 00-29, linguistics 30-49, literature 50-99.

- Lower Division: Enrollment in literature courses numbered 100 to 299 requires concurrent enrollment in or completion of ENGL 103 English Composition.
- Upper Division: Literature courses numbered 300 to 499 require the completion of ENGL 162 or 163 and two additional 100 to 299 numbered English courses. All 300 courses require 60 credit hours and/or one specified English course. All 400 courses require 90 credit hours and/or two specified English courses.


## Course Descriptions

(Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title.)

## ENGL 090 Composition Skills (3:3:0)

This preparatory course is designed for students who placed into the course based on their score on the English Placement Exam. Students required to take ENGL 090 may not enter ENGL 103 until they have passed 090 . This course is offered each semester. Credits granted for the course are not included within the minimum 120 semester hours required for graduation.

## ENGL 091 Composition Skills for Foreign Students (3:3:0)

This course, a special section of ENGL 090, offers international students the opportunity to improve their writing, reading, listening, and speaking skills (in that order).
ENGL 103 English Composition (3:3:0)
This course entails the study and practice of expository writing. The course or its equivalent is required of all students, but the results on the essay written during orientation may require some students to pass ENGL 090 before entering ENGL 103. Other students may demonstrate competency by attaining a high grade on an examination or an essay. The course is offered each semester. Students must receive a minimum grade of C to fulfill the English Composition requirement.
ENGL 104 English Composition for the English/Secondary Education Major (3:3:0)
Specifically designed for those preparing for a B.S in English Education, this course will provide students with experience in the formal styles of academic writing and research. They will be introduced to reading strategies that permit access to a wide range of print and non-print texts, such as video, Internet, and print media that address America's most pressing social concerns and learn to analyze them critically. Through oral presentations, collaborative writing exercises, and formal research projects, students will gain experience in utilizing these media in the classroom.
ENGL 150 WS: Introduction to Women's Studies (3:3:0)
The course will provide an overview of the history, theories, and methodological approaches of Women's Studies; examine the implications of our cultural understandings of woman, gender, race, and class; raise questions about the goals and direction of social change; and review the impact of Women's Studies on traditional disciplines and knowledge.
ENGL 162 GE: Introduction to Literary Analysis \& Interpretation (3:3:0)
Designed to acquaint the student with the basic skills of literary interpretation, this course includes readings in selected works of literature and examines such topics as explication and analysis of the genres of literature, plot, character, foreshadowing, atmosphere, symbolism, and imagery. The course is offered each semester. Enrollment in ENGL 162 requires the completion of or concurrent enrollment in ENGL 103.
ENGL 163 The Study of Literature (3:3:0)
Students will study fiction, poetry and drama from around the world and write a number of critical papers. Students will also learn to conduct critical research and will demonstrate familiarity with a wide variety of critical approaches. This course is for majors only. Enrollment in ENGL 163 requires the completion of or concurrent enrollment in ENGL 103.
ENGL 173-188 GE: Selected Readings (3:3:0)
These courses are designed to introduce the student to literary interpretation through readings in various interest areas. The following courses are offered as interest permits: Contact the department for details.

## ENGL 173 GE: Literature of War

ENGL 174 GE: Literature and Religion
ENGL 175 GE: Biblical Literature

## ENGL 177 GE: Environmental Literature

ENGL 178 GE: Horror and Fantasy
ENGL 180 GE: Literature and Science
ENGL 182 GE: Literature of Sport and Games
ENGL 183 GE: WS: Women in Literature
ENGL 188 GE: Mystery Fiction

## ENGL 190 GE: Multicultural American Literature (3:3:0)

Students will learn to analyze, interpret and write about the multiplicity of ethnic experiences that make up American cultural experiences. This work can address a variety of cultural groups and experiences not limited to African-American, Latino/a, European-American, or Asian-American. Prerequisite: completion or concurrent enrollment in ENGL 103.

## ENGL 192 GE: Native American Literature (3:3:0)

Students will learn to analyze, interpret and write about works produced by native North American authors. The course will consider works from the historical period that begins with the U.S. Republic and continues to the present. It will include both original works and works in translation. Prerequisite: completion of or concurrent enrollment in ENGL 103.

## ENGL 194 GE: African American Literature (3:3:0)

Students will read and write about the cultural and artistic forces that gave birth and shape to what has come to be called African American Literature. From the slave narratives and folktales of the 18th and 19th centuries to contemporary fiction and drama, these works make up a body of literature that is defined through race even as it transcends it. Prerequisite: completion of or concurrent enrollment in ENGL 103.

## ENGL 196 GE: Italian American Literature (3:3:0)

Students will read and discuss texts relating to Italian American history, literature, and culture. The course will analyze and criticize the media stereotypes adhering to Italian Americans and seek to develop an understanding of their positive contribution to American life. Prerequisite: completion of or concurrent enrollment in ENGL 103
ENGL 203 GE: Advanced Composition (3:3:0)
This course is designed to give students further practice in expository writing to improve their skills. Students will explore a topic through short and long reading and writing assignments in a workshop environment. At least one course project will be a substantial academic research paper. Prerequisites: ENGL 103 with a minimum grade of C.

## ENGL 204 Technical Writing (3:3:0)

This course acquaints students with the skills necessary for professional writing in such fields as engineering and the sciences. Students will learn to write effective proposals, operations manuals and a variety of technical reports. Prerequisite: ENGL 103.
ENGL 205 Workplace Writing (3:3:0)
This course teaches students the skills necessary for writing in workplace contexts such as businesses and non-profit organizations. Students will learn to write and present a wide range of workplace texts, including resumes, application letters, proposals, reports, e-mails, memos, and letters. This course does not count for GE credit. Prerequisite: ENGL 103.
ENGL 208 Writing About Young Adult Literature (3:3:0)
The primary focus of this course is critical reading and writing in relation to young adult literature. Students will read a wide variety of genres and write in a variety of modes (expressive, analytical, expository). The purposes of this course are (1) to strengthen students' writing skills for various purposes and audiences, and (2) to raise awareness about the literary and interdisciplinary merits of young adult literature and its relevance in terms of the lives of young adults and the culture within which they live. Prerequisite: ENGL 103 or 104.
ENGL 215 Print Journalism I: Newspapers (3:3:0)
This course is an introduction to print journalism, including practice in all activities relevant to daily newspaper work. Assignments will emphasize the techniques of reporting, interviewing, copyediting, fact checking, proofreading, and editorial and feature writing. There will be some discussion of layout and typography as well. Prerequisite: ENGL 103.

## ENGL 218 Sports Writing (3:3:0)

The course will deal with the techniques of daily reporting and feature writing about sports events, personalities, and issues. Emphasis will be given to newspaper and magazine writing, with some photojournalism required. Editorial skills will also be taught so that students can take their manuscript copy through the editing process to the printed page. Prerequisite: ENGL 215.

## ENGL 220 Script Writing (3:3:0)

Students will learn the craft of script writing and have an opportunity to apply the techniques to film, television, and theatre. Students will prepare short scripts and a major work, ranging from a scenario, to a television play, to a one-act play.

## ENGL 225 GE: Introduction to Creative Writing (3:3:0)

This course is a workshop in writing poetry, fiction, and drama. It is designed to introduce students to the mechanics of each genre and to the workshop format. Prerequisites: ENGL 103, 162 or 163.

## ENGL 231 English Grammar (3:3:0)

This course is required for those seeking secondary certification in English. It consists of a review of the basic precepts of traditional grammar and an introduction to new grammars.

## ENGL 260 GE: English Literature I (3:3:0)

This course is an introductory survey of English literature to 1800 designed to acquaint the student with major literary figures, works and trends. Offered in the fall. Prerequisite: Concurrent enrollment in or completion of ENGL 162 or 163.
ENGL 261 GE: English Literature II (3:3:0)
This course is an introductory survey of English literature from 1800 to the present, designed to acquaint the student with major literary figures, works, and trends. Offered in the spring. Prerequisite: Concurrent enrollment in or completion of ENGL 162 or 163.

## ENGL 264 GE: American Literature I (3:3:0)

This course is an introductory survey of American literature to the Civil War, designed to acquaint the student with major literary figures, works and trends. Offered in the fall. Prerequisite: Concurrent enrollment in or completion of ENGL 162 or 163.

## ENGL 265 GE: American Literature II (3:3:0)

This course is an introductory survey of American literature from the Civil War to the present, designed to acquaint the student with major literary figures, works, and trends. Offered in the spring. Prerequisite: Concurrent enrollment in or completion of ENGL 162 or 163.

## ENGL 272 GE: World Literature I (3:3:0)

This survey course introduces students to literature and literary traditions of selected countries and cultures from ancient and classical periods through the Renaissance. Prerequisite: Concurrent enrollment in or completion of ENGL 103.
ENGL 273 GE: World Literature II (3:3:0)
The readings in this survey course cover literature and literary traditions of selected countries and cultures from the Renaissance through to the present. Students can select this course without taking World Literature I. Prerequisite: Concurrent enrollment in or completion of ENGL 103.

## ENGL 275-284 GE: Studies in Literary Genre (3:3:0)

These courses emphasize the characteristics and techniques differentiating the literary genres. Attention is also given to the historical development of the genre. Prerequisites: ENGL 103, 162 or 163. The following courses are offered as interest permits:

## 275 GE: Comedy

276 GE: The Epic
277 GE: The Lyric
279 GE: The Romance
280 GE: Satire and Irony
282 GE: Drama
284 GE: Short Story
Students may contact the department for further details on these courses.

## ENGL 290 Special Topics (Semester hours arranged)

These courses are designed to meet specific needs of groups of students or are offered on a trial basis in order to determine the demand for and the value of introducing them as part of the university curriculum.

## ENGL 302 Creative Writing-Fiction (3:3:0)

This course is a workshop in the writing of prose fiction, with emphasis on the techniques of the short story. Supplementary readings may be assigned by the instructor. Prerequisites: ENGL 162 or 163; two English courses other than ENGL 090 or ENGL 103.

## ENGL 303 Creative Writing-Poetry (3:3:0)

This course is a workshop in the writing of poetry. Students are expected to achieve competence in a variety of forms. Supplementary readings may be assigned by the instructor. Prerequisites: ENGL 162 or 163; two English courses other than ENGL 090 or ENGL 103.
ENGL 305 Professional Writing: Public Relations (3:3:0)
This course is a workshop in the writing forms and styles, from basic press releases to multi-media public relations campaigns, used by communications professionals; students will also explore topics in media relations, business ethics, and non-profit/corporate public relations case studies. Prerequisite: ENGL 205 or 215.

## ENGL 306 Professional Writing: Advertising (3:3:0)

The course is a workshop in advertising copywriting. Students will examine current advertisements and learn to write print ad copy and broadcast scripts. They will explore the relationship between copy and images and will consider some of the ethical challenges, which can face a copywriter. Prerequisite: ENGL 205 or 215.

## ENGL 307 Professional Writing: World Wide Web (3:3:0)

This course is a workshop in writing for the World Wide Web. Students will learn how to plan, write, design, evaluate, and test web pages and sites. Prerequisite: One of the following: ENGL 203, 204, 205, or 215.
ENGL 316 Print Journalism II: Magazines (3:3:0)
This advanced course focuses on all aspects of magazine journalism. Students will analyze a variety of current consumer and trade magazines. They will research and write articles suitable for broad-based and special interest publications and discuss layout and editing techniques. Prerequisite: ENGL 215.
ENGL 317 Reviewing the Arts for Newspapers and Magazines (3:3:0)
The course stresses journalistic coverage of all the major art forms: literature, drama, film, plastic arts, music, dance, and television. Students will learn to write intelligent, informative reviews for the popular media; they will also do one or two feature articles or interviews about individual artists or current artistic trends. Prerequisite: ENGL 215.
ENGL 319 Writing Creative Non-Fiction (3:3:0)
This course explores the techniques and history of the New Journalism as practiced by Tom Wolfe, Annie Dillard, and others. Students will read and write nonfiction that makes use of on-site reporting, in-depth interviews, and literary feature writing style. Prerequisites: ENGL 215; 316 or 317.
ENGL 332 Linguistics (3:3:0)
This course is an introductory study of human language theory. Given evidence from various languages, students will formulate explicit generalizations, which will give them insight into linguistic theory. Investigation will then turn to social variations within languages, changes that occur in languages over time, the use of language to communicate, and language acquisition. Prerequisites: ENGL 162 or 163; two courses other than ENGL 090 or 103.
ENGL 334 History of the English Language (3:3:0)
This course is required for those seeking secondary certification in English. It is an introductory study of selected topics in semantics, phonology, morphology, and syntax from Old English to the present.
The course is offered once a year. Prerequisites: ENGL 162 or 163; two courses other than 090 or 103.
ENGL 356 American Poetry (3:3:0)
This course is a study of important individual poets and poetic movements in the history of American poetry. Selections range from Puritan to contemporary poetry. Prerequisites: ENGL 162; two courses other than ENGL 090 or 103.

ENGL 357 The American Novel (3:3:0)
This course is a study of representative examples of the American novel and its themes and forms from the early nineteenth century to the present. Prerequisites: ENGL 162 or 163; two courses other than ENGL 090 or 103.

## ENGL 358 The British Novel (3:3:0)

The British Novel is a survey of the development of the novel in Britain. It focuses on the "great tradition" of British novelists and also includes novels by other masters of the form. Prerequisites: ENGL 162; two courses other than ENGL 090 and 103.
ENGL 360 Approaches to World Literature (3:3:0)
Students will develop the necessary skills to respond to and understand literary texts that come from cultures outside the British and American traditions. Students will read a wide range of representative texts from various European and non-Western cultures. This course will explore a variety of common themes found in these texts and compare these themes across cultures. Prerequisites: ENGL 163; two additional English courses other than 090 or 103.
ENGL 374 Literary Criticism and Theory (3:3:0)
This course is a survey of the various approaches to the discussion of literature from Classical times to the present. Prerequisites: ENGL 162; two courses other than ENGL 090 and 103.
ENGL 378-388 Studies in Literary Movements (3:3:0)
These courses are intensive studies of the dominant literary spirit as reflected in both major and minor writers of particular eras in the American and British tradition. Prerequisites: ENGL 162 or 163; two courses other than ENGL 090 or 103. The following courses are offered as interest permits:
378 Old and Middle English Literature
379 British Literature of the Renaissance
380 Seventeenth-Century British Literature
381 Eighteenth-Century British Literature
382 British Romanticism
383 Victorian Literature
384 Modern British Literature
385 American Romanticism
386 American Naturalism
387 Modern American Literature
388 Contemporary Literature

## ENGL 390 Shakespeare (3:3:0)

This course offers intensive study of Shakespeare's plays and the social and political milieu of the Elizabethan period. Prerequisites: ENGL 162; two courses other than ENGL 090 or 103.
ENGL 391 Geoffrey Chaucer (3:3:0)
This course offers intensive study of the poetry of Geoffrey Chaucer and the social and political milieu of Chaucer's England. Prerequisites: ENGL 162; two courses other than ENGL 090 or 103.
ENGL 392 John Milton (3:3:0)
This course will consider Milton's major works within the literary, religious, political and social crosscurrents of the 17th Century. Prerequisites: ENGL 162; two courses other than ENGL 090 or 103.
ENGL 393 Major Writers (3:3:0)
This course will offer intensive study of a writer about whom a significant body of critical texts exists. A study of at least one writer chosen by the department will be offered each year. Students may take this course for credit more than once if they wish to study more than one major writer. Students may not improve a grade by retaking the course when a different major writer is studied. Prerequisites: ENGL 162 or 163; two courses other than ENGL 090 or 103.
ENGL 412 Teaching of Writing in the Secondary Schools (3:3:0)
This course will briefly survey the history of the teaching of writing in American secondary schools, intensively review writing process theory and research of the past two decades, and critically consider the implications of writing process theory and research for classroom practice. Also listed as PSED 412. Prerequisites: Completion of 90 credits; consent of instructor.

## ENGL 415 Computers and Writing (3:3:0)

Computers and Writing will examine the impact that the new forms of electronic writing have had and will have on conventional print-based writing. We will analyze various forms of electronic writing such as the World Wide Web, e-mail, listservs, and newsgroups, MOOs. Prerequisites: ENGL 103; two 300or 400- level English courses.

## ENGL 466 Teaching Multicultural Literature (3:3:0)

The English/Education major will utilize a seminar setting to focus on a detailed consideration of current multicultural subject matter, theory, and strategy that may be effective in the multicultural classroom. Prerequisites: ENGL 162 or ENGL 163; two 300-or 400-level English courses.
ENGL 485 Independent Study (Semester hours arranged)
Directed research and study on an individual basis. Open to advanced students ( 90 credits) on a limited basis upon approval of the department or the instructor and after the completion of twelve semester hours in the subject. Independent studies cannot be given in areas in which courses are being taught. A student entering upon independent study must complete a minimum of five (5) hours of individual conference time with the sponsoring professor for each credit undertaken. The student must demonstrate competencies appropriate to the level of the course. The standards shall include performance in the subject, explication of that work by written or oral reports, and evidence of willingness to meet the commitments of the discipline.

## ENGL 486 Internship in Written Expression (Semester hours arranged)

This is an opportunity for a limited number of advanced students to develop their skills by applying them in a professional situation and thus receive both an apprenticeship experience and college credit. Prerequisites: Department approval; completion of 90 credits.
ENGL 490 Senior Seminar in Writing (3:3:0)
The course is the culminating experience for Writing Track Majors. They will collectively focus on creative, journalistic, non-fiction, and corporate writing being published in the current marketplace. Individually, they will conceive, write, and revise a major project of their own in the writing field of their choosing. Prerequisites: ENGL 203; at least three 200-300 level required courses in the writing track.
ENGL 495 Senior Seminar (3:3:0)
This is a culminating course in which students, making use of the ability and knowledge they have acquired, examine intensively a figure, movement, or era. Required of liberal arts English majors. Prerequisites: Completion of 90 credits; consent of instructor.

## ENGL 498 WS: Seminar in Women's Studies (3:3:0)

This seminar is designed to enable students from various disciplines to analyze and synthesize data, ideas, and academic perspectives as they focus on the personal and societal dimensions of gender and roles as these differentiate and affect female experience and activities. Prerequisite: Completion of 9 credits of Women's Studies courses, including CMST/ENGL 150.

## ENGL 499 Student Teaching Internship (1:1:0)

This course is designed to provide the student with an opportunity to work with a faculty member in English during the student teaching experience. Prerequisites: Qualification to Student Teach, concurrent registration in PSED 430 or 431.

## Planning Semesters of Study in English

On the following pages are four model schedules that demonstrate how English majors can fulfill Major and General Education requirements within a four-year plan of study. The English Faculty Adviser works closely with the student to create a plan of study also suited to the student's interests, so there is room for flexibility and variation. For example, many English majors choose a Minor. Where a model course plan states "Elective," a student might instead pursue Minor requirements. Some English Majors also pursue a second Major.

English

# Model Sequence of Courses B.S. in English/Secondary Education 

Fall
Spring
Freshman Year - Used to complete 31 credits

| ENGL 104 English Composition for the Eng- <br> lish/Secondary Education Major | 3 | ENGL 163 The Study of Literature | 3 |
| :--- | ---: | :--- | ---: |
| GE Arts and Letter - Course (CMST 111) | 3 | GE Arts and Letters - Course | 3 |
| GE Natural Science - Course | 3 | GE Arts and Letters - Course (THTR 100) | 3 |
| GE Social Science - Course | 3 | GE Arts and Letters - Course (with lab) | 4 |
| PSED 161 Foundations of Education | 3 | GE Arts and Letters - Course | 3 |
| Subtotal | 15 | Subtotal | 16 |

Sophomore Year - Used to complete 32 credits

| ENGL 231 English Grammar | 3 | ENGL 334 History of the English Language | 3 |
| :--- | ---: | :--- | ---: |
| ENGL Advanced Writing | 3 | GE Arts and Letters - ENGL 261 or 265 | 3 |
| GE Arts and Letters - ENGL 260 | 3 | GE Natural Science - Course (Math) | 3 |
| GE Natural Science - Course (Math) | 3 | GE Social Science - Course | 3 |
| GE Social Science - Course | 3 | PSED 242 Educational Psychology | 3 |
| Fitness Courses | 1 | Fitness Course | 1 |
| Subtotal | $\mathbf{1 6}$ | Subtotal | $\mathbf{1 6}$ |

Junior Year - Used to complete 30 credits

| ENGL 264 American Literature I | 3 | ENGL Movement Course | 3 |
| :--- | ---: | :--- | ---: |
| GE Natural Science - Course | 3 | ENGL 360 Approaches to World Literature | 3 |
| GE Social Science - Course | 3 | PSED 406 Teaching of English in Secondary <br> Schools | 3 |
| ENGL 390 Shakespeare | 3 | PSED 420 Seminar in Secondary Education I | 3 |
| REED 321 Teaching of Reading in the Sec- <br> ondary School | 3 | MCOM 262 Educational Communications and <br> Technology | 3 |
| Subtotal | $\mathbf{1 5}$ | Subtotal | $\mathbf{1 5}$ |

Senior Year - Used to complete 27 credits

| ENGL 412 Teaching of Writing in the Second- <br> ary Schools | 3 | PSED 430 Student Teaching in Secondary <br> Education/Senior High School | 6 |
| :--- | ---: | :--- | ---: |
| PSED 421 Seminar in Secondary Education <br> II | 2 | PSED 431 Student Teaching in Secondary <br> Education/Middle School/Junior High School | 6 |
| ENGL Movement Course | 3 | ENGL 499 Student Teaching Internship | 1 |
| ENGL 466 Teaching Multicultural Literature | 3 |  |  |
| ENGL Major Writer | 3 |  | $\mathbf{1 3}$ |
| Subtotal | $\mathbf{1 4}$ | Subtotal |  |

## Model Sequence of Courses B.A. English Major on the Literature Track

Fall

Spring
Freshman Year - Used to complete 31 credits

| ENGL 103 English Composition | 3 | ENGL 203 Advanced Composition | 3 |
| :--- | ---: | :--- | ---: |
| ENGL 163 Study of Literature | 3 | ENGL 265 American Literature II | 3 |
| GE Arts and Letters - Course | 3 | GE Arts and Letters - Course | 3 |
| GE Natural Science - Course (with lab) | 4 | GE Natural Science - Course | 3 |
| GE Social Science - Course | 3 | GE Social Science - Course | 3 |
| Subtotal | $\mathbf{1 6}$ | Subtotal | $\mathbf{1 5}$ |

Sophomore Year - Used to complete 31 credits

| ENGL 264 American Literature I | 3 | ENGL 261 English Literature II | 3 |
| :--- | ---: | :--- | ---: |
| ENGL 260 English Literature I | 3 | GE Arts and Letters Course - (Foreign Lan- <br> guage) | 3 |
| GE Arts and Letters - Course (Foreign Lan- <br> guage) | 3 | GE Arts and Letters - Course | 3 |
| GE Natural Science - Course | 3 | GE Natural Science - Course | 3 |
| GE Social Science - Course | 3 | GE Social Science - Course | 3 |
|  |  | Fitness Class | 1 |
| Subtotal | $\mathbf{1 5}$ | Subtotal | $\mathbf{1 6}$ |

Junior Year - Used to complete 31 credits

| ENGL 390 Shakespeare | 3 | ENGL 332 Linguistics | 3 |
| :--- | ---: | :--- | ---: |
| ENGL 374 Literary Criticism | 3 | ENGL 393 Major Writers | 3 |
| GE Natural Science - Course | 3 | ENGL 3xx - Literary Movement | 3 |
| GE Social Science - Course | 3 | Elective | 3 |
| Elective | 3 | Elective | 3 |
| Fitness Class | 1 |  |  |
| Subtotal | $\mathbf{1 6}$ | Subtotal | $\mathbf{1 5}$ |

Senior Year - Used to complete 27 credits

| ENGL Elective | 3 | ENGL 3xx - Literary Movement | 3 |
| :--- | ---: | :--- | ---: |
| ENGL Elective | 3 | ENGL 495 Senior Seminar | 3 |
| ENGL Elective | 3 | Elective | 3 |
| Elective | 3 | Elective | 3 |
| Elective | 3 |  |  |
| Subtotal | 15 | Subtotal | $\mathbf{1 2}$ |

## Model Sequence of Courses B.A. English Major on the Writing Track

Fall
Spring
Freshman Year - Used to complete 31 credits

| ENGL103 English Composition | 3 | ENGL163 Study of Literature | 3 |
| :--- | ---: | :--- | ---: |
| GE Arts and Letters - Course | 3 | ENGL 203 Advanced Composition | 3 |
| GE Arts and Letters - Course | 3 | GE Arts and Letters - Course | 3 |
| GE Natural Science - Course | 3 | GE Natural Science - Course | 3 |
| GE Social Science - Course | 3 | GE Social Science - Course | 3 |
| Fitness | 1 |  |  |
| Subtotal | $\mathbf{1 6}$ | Subtotal | $\mathbf{1 5}$ |

Sophomore Year - Used to complete 30 credits

| ENGL 264 American Literature I | 3 | ENGL 265 American Literature II | 3 |
| :--- | ---: | :--- | ---: |
| ENGL 2xx - Writing Course | 3 | ENGL 3xx - Writing Course | 3 |
| GE Arts and Letters - (Foreign Language) | 3 | GE Arts and Letters - (Foreign Language) | 3 |
| GE Natural Science - Course | 3 | GE Natural Science - Course | 3 |
| GE Social Science - Course | 3 | GE Social Science - Course | 3 |
| Subtotal | $\mathbf{1 5}$ | Subtotal | $\mathbf{1 5}$ |

Junior Year - Used to complete 30 credits

| ENGL 3xx - Writing Course | 3 | ENGL 3xx - Writing or Linguistics | 3 |
| :--- | ---: | :--- | ---: |
| ENGL 260 English Literature I | 3 | ENGL 3xx - Literature Course | 3 |
| ENGL 2xx - Writing Course | 3 | Elective | 3 |
| GE Natural Science - Course | 3 | Elective | 3 |
| GE Social Science - Course | 3 | Elective | 3 |
| Subtotal | 15 | Subtotal | $\mathbf{1 5}$ |

Senior Year - Used to complete 29 credits

| ENGL Elective | 3 | ENGL 490 Senior Seminar in Writing | 3 |
| :--- | ---: | :--- | ---: |
| ENGL 3xx - Writing Course | 3 | ENGL 486 Internship | 3 |
| ENGL 3xx - Literature Course | 3 | Elective | 3 |
| Elective | 3 | Elective | 3 |
| Elective | 3 | Elective | 1 |
|  |  | Fitness | 1 |
| Subtotal | $\mathbf{1 5}$ | Subtotal | $\mathbf{1 4}$ |

## Model Sequence of Courses <br> B.A. English Major on the Professional and Media Writing Track

Fall
Spring
Freshman Year - Used to complete 31 credits

| ENGL103 English Composition | 3 | ENGL163 Study of Literature | 3 |
| :--- | ---: | :--- | ---: |
| GE Arts and Letters - Course | 3 | ENGL 203 Advanced Composition | 3 |
| GE Arts and Letters - Course | 3 | GE Arts and Letters - Course | 3 |
| GE Natural Science - Course | 3 | GE Natural Science - Course | 3 |
| GE Social Science - Course | 3 | GE Social Science - Course | 3 |
| Fitness | 1 |  |  |
| Subtotal | $\mathbf{1 6}$ | Subtotal | $\mathbf{1 5}$ |

Sophomore Year - Used to complete 30 credits

| ENGL 204 Workplace Writing | 3 | ENGL 225 Introduction to Creative Writing | 3 |
| :--- | ---: | :--- | ---: |
| ENGL 215 Print Journalism I | 3 | ENGL 231 English Grammar | 3 |
| GE Arts and Letters | 3 | GE Arts and Letters | 3 |
| GE Natural Science - Course | 3 | GE Natural Science - Course | 3 |
| GE Social Science - Course | 3 | GE Social Science - Course | 3 |
| Subtotal | $\mathbf{1 5}$ | Subtotal | $\mathbf{1 5}$ |

Junior Year - Used to complete 30 credits

| ENGL 3xx - Writing Course | 3 | ENGL 317 Reviewing the Arts for Newspapers <br> and Magazines | 3 |
| :--- | ---: | :--- | ---: |
| ENGL 2xx - Literature Course | 3 | ENGL 316 Print Journalism II: Magazines | 3 |
| ENGL 218 Sports Writing | 3 | Elective | 3 |
| GE Natural Science - Course | 3 | Elective | 3 |
| GE Social Science - Course | 3 | Elective | 3 |
| Subtotal | $\mathbf{1 5}$ | Subtotal | $\mathbf{1 5}$ |

Senior Year - Used to complete 29 credits

| ENGL Elective | 3 | ENGL 490 Senior Seminar in Writing | 3 |
| :--- | ---: | :--- | ---: |
| ENGL 3xx - Writing Course | 3 | ENGL 486 Internship | 3 |
| ENGL 3xx - Literature Course | 3 | Elective | 3 |
| Elective | 3 | Elective | 3 |
| Elective | 3 | Elective | 1 |
|  |  | Fitness | 1 |
| Subtotal | 15 | Subtotal | $\mathbf{1 4}$ |

[^3]
## Environmental Studies

School of Arts and Sciences<br>The Faculty of Science<br>\section*{Bachelor of Arts or Bachelor of Science<br><br>Interdisciplinary Program}

Environmental Studies major-67-76 semester hours or 69-75 semester hours
See Biological Sciences, Page 83
An integrated interdisciplinary program which offers students the unique opportunity to select individualized programs from a wide variety of electives in several disciplines. Field experience and internship are required.

Please see the Foreign Language Competency Requirement for B.A. in Environmental Studies in this catalog.

## Exercise Science

| School of Health Sciences and Human Performance <br> The Faculty of Human Performance <br> Koehler Fieldhouse <br> $570-422-3302$ |  |
| :--- | :--- |
| Department faculty | www3.esu.edu/academics/hshp/es/home.asp |
| Professor: | Donald Cummings, chair (dcummings@po-box.esu.edu) <br> Shala Davis (sdavis@po-box.esu.edu) <br> Eli Berman (eberman@po-box.esu.edu) <br> Gregory Dwyer (gdwyer@po-box.esu.edu) <br> Georgios Stylianides (gstylianides@po-box.esu.edu) |
| Assistant Professor: | Gavin Moir (gmoir@po-box.esu.edu) <br> Chad Witmer (cwitmer@po-box.esu.edu) |

The Exercise Science major offers a concentration in Exercise Physiology and a concentration in Sport and Exercise Conditioning. Course offerings are extensive and there are opportunities for internships in hospitals, fitness centers and corporate fitness areas.

## Bachelor of Science with an Exercise Science major: 60 semester hours Concentration: Exercise Physiology

- Required major courses: EXSC 100, 120, 121, 122, 202, 203, 310, 311, 322, $330402,410,431,441,445,447,451,452,453,454,455,461,462$, and 3 credits from 485 or 486.
- Corequisites: Twenty additional semester hours from Biology, Chemistry, Mathematics, Computer Science and Athletic Training, or required to complete the preparation for this concentration.
- Minimum Standard: A minimum grade of a "C" in 400 level major courses and a quality point average of $\mathbf{2 . 5}$ in major course required for graduation.
- Please see the university requirements in this catalog.

Bachelor of Science with an Exercise Science major- 53 semester hours
Concentration: Sport and Exercise Professional

- Required major courses: EXSC 100, 120, 121, 122, 202, 203, 310, 311, 322, 330, 342, 402, 410, 431, 445, 447, 451, 452, 453, 454, 455, 456, 486.
- Corequisites: Fourteen additional semester hours from Biology, Computer Science, Athletic Training are required to complete the preparation for this concentration.
- Minimum Standard: A minimum grade of a "C" in 400 level major courses and a quality point average of 2.5 in major courses required for graduation.
- Please see the university requirements in this catalog.


## Course Descriptions

(Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title.)
EXSC 100 Introduction to Movement Studies and Exercise Science (3:2:2)
This course is designed to enable the student to understand movement studies and exercise science as fields of academic study, programs, and professional applications and to discriminate among these contexts and relate them by applying relevant knowledge and appropriate theoretical perspectives. Students will demonstrate the intrapersonal and interpersonal skills important for becoming a professional.

## EXSC 120 Physical Conditioning (1:0:3)

This course provides for development of programs of exercise and activity and individual assessment of status, needs, and goals and is designed to enable each individual to determine realistic goals for his/her development and the use of activity throughout his/her life.

## EXSC 121 Aerobic Fitness Activities (1:0:3)

This course is designed to introduce the student to the various aerobic fitness activities for adult populations. Techniques of fitness assessment, aerobic dance, jogging and aquacizing activities will be emphasized.

## EXSC 122 Strength Training (1:0:3)

This course is designed to give the student a broad background in the area of strength training. Various strength training programs, techniques, and trends will be examined. Students will have the opportunity to set up and become involved in various strength-training methods. Recommended prerequisite: EXSC 120.
EXSC 202 Kinesiology—Applied Anatomy (3:2:2)
Upon completion of this course, a student should be able to identify the structural characteristics, movements, and muscles acting as the major joints of the body. The student will be able to select movements or exercises which utilize specific muscle groups and analyze the joint actions, muscle actions, and mechanical principles which apply to the performance of a specific movement.

## EXSC 203 Kinesiology-Mechanical Analysis (3:2:2)

This course is designed to enhance the student's understanding of the fundamental laws of physics as they apply to human motion. Emphasis is placed on sport skill analysis. The student is prepared to identify the various phases of motion and explain the mechanical significance of each in producing the desired outcome.

## EXSC 286 Early Internship (1-3:0:0)

This experience enables a student to explore the role of a professional in a sport fitness or rehabilitation setting under the close supervision of a work-site supervisor. Prerequisites: 30 semester hours; 2.0 QPA ; department approval.
EXSC 302 Psychosocial Aspects of Activity (3:3:0)
This course analyzes movement activities as psychosocial phenomena, including consideration of the symbolic and cultural nature of movement forms within a framework of human personality, motivation, and social values and organization. Prerequisite: EXSC 100.
EXSC 310 Exercise Physiology I (3:2:2)
This course studies human responses and adaptations to exercise of varying levels of stress and intensity. Concepts relating to neuromuscular, metabolic, circulatory, and respiratory physiology are treated in both lecture and laboratory experiences which include both theoretical and practical applications to exercise and training principles. Developmental considerations will be addressed as well as health-related physical fitness. Prerequisite: EXSC 100.

## EXSC 311Exercise Physiology II (3:2:2)

This course provides advanced applied biological treatment of adaptations necessary to sustain and/or develop exercise tolerance. Included in this course are principles and findings related to energy metabolism. Laboratory experiences illustrate theoretical material. This course is required for all Exercise Science majors. Prerequisites: EXSC 100, 310; Recommended: BIOL 111, 112.
EXSC 322 Strength and Conditioning Theory (3:3:0)
This course is designed to provide the student with an understanding of basic conditioning principles and how to apply them to various groups or individuals. Prerequisites: EXSC 100, 310, and advanced standing of 90 credits.

## EXSC 327 Stress Management in Exercise and Sport (2:1:2)

This course concerns the occurrence of stress in relation to exercise and sport settings, the potential for movement forms to serve as stress reducers, and other factors involved in stress and stress management. In laboratory experiences attention will be given to learning relaxation skills and leading others in relaxation and other stress reduction activities. Prerequisites: EXSC 302 or advanced standing with permission of instructor.

## EXSC 330 Health-Related Fitness Assessment and Exercise Programming (3:2:2)

This course provides experience in health-related physical fitness assessment and exercise programming for varied populations. The students will complete health-related physical fitness assessments and exercise programming under the direct supervision of the Exercise Science faculty. All students are required to have or obtain CPR certification and Professional Liability Insurance. Prerequisites: EXSC 310 and 311.

## EXSC 342 Power Training for Sport Performance (1:0:3)

This course is designed to meet specific competencies needed for students interested in pursuing certification as a strength and conditioning specialist. This course will provide the student with the abilities to employ effective power training methods for optimal sport-specific athletic performance. Training methods that develop speed and power will be emphasized, such as plyometrics, medicine ball training and Olympic Weightlifting. Prerequisites: EXSC 122, 202, or 203 or permission of the instructor.

## EXSC 402 Psychology of Sport and Exercise (3:3:0)

This course provides a broad overview for understanding the behavior of individuals in sport and exercise and focuses specific attention on the major sport and exercise concerns related to a psychological perspective. Content areas include personality and motivation factors, performance in groups, enhancing sport performance, and the psychological effects of participation in sport and exercise. Prerequisites: SMGT 201, 302, or two psychology courses; for EXSC students advanced standing of 75 credits.

## EXSC 410 Organization \& Administration of Exercise and Wellness Programs (3:3:0)

This course presents an overview of organizational and administrative issues relative to the planning, design, and management of health and wellness programs. Opportunities will be provided to observe and evaluate current wellness programs and facilities. Prerequisites: EXSC 310 and 311.
EXSC 431 Analysis of Performance Skills (3:2:2)
Upon completion of this course the student will be able to quantify and analyze human motions utilizing modern techniques of analysis including cinematography, still or sequence photography, video analysis, electrocardiography, and other selected laboratory and field techniques. Prerequisites: EXSC 100, 202, and 203.

## EXSC 441 Environmental Exercise Physiology (3:2:2)

This course includes the study of the physiological responses of the human body to maximal and submaximal exercise in various environmental conditions including heat, cold, varying humidity, air pollution, altitude (hypobaria), and hyperbaria. Focus will be on the general and specific mechanisms of adjustment of circulation, respiration, fluid regulation, and metabolism. Both theoretical and laboratory experiences will be provided. Prerequisites: EXSC 301 and 311.

## EXSC 445 Seminar in Adult Fitness Programs (3:3:0)

This course is designed to provide a cohesive overview of the entire field of adult fitness. The scientific basis of physiological changes in the adult population with their implications in recommending exercise and associated behavior modification are emphasized. Development, organization, and administration of adult fitness programs in varying environments are explored along with possible on-site visits. Prerequisites: EXSC 310 and 311.

## EXSC 447 Sport Nutrition (3:3:0)

This course is designed for students in exercise science or other students with an interest in the role of nutrition in supplying energy for various forms of physical activity. Topics include: physiological role of macronutrients in aerobic and anaerobic energy supply, micronutrients, fluid intake, commercial supplements, body composition, and disordered eating problems of athletes. Prerequisites: EXSC 100 and 310.

## EXSC 451 Aerobic Fitness Workshop (2:1.5:1)

This workshop provides a theoretical and practical framework for measurement and evaluation of aerobic fitness across the lifespan. Field tests that can be administered by exercise professionals are practiced, analyzed, discussed, and validated by laboratory demonstration and participation. Concepts and application of aerobic fitness principles are viewed in light of present day and future needs. Prerequisites: EXSC 100, 310, and/or advanced standing of 90 credits.

## EXSC 452 Exercises and Weight Control Workshop (2:1.5:1)

This workshop will focus on the role of exercise in regard to its positive influences on weight control. The hazards and implications of being overweight will be studied. Techniques for evaluating energy balance and planning for weight loss programs are discussed in light of established scientific principles and procedures. Exercise along with its dietary counterpart are analyzed to determine their relative importance in the weight loss regime. Facts and fallacies are discussed, and opportunities for self-evaluation of leanness and fitness provide practical as well as theoretical experience. Prerequisites: EXSC 100, 310, and/or advanced standing of 90 credits.
EXSC 453 Reducing Coronary Heart Disease Workshop (2:1.5:1)
This workshop examines exercise as a means of evaluation, prescription, and diagnosis of the major threat to health in the United States today - heart disease. Recent studies with their findings and implications will be viewed. The scientific basis for recommended exercise and associated behavior will provide information with regard to children and adults of both sexes on reducing heart disease risk. Rehabilitative exercise programs for heart victims will focus on accepted training principles and the necessity for changing life styles. Prevention rather than treatment for heart disease will be stressed. Prerequisites: EXSC 100, 310, and advanced standing of 90 credits.

## EXSC 454 Anaerobic Training Workshop (2:1.5:1)

This workshop provides a theoretical and practical framework for measurement and evaluation of anaerobic conditioning, flexibility, strength training, and plyometrics. Field and laboratory tests that can be administered by athletic coaches, teachers, and fitness professionals are practiced, analyzed, and discussed. Prerequisites: EXSC 310, 322 and/or advanced standing of 90 credits.
EXSC 455 American College of Sport Medicine Health Fitness Instructor Workshop (1:0.5:1)
The American College of Sports Medicine's Health Fitness Instructor Workshop will provide structured experiences in the classroom, laboratory and exercise arenas to improve the knowledge, skills and abilities in health-related physical fitness assessment and exercise programming as outlined by the American College of Sports Medicine guidelines. Prerequisites: EXSC 100, 310, and/or advanced standing of 90 credits.

## EXSC 456 Certified Strength and Conditioning Specialist Workshop (1:0:2)

This workshop will provide structured experiences through instruction in the specific theoretical and practical concepts of strength and conditioning as they relate to the National Strength and Conditioning Association certification requirements. Upon completion of the workshop the student will be eligible to take the Certified Strength and Conditioning Specialist exam offered through the NSCA. Prerequisites: EXSC 310 and 322.

## EXSC 461 Experimental Exercise Physiology (3:2:2)

This course will address various physiological conditions which impact physical performances. Experimental design and data collection techniques commonly used in Exercise Science literature will be addressed. Mini-experiments (sleep deprivation, carbohydrate ingestion, oxygen supplementation, caffeine ingestions, etc.) will be utilized to demonstrate various physiological responses in the exercise arena. Prerequisites: EXSC 310 and 311.

## EXSC 462 Seminar in Exercise Physiology (3:3:0)

This seminar is designed to focus on the study and discussion of recent experimental and descriptive work in exercise science. Emphasis is placed on student's oral presentations with class interactions. Critical thinking and evaluation of research literature is included. Concepts and issues raised by students are reviewed and further discussed with leadership of the instructor. Integration of previous exercise science course material as well as recent issues are the objectives of this course. Prerequisites: EXSC 310 and 311.

## EXSC 463 Neuromuscular Adaptations to Exercise (4:3:2)

This course is designed to study skeletal muscle physiology as it relates to exercise, and the physiological adaptations that occur following alterations in mechanical loading. Concepts relating to skeletal muscle adaptation during exercise training and inactivity are treated in both lecture and laboratory experiences. Prerequisites: EXSC 202, 310, and 311.

## EXSC 485 Independent Study (Semester hours arranged)

This course deals with independent research and study under the direction of a faculty member and is designed to deepen the student's interest in a particular area of an academic field. The directing faculty member will be available exclusively to the student for a minimum of five hours per credit. Approval for enrollment must be obtained from the faculty member and from the Department chair. Approval and granting of credit must be in accordance with procedures and standards established by departmental faculty. The student must present a study prospectus prior to approval. Prerequisites: EXSC 100, 15 credits in EXSC.
EXSC 486 Field Experiences and Internships (Semester hours arranged)

## Requirements for Approval:

All internship sites must be approved by the department faculty. Each application for an internship must be approved by the faculty member in charge of the experience, the director/supervisor of the site where the internship will be done, and the department chair. Before application is made, students must meet the following requirements:

1. Have faculty recommendation based on qualities essential for success in the assigned environment.
2. Have successfully completed at least 96 semester hours of credit ( 45 hours in ATSM).
3. Have no incomplete grades in required courses.
4. Have a minimum average of 2.0 GPA overall and in the major.
5. Application deadlines are:
a. October 15 for spring semester internships;
b. March 15 for fall and summer internships

# Bachelor of Science Major in Exercise Science With a Concentration in Exercise Physiology (Sample) Program Curriculum Plan 

Fall
Freshman Year
Spring

| EXSC 100 Intro to Exercise Science | 3 | EXSC 202 Kinesiology -Applied Anatomy | 3 |
| :--- | ---: | :--- | ---: |
| EXSC 120 Physical Conditioning | 1 | BIOL 112 Anatomy and Physiology II (GE) | 4 |
| BIOL 111 Anatomy and Physiology I (GE) | 4 | CPSC 100 Personal Computers (GE) | 3 |
| ENGL 103 English Composition | 3 | General Education | 3 |
| General Education | 3 | General Education | 3 |
| Subtotal | $\mathbf{1 4}$ | Subtotal | $\mathbf{1 6}$ |

Fall
Sophomore Year
Spring

| EXSC 122 Strength Training | 1 | EXSC 311 Exercise Physiology II | 3 |
| :--- | ---: | :--- | ---: |
| EXSC 203 Kinesiology - <br> Mechanical Analysis | 3 | EXSC 322 Strength and Conditioning Theory | 3 |
| EXSC 310 Exercise Physiology I | 3 | ATEP 230 Prevention and Management of <br> Sport and Fitness Injuries | 3 |
| CHEM 111 General Chemistry I (GE) | 3 | MATH 110 General Statistics (GE) | 3 |
| General Education | 3 | General Education | 3 |
| General Education | 3 |  |  |
| Subtotal | $\mathbf{1 6}$ | Subtotal | $\mathbf{1 5}$ |


| Fall |  |  | Spring |
| :--- | ---: | :--- | ---: |
| EXSC 121 Aerobic Fitness Activities | 1 | EXSC 441 Environmental Exercise Physiology | 3 |
| EXSC 330 Health-Related Fitness Assess- <br> ment and Exercise Programming | 3 | EXSC 447 Sport Nutrition | 3 |
| EXSC 451 Aerobic Fitness Workshop | 2 | EXSC 452 Exercise \& Weight Control <br> Workshop | 2 |
| EXSC 453 Reducing Coronary Heart <br> Disease Workshop | 2 | EXSC 454 Anaerobic Training Workshop | 2 |
| General Education | 3 | Elective | 3 |
| General Education | 3 | General Education | 3 |
| Subtotal | $\mathbf{1 4}$ | Subtotal | $\mathbf{1 6}$ |


| Fall |  |  |  |
| :--- | ---: | :--- | ---: |
| EXSC 402 Psychology of Sport \& Exercise 3 EXSC 410 O \& A Exercise Science Programs 3 <br> EXSC 461 Experimental Exercise <br> Physiology 3 EXSC 445 Seminar in Adult Fitness Programs 3 <br> EXSC 431 Analysis of Performance Skills 3 EXSC 455 ACSM HFI Workshop 1 <br> Elective 3 EXSC 462 Seminar in Exercise Physiology 3 <br> General Education 3 EXSC 485/486 Research Project or Internship 3 <br>   Elective 1 <br> Subtotal $\mathbf{1 5}$ Subtotal $\mathbf{1 4}$ |  |  |  |

# Bachelor of Science Major in Exercise Science With a Concentration in Sport and Exercise Conditioning <br> (Sample) Program Curriculum Plan 

| Fall Spring |
| :--- | ---: | :--- | ---: |
| EXSC 100 Intro to Exercise Science 3 EXSC 202 Kinesiology - Applied Anatomy 3 <br> BIOL 111 Anatomy and Physiology I (GE) 4 BIOL 112 Anatomy and Physiology II (GE) 4 <br> ENGL 103 English Composition 3 CPSC 100 Personal Computers (GE) 3 <br> EXSC 120 Physical Conditioning 1 General Education 3 <br> General Education 3 General Education 3 <br> Subtotal 14 Subtotal $\mathbf{1 6}$ |


| Fall Spring |  |  |  |
| :--- | ---: | :--- | ---: |
| EXSC 122 Strength Training 1 EXSC 311 Exercise Physiology II 3 <br> EXSC 203 Kinesiology - Mechanical Analysis 3 EXSC 322 Strength/Conditioning Theory 3 <br> EXSC 310 Exercise Physiology I 3 ATEP 203 Prevention and Management of <br> Sport and Fitness Injuries 3 <br> General Education 3 General Education 3 <br> General Education 3 General Education 3 <br> General Education 3   <br> Subtotal $\mathbf{1 6}$ Subtotal $\mathbf{1 5}$ |  |  |  |


| Fall Sunior Yearing |  |  |  |
| :--- | ---: | :--- | ---: |
| EXSC 121 Aerobic Fitness Activities 1 EXSC 447 Sport Nutrition |  |  |  |
| EXSC 342 Power Training for Sport <br> Performance | 1 | EXSC Ex. \& Wt. Control Workshop | 2 |
| EXSC 330 Health-Related Fitness Assessment <br> and Exercise Programming | 3 | EXSC 454 Anaerobic Training Workshop | 2 |
| EXSC 451 Aerobic Fitness Workshop | 2 | Elective | 3 |
| EXSC 453 CHD Workshop | 2 | General Education | 3 |
| General Education | 3 | General Education | 3 |
| General Education | 3 |  |  |
| Subtotal | $\mathbf{1 5}$ | Subtotal | $\mathbf{1 6}$ |

Senior Year

|  | Spring |  |  |
| :--- | ---: | :--- | ---: |
| EXSC 402 Psychology of Sports \& Exercise | 3 | EXSC 445 Seminar in Adult Fitness | 3 |
| EXSC 410 0 \& A Exercise Science Programs | 3 | EXSC 455 ACSM HFI Workshop | 1 |
| EXSC 431 Analysis of Performance Skills | 3 | EXSC 456 CSCS Workshop | 1 |
| General Education | 3 | EXSC 486 Internship | 3 |
| Elective | 3 | Elective | 5 |
| Subtotal | $\mathbf{1 5}$ | Subtotal | $\mathbf{1 3}$ |
| TOTAL CREDITS |  |  |  | | $\mathbf{1 2 0}$ |
| :--- |

# Fitness (FIT) General Education Activity Courses Movement Activities and Lifetime Fitness (FIT) 

School of Health Sciences and Human Performance<br>Faculty of Human Performance

Koehler Fieldhouse
570-422-3231
www.esu.edu/mses

## Department faculty Professor:

Associate Professor:
Assistant Professor:
Instructors:

Elizabeth Gibbons, chair (lgibbons@po-box.esu.edu)
Kevin Casebolt (kcasebolt@po-box.esu.edu)
Chad Witmer (cwitmer@po-box.esu.edu)
Catherine Culnane (cculnane@po-box.esu.edu)
Shawn Munford (smunford@po-box.esu.edu)

FIT courses are activity courses designed to meet General Education Requirements. These courses are for non-Human Performance Majors: Physical Education, Athletic Training, Sport Studies, or Exercise Science. To fulfill this requirement, a student must successfully complete two credits selected from the Lifetime Fitness courses offered by the Department of Movement Activities and Lifetime Fitness (FIT). This may be accomplished with two 1-credit courses or with one 2-credit course.

## Transfers and Accommodations:

All FIT activities will include accommodations to meet the physical activity needs of individuals with disabilities in accordance with the Americans with Disabilities Act. Prior military service or law enforcement experience is not accepted for FIT credit.

## Course Descriptions

(Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title.)

## FIT 101 Lifetime Fitness and Physical Assessment (2:1:3)

This one-semester long course is designed to disseminate foundational information of concepts of physical assessment and lifetime fitness. The student will be able to demonstrate the skills needed to enrich the quality of life through physical activities that enhance cultural awareness and promote lifetime fitness (General Education Outcome \#8). This course satisfies in its entirety the General Education Physical Activity requirement.
FIT 110 Aerobic Dance (1:0:1.5)
This course is designed to develop cardio respiratory conditioning, muscle tone, improved posture, and other elements of fitness through a variety of dance and exercise movements performed to a musical accompaniment.

## FIT 111 Personal Fitness I (1:0:1.5)

This course assists the student in developing a physical activity program based upon a wellness assessment of body composition, flexibility, strength, CHD risk factors, aerobic capacity, and diet. Students work with the instructor during the quarter to determine what prescriptive activities will compose their future program and how to implement those suggestions.
FIT 113 Self Defense (1:0:1.5)
This course is designed to give student exposure to all phases of self-defense. It includes: combative skills, counter moves, body attitudes, self-assertion, legal implications and psychological aspects of self-defense.

## FIT 114 Weight Training (1:0:1.5)

The course provides students the opportunity to acquire a basic knowledge concerning weight training programs and their uses, to become familiar with a wide range of basic lifts and various self-testing procedures, and to develop an individualized weight-training program which will promote an optimal level of functional strength and endurance.

## FIT 115 Tae Kwon Do I (1:0:1.5)

Students receive instruction in the basic skills of this martial art: sparring, kicking, punching, selfdefense, and breathing techniques. The mental training elements such as patience, self control, concentration, perseverance, and courtesy are an integral part of this course.

## FIT 116 Aqua Aerobics (1:0:1.5)

This course is designed to develop cardio respiratory conditioning and muscle tone, improve posture, increase flexibility, and enhance other elements of fitness through a wide variety of dance and callisthenic moves performed in the water. *If the student is presently under a physician's care and/or is presently taking medication for any reason, the student must indicate this to the instructor.

## FIT 120 Archery (1:0:1.5)

This course provides instruction in the basic techniques of target archery, low methods of anchoring, and bowsight method of aiming. The course includes archery films, novelty, and tournament shooting.

## FIT 121 Fencing I (1:0:1.5)

This course develops basic skills and an understanding of foil fencing. Position and footwork are mastered, and students fence for touches thereby learning the competitive aspects of fencing.

## FIT 122 Golf I (1:0:1.5)

This course provides instruction and practice in the basic strokes including driving, approaching (long and short), and putting. Sociocultural aspects of the sport, the rules, and etiquette are included. Golf course experience is included at nominal expense.

## FIT 123 Volleyball I (1:0:1.5)

Students receive instruction in the basic fundamentals: overhand and underhand serve, overhand pass, underhand pass, spike and block. Basic offensive and defensive strategies and the rules of play governing the use of the basic skills are taught through single sex and co-ed teams of six, three, and two players.

## FIT 127 Slow Pitch Softball (1:0:1.5)

This course provides for the development and use of softball skills in the slow pitch version of softball. The use of the basic skills of catching, fielding, throwing, pitching, and hitting will be emphasized, especially within the context of the playing of the game.

## FIT 128 Soccer (1:0:1.5)

This course is designed to provide development and use of basic skills of soccer such as passing, trapping, heading, and shooting. Those skills as well as rules of the game and actual game play will be emphasized.

## FIT 130 Badminton (1:0:1.5)

This course provides instruction in the fundamental skills of the sport with emphasis on singles and doubles play, rules, and strategy. Serves, net shots, clears, drops, drives, and smashes are developed.

## FIT 131 Racquetball I (1:0:1.5)

Students receive instruction in fundamental skills: forehand, backhand, and overhead techniques. The course includes the sociocultural aspects of the sport and the rules. The strategy involved in games of singles, cut throat, and doubles is presented.

## FIT 132 Tennis I (1:0:1.5)

Students receive instruction and practice in the basic skills: the service, service return, groundstrokes, approach shot, and net play. The course includes the sociocultural aspects of the sport and the rules and strategy of the games of singles and doubles. Student must furnish own racket.
FIT 140 Dance I (1:0:1.5)
In this survey course, students receive practice in the fundamentals of rhythm and dance. Students experience basic axial and locomotor movement and explore the qualities of movement using varied space and time relationships and energy-release.

## FIT 141 International Ethnic Dance (1:0:1.5)

This course presents a wide variety of international folk dances including the square and contra dances familiar to the United States. Theoretical considerations concern the characteristics, ethnic sources, and values of the social forms of dance.

## FIT 142 Social and Ballroom Dancing (1:0:1.5)

This course is designed to introduce students to basic social and ballroom dances including foxtrot, waltz, jitterbug, swing, country-western, cha-cha, and tango. Students will become familiar with basic step patterns and variations and skills of leading and following effectively.

## FIT 153 Swimming I (1:0:1.5)

This course is specifically designed for non-swimmers, those fearful of the water, and persons who possess very little swimming ability. The primary course objectives are to acquire self-confidence in the water and to become "water safe." Basic adjustment skills, rhythmic breathing, and basic survival strokes and skills are taught.

## FIT 161 Horseback Riding I (1:0:1.5)

This course includes the skills necessary in developing a safe and secure seat with effective use of the aids for the English style of riding. Students learn the fundamentals of handling a horse and tack safely and appropriately on and off the ground. Students must have a tetanus shot and insurance to cover accidental injury. Tetanus shots may be obtained at the Health Center.

## FIT 162 Ice Skating (1:0:1.5)

The ice skating course is designed to develop the fundamental skills of ice skating, including forward and backward skating, basic turns, and stops. Recognition and performance of proper edges and elementary school figures are included. Students are urged to furnish their own figure skates; rental skates are available.

## FIT 163 Skiing/Snowboarding I (1:0:1.5)

Skiing/Snowboarding I consists of eight lessons with instruction provided by the staff of local professional ski/snowboard schools. This course is designed for students who have little or no skiing or riding experience. This course will cover proper use of equipment, on-mountain safety and the correct use of lifts. Progressive skill instruction on snow will focus on balance, sliding, stopping, and turning techniques. Students will learn at their own pace on mountain terrain matching their ability level.

## FIT 164 Roller Skating (1:0:1.5)

Students receive instruction and practice in the basic skills: proper balance, best skating form, start, stop, forward and backward roll, proper stroking, mohawk turns, crosspulls, fundamental hops and jumps, etc. The course will cover the aerobic aspects as well, including the necessary warm-up stretching exercises for an effective workout. Skates will be furnished at the facility, unless students have their own.

## FIT 171 International and Multicultural Games (1:0:1.5)

This course is designed to acquaint the student with physical activity and games from different countries. Students will be exposed to the nature of physical activity and an exploration of games from different countries. Students will broaden their cultural horizons and gain a better appreciation for physical activity as it is conducted by diverse cultures.
FIT 210 GE: Elementary Ballet (2:1:3)
This course will include techniques in elementary ballet including alignment, barre, center work, basic enchainements, and room and body directions, with emphasis on developing the physical and expressive potential of the human body. The class will enable students to understand and synthesize the kinesiological and anatomical, historical and theoretical, and aesthetic aspects of dance. Prerequisite: FIT 140 or PETE 110, or equivalent dance training.

## FIT 214 Yoga I (1:0:1.5)

Yoga is a system of exercise that improves the health of the entire body and physiological functioning. The course includes asanas (postures), relaxation techniques, and breathing techniques as a means of unifying body and mind.
FIT 215 GE: Elementary Lyrical Modern Dance (2:1:3)
This is an elementary level modern dance technique course. It explores a variety of axial and lo-
comotor techniques and simple combinations characteristic of contemporary dance. The ability to apply skills in the art form is implied in any study of technique; this ability will be realized through improvisational and compositional experiences. Prerequisite: FIT 140 or PETE 110, or equivalent dance training.

## FIT 223 Volleyball II (1:0:1.5)

This course is designed to provide further instruction in the fundamentals of volleyball such as the underhand and overhand serve, underhand and overhand pass, attacks and block. An in depth examination of offensive and defensive formations will be emphasized in an effort to structure and improve game play. Additionally, students will gain exposure to advanced skills such as digging and jump serving. Prerequisite: FIT 123 or equivalent.

## FIT 232 Tennis II (1:0:1.5)

The course reviews the basic skills, introduces the approach shot, volley, overhead, the lob, and the half volley. The course includes strategy and competition in singles and doubles game-play. Student must furnish own racquet. Prerequisite: FIT 132 or equivalent.

## FIT 240 Dance II (1:0:1.5)

Students explore movement as a form of artistic expression. The course includes timing in axial and locomotor movement, improvisation (exploring the space, time, and energy qualities for their expressive values), and the creation of original choreographic studies (students work at a level commensurate with their prior experience). Theoretical considerations include historical development, characteristics, prominent artists, and present status of contemporary dance. Prerequisite: FIT 140 or equivalent.

## FIT 256 Scuba Diving (1:0:3)

This program is designed to prepare students with essential knowledge and diving skills to participate in open water scuba diving activities. Upon completion of the course, students will be qualified to do an open water dive for certification. Prerequisites: Students must pass a water pretest to continue in the course: a) distance swim of 250 yards nonstop, b) survival swim for 10 minutes, c) underwater swim of 50 feet with no push off or dive, d) recovery of a 10 lb . diving brick from deep water ( 12 feet).

## FIT 261 Horseback Riding II (1:0:1.5)

Students receive further instruction in the English style of riding. The course includes more advanced rein effects and leg aids in the gaits which lead up to eventing and showing. Horse management and the care and fitting of saddlery are included. Students must have a tetanus shot and insurance to cover accidental injury. Tetanus shots may be obtained at the Health Center. Prerequisite: FIT 161 or equivalent.

## FIT 263 Skiing/Snowboarding II (1:0:1.5)

Skiing/Snowboarding II is a continuation of Skiing/Snowboarding I, with emphasis placed on higher skill development. This course consists of eight lessons with instruction provided by the staff of local professional ski/snowboard schools. This course is designed for students who have at least an intermediate level of skiing or riding ability. Course content will concentrate on refining turning skills as well as teaching advanced carving techniques. Students will be exposed to skiing/riding on steep terrain under a variety of conditions such as bumps. Prerequisite: FIT 163.

## FIT 271 Adventure Activities (1:0:1.5)

Adventure activities involve nontraditional games and exercises, group initiative problems, and low and high ropes course elements. This course will provide the student with opportunities to meet new challenges, face risk, and overcome obstacles through individual and group effort. Students are invited to venture forth into the unknown, exercising choice and decision making in meeting physically demanding challenges. Extensive use will be made of the Stony Acres ropes course. Students must show evidence of health/accident insurance.
FIT 272 Backpacking (1:0:1.5)
Students are instructed in basic skills of backpacking, wilderness camping and cooking, navigation, and trip planning. Students will plan and carry out an overnight trip in the Stroudsburg area.

## FIT 273 Basic Sailing (1:0:1.5)

Instruction will be given in the fundamentals of sailing and small craft safety. The students will make practical application of the skills in both solo and crew experiences. An introduction to sailboat racing is also featured. Swimming and deep-water survival are essential.

## FIT 274 Canoeing I (1:0:1.5)

This course focuses on the American Red Cross Basic Canoeing skills essential in handling a canoe safely and efficiently on land and in water. Students acquire paddling skills in pool, lake, and river environments. A student must have adequate swimming skills and be able to function in a deep-water environment. Qualified students receive the American Red Cross Basic Canoeing Certification.

## FIT 275 Cycling (1:0:1.5)

This course introduces the student to general knowledge of buying and maintaining a bicycle. The course also instructs in basic cycling skills such as the biomechanics of pedaling, hand positions, braking, group riding, touring, and safety. Students must provide their own bicycles. Actual riding is a major focus of the course.

## FIT 290 Special Topics (1:0:1.5)

These courses are designed to meet specific needs of groups of students. The courses will be offered on a trial basis in order to determine the demand and value of introducing them as part of the university curriculum.

## FIT 314 GE: Creative Experiences in Dance (1:0:3)

This course provides the student with intermediate to advanced dance experience (minimum 3 years of study) guidance in individual and group experiences in dance. Using a related arts approach it examines the expressive quality of movement in the use of time, space, and energy factors. Improvisation and choreography are included. Fulfills GE requirement for Performing Arts. Prerequisites: PETE 110 or FIT 140; PETE or DANC 114, PETE or DANC or FIT 210; PETE or DANC or FIT 215.

FIT 315 GE: Dance Performance and Production (1:0:3)
This course consists of performance, choreography, and production work involved with dance as a performing art. Work in performance and technical areas is included, and participation in production is required. This course may be elected more than once for credit (maximum of 3 times). Prerequisite: FIT 140, PETE 110, or equivalent dance instruction.

## FIT 353 Lifeguard Training (1:0:3)

Successful completion of this course leads to acquisition of the American Red Cross Lifeguard Training Certificate. This course replaces the Advanced Lifesaving course. The Lifeguard Training course will provide participants with the skills and knowledge required to be a lifeguard at a swimming pool or protected (non-surf) open-water beach. Prerequisites: 500 yards continuous swim consisting of front crawl, breaststroke and sidestroke; retrieval of a 10 lb . brick from 8 feet of water and treading water for 2 minutes using the legs only.
FIT 453 Water Safety Instructor (1:0:3)
Satisfactory completion of this course leads to certification as a Red Cross Water Safety Instructor. The course focuses on the development of skill proficiency and teaching proficiency of swimming and lifesaving skills. The Red Cross Introduction to Health Services Education course (IHSE) is incorporated into the Water Safety course. Course is also listed as MSES 453. Prerequisites: Current lifeguard training card; successful completion of Red Cross swimming prerequisite.

## FIT 454 Lifeguard Instructor (1:0:3)

Satisfactory completion of this course leads to certification as an American Red Cross Lifeguard Instructor. This course prepares instructor candidates to teach Lifeguard Training, Basic Water Safety, Emergency Water Safety, and the Lifeguard Review course. Prerequisites: Lifeguard Training Certificate (FIT/MSES 353); current CPR Certificate/standard First Aid Certificate.

## FIT 463 Basic Alpine Ski Instructor (1:0:1.5)

This course is designed to provide the student with knowledge of the various approaches to ski instructing and teaching philosophies. It also enhances the student's development of the technical aspects for teaching skiing fundamentals to adults and children. Prerequisite: FIT 263.

# Foreign Languages 

School of Arts and Sciences<br>The Faculty of Arts and Letters

Stroud Hall, Room 208
570-422-3407
www.esu.edu/fld

| Department faculty <br> Professor: |  |
| :--- | :--- |
| Associate Professors: | R. Squier Ball (sball@po-box.esu.edu) |
|  | Alfredo Ahumada (aahumada@po-box.esu.edu) |
|  | Jeffrey Ruth (jruth@po-box.esu.edu) |
|  | Ralph Vitello, chair (rvitello@po-box.esu.edu) |

The Foreign Languages Department offers baccalaureate degree programs in French and Spanish. An Interdisciplinary German Studies Minor is also available, as are minors in French and Spanish. The primary focus of our major and minor programs is to teach students to communicate effectively in the target language. Emphasis is placed on situating language study within a larger cultural and historical context.

These programs are designed to prepare students for careers in foreign language education, international business and finance, international studies, translation services, and relevant positions in the health and medical professions. The B.A. major in French or Spanish offers excellent preparation for graduate studies in a wide range of fields, including foreign languages, comparative literatures and cultures, international relations, diplomatic studies and law school. The B.S. major in French or Spanish offers K-12 teaching certification through the Pennsylvania Department of Education. Our teaching certification programs in French and Spanish are accredited by PDE and NCATE (National Council for Accreditation of Teacher Education).

Career prospects for foreign language majors, both in the liberal arts and the teaching programs, are very strong and continue to expand.
The course requirements and descriptions for both the B.A. and the B.S. are listed below, followed by a suggested plan for completing these degrees in eight semesters.

## Bachelor of Arts with a French major- $\mathbf{3 0}$ semester hours

- Required major courses: FLFR 235, 315, 336, 343; 18 additional semester hours, three of which must be met with a 400 -level literature course. (Language course 116 is not counted toward the major.)
- Please see the university requirements in this catalog.

Bachelor of Arts with a Spanish major- $\mathbf{3 0}$ semester hours

- Required major courses: FLSP 310, 315 (or 416), 336; FLNG 361; 18 additional semester hours, three of which must be met with a 400 level literature course. (Language course 116 is not counted toward the major.)
- Please see the university requirements in this catalog.

Note: All students pursuing a Bachelor of Arts degree in French or Spanish must complete a minimum of 12 credits at ESU in their target language at a level higher than Language 215 (Language IV). Of these 12 credits, a minimum of three (3) credits must be at the 400 level. Students must maintain a minimum quality point average of 2.50 in the major. No grade less than "C" will be accepted in any course within the major. Additional information is in the Foreign Language Department and available upon request. The department encourages students majoring in a language to participate in foreign study. Appropriate credit will be awarded for courses taken through programs approved by the department.

## Bachelor of Science with a French major (Education)- $\mathbf{3 1}$ semester hours

- Required major courses: FLFR 235, 315, 336; 343, FLNG 361, 499; 15 additional semester hours, three of which must be met with a 400-level literature course. (Language courses 116 and 117 are not counted toward the major.)
- Required professional education courses: MCOM 262; PSED 161, 242, 416, 420, 421, 430, 431; REED 321.
- Required tests: ACTFL Oral Proficiency Interview (with a ranking at "Advanced Low"), PRAXIS I, PRAXIS Fundamental Subjects Content Knowledge (\#30511), PRAXIS French Content Knowledge (\#20173).
- Note: All students pursuing a Bachelor of Science Degree in French must maintain a minimum quality point average of 3.0 in the major. No grade less than "B" will be accepted for the major.
The Commonwealth of Pennsylvania has established new requirements for all candidates in teacher preparation programs. Please refer to the section The College of Education in this catalog for specific requirements for admission into teacher education programs.
- Please see the university requirements in this catalog.
- Note: Certification encompasses kindergarten through grade 12.


## Bachelor of Science with a Spanish major (Education)- $\mathbf{3 1}$ semester hours

- Required major courses: FLSP, 310, 315 (or 416), 336; FLNG 361, 499; 18 additional semester hours, three of which must be met with a 400 level literature course. (Language courses 116 and 117 are not counted toward the major.)
- Required professional education courses: MCOM 262; PSED 161, 242, 416, 420, 421, 430, 431; REED 321.
- Required tests: ACTFL Oral Proficiency Interview (with a ranking at "Advanced Low"), PRAXIS I, PRAXIS Fundamental Subjects Content Knowledge (\#30511), PRAXIS Spanish Content Knowledge (\#10191).
- Note: All students pursuing a Bachelor of Science Degree in Spanish must maintain a minimum quality point average of 3.0 in the major. No grade less than B will be accepted for the major.

The Commonwealth of Pennsylvania has established new requirements for all candidates in teacher preparation programs. Please refer to the section The College of Education in this catalog for specific requirements for admission into teacher education programs.

- Please see the university requirements in this catalog.
- Note: Certification encompasses kindergarten through grade twelve.

Note: All students pursuing a Bachelor of Science degree in French or Spanish must complete a minimum of 12 credits at ESU in their target language at a level higher than Language 215 (Language IV). Of these 12 credits, a minimum of three (3) credits must be at the 400 level.

Students seeking a Bachelor of Science degree or certification in French or Spanish must take the ACTFL Telephonic Oral Proficiency Interview Test before entering student teaching. It is expected that students will pass the test at the Advanced Low Level. Candidates for the Bachelor of Science degree in Foreign Language will also be required to demonstrate appropriate language proficiency through an exit interview conducted by faculty members within the appropriate language component. Students must maintain a minimum quality point average of 3.0 in the major. No grade less than B will be accepted in any course within the major.

Additional information is in the Foreign Language Department, and available upon request. The department encourages students majoring in a language to participate in foreign study. Appropriate credit will be awarded for courses taken through programs approved by the department.

## Students Returning for Certification Only:

## A. Requirements for Students with a Previous Degree in a Field other than Language of Certification

These students must follow all requirements as set forth for the Bachelor of Science candidates. Students must complete the equivalent of 27 upper-level credits in the language plus a Linguistics course and a Methods course. Native-speakers must take all course work at the 300-400 levels. (See B.S. Requirements)
B. Requirements for Students with a Previous Degree in Language of Certification

These students will be handled on a case-by-case basis. An oral interview in the target language will be conducted with members of the faculty from the language area. Following this initial interview, the faculty of the language area, in consultation with the chair, will decide upon the number of additional credits (if any) required of the candidate.

## Bachelor of Arts or Bachelor of Science with a double majorForeign Language + Foreign Language

Language levels 116 and 117 are counted for one of the languages. For all other requirements, refer to the Foreign Language B.A. or B.S. program.

## German Studies Interdisciplinary Minor

This minor provides an integrated program of studies which combines the study of German (9 credits) with relevant courses from other departments ( 9 credits). The nine German credits may be chosen from the following courses; FLGR 116, 117, 120, 214 or any upper-level German course approved by the Department. Corequisites may be chosen from ART 202, ENGL 273, GEOG 234, HIST 281 or 473 , PHIL 318 or 457, POLS 222 or 426. Two of the corequisites should be at the 300 -level or above. A minimum of 12 credits must be taken in residence. A minimum QPA of 2.5 must be maintained in program courses.

## French or Spanish minor

Students will be required to complete a minimum of 18 credits in the target language. Any target language courses may be counted for the minor, except the following: FLFR 120; FLFR 141; FLSP 120; FLSP 143. Twelve semester hours in the minor must be completed at East Stroudsburg University. This residency requirement applies to all students, including transfer students who arrive with credits completed elsewhere. Students are required to maintain a QPA of 2.50 . No grade less than "C" will be accepted in any course within the minor. Native speakers choosing a minor in their native language will be required to complete twelve credits at the 300-400 level.

## Elementary Education Concentration

This is a single subject area of concentration in French or Spanish. Students will be required to complete a minimum of 12 credits in the target language starting with language levels III and IV. Courses must include one of the following: FLFR 235; FLFR/FLSP 315; FLFR/FLSP 336. Students must maintain a 2.50 quality point average in their area of concentration. No grade less than "C" will be accepted in any course within the concentration.

## Foreign Language General

The following courses may not be counted toward the major: FLFR 120; FLSP 120; FLFR 141; FLSP 143; FLSP 233; FLSP 234. These courses do count toward General Education.

## Departmental Authorization for Native/Near-native Speakers:

This option is available only to native speakers of French or Spanish. Such a student will apply for authorization only after having spent at least two semesters at East Stroudsburg University and only after having completed two language courses at ESU at the 300 level or above, and having earned a QPA of 3.0 or better in the major. The student will be required to write a detailed statement in the target language concerning the extent of language experience and the re-
lation of that language experience to a legitimate course of study. Each application will receive the consideration of the total Department membership, and the decision concerning the number of credits to be granted will be decided collaboratively between the Department Chair and the professors of the language area in question.
Regarding the policy on departmental authorization, the maximum number of credits which may be granted by the department is six (6). The Foreign Language Department may authorize credit only for those languages in which it offers a major, namely French or Spanish. This policy also applies to any credits granted through examination. (See Department of Foreign Languages for specific information.)

Native speakers choosing a major in their native language will be required to complete twelve (12) credits at the 300-400 level, in addition to required courses. Please note: Native speakers choosing courses in their native language (but not majoring in the language) will be placed in appropriate courses by Foreign Language Faculty.

General Education Offerings: Students with advanced language skills who start a language sequence at a level above the GE courses listed may substitute that course(s) as valid GE offerings.

## Course Descriptions

(Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title.)

## FLNG 120 GE: Classical Mythology (3:3:0)

This course will study the nature and development of classical mythology through its various manifestations in the Greco-Roman world. Topics will include cosmology, Homeric heroes, the Olympians, fertility myths, and ancient religious customs. The class will read from a wide range of primary texts (Homer, Ovid, Virgil) and will also examine the legacy of classical mythology in selected works of modern art and literature.

## FLNG 361 Introduction to Linguistics (3:3:0)

This course examines the nature of language. Characteristics of phonological and grammatical systems and techniques of linguistic analysis are considered. The field of linguistics is discussed. Prerequisite: Advanced standing.

## FLNG 499 Student Teaching Internship (1:0:TBA)

This course is designed to provide the student with an opportunity to work with a faculty member in the student's primary Arts and Sciences discipline during the student teaching experience. The course will enhance the student's ability to understand and maximize the relationship between disciplinary subject matter and pedagogy. Prerequisite: Qualification to student teach. Concurrent registration in PSED 430 or 431.


#### Abstract

ARABIC

\section*{FLAR 116 GE: Arabic I (3:3:0)}

This is a foundation course in elementary Arabic. Emphasis will be placed on developing basic oral proficiency, studying the structure of the language, and examining its relevant cultural contexts. Multimedia resources at the Language Learning Center will supplement course materials. Prerequisites: Students with no previous study of the language, or no more than one year of previous study, are admitted. This is not a course for heritage speakers of Arabic. FLAR 117 GE: Arabic II (3:3:0) This course completes the first-year introduction to Arabic, providing students with the knowledge and skills needed to function at the elementary level. Emphasis will be placed on developing oral proficiency appropriate to level II, studying grammatical structures of the language, and further examining relevant cultural context. Multimedia resources at the Language Learning Center will supplement course materials. Prerequisites: FLAR 116 or the equivalent of one semester of col-lege-level study, or no more that 2-3 years high school study. This is not a course for heritage speakers of Arabic.


## ASIAN LANGUAGES

## FLCH 116 GE: Chinese I (3:3:0)

This is a foundation course in Chinese language. It will provide the students with the basic skills of speaking and listening. It will include extensive study of language structures and vocabulary aimed at facilitating authentic communication with native speakers. Use of the language lab as determined by the instructor will be required. Prerequisites: Students with no previous study of the language, or no more than 1 year of previous study, will be admitted.

## FLCH 117 GE: Chinese II (3:3:0)

This course will further develop skills acquired in Chinese I. It will provide the students with extended practice in speaking and listening. It will include extensive study of language structures and vocabulary aimed at facilitating authentic communication with native speakers. Use of the language lab as determined by the instructor will be required. Prerequisites: FLCH 116 or equivalent of no more than one semester of college-level study.

## FLJA 116 GE: Japanese I (3:3:0)

This is a foundation course in Japanese language. It will provide the students with the basic skills of speaking and listening. It will include extensive study of language structures and vocabulary aimed at facilitating authentic communication with native speakers. Use of the language lab as determined by the instructor will be required. Prerequisites: Students with no previous study in the language, or no more than 1 year of previous study, will be admitted.

## FLJA 117 GE: Japanese II (3:3:0)

This course will further develop skills acquired in Japanese I. It will provide the students with extended practice in speaking and listening. It will include extensive study of language structures and vocabulary aimed at facilitating authentic communication with native speakers. Use of the language lab as determined by the instructor will be required. Prerequisites: FLJA 116 or equivalent of no more than one semester of college-level study.

## FRENCH

## FLFR 116 GE: French I (3:3:0)

This is a foundation course designed for the beginning student. It includes the study of grammar and reading materials and emphasizes social and cultural values. Use of the language laboratory as required by the instructor. Prerequisites: Students with no previous study of the language, or no more than 1 year of previous study, will be admitted.

## FLFR 117 GE: French II (3:3:0)

This is a continuation of French I. Its purpose is to further reinforce previously acquired basic language skills. Use of the language laboratory as required by the instructor. Prerequisite: FLFR 116 or equivalent of one semester of college-level study, or no more than 2-3 years combined total of junior high/high school language.

## FLFR 120 GE: French Masterpieces in Translation (3:3:0)

This is a general education course open to all students except French majors. It includes reading and analysis of representative French works, done in English translation, of the 19th and 20th centuries.

## FLFR 141 GE: French Influence on European Culture (3:3:0)

This course, in English translation, concentrates on original esthetic texts, which reveal the movement of ideas at two high points in French civilization. It shows the reasoning behind French baroque, classicism, romanticism, symbolism, Dadaism, and Surrealism. This course is open to all students except French majors.
FLFR 214 GE: French III (3:3:0)
This is an intermediate level course designed to improve the communicative skills of students who have studied French for one-year in college or 4 years in high school. Students will practice patterns of grammatical structures both orally and in written exercises. Prerequisites: FLFR 117, or four years of high school French.

FLFR 215 GE: French IV (3:3:0)
This is a continuation of the French III course, and is designed to further develop those skills already learned. New grammatical concepts will be learned as well. Prerequisite: FLFR 214 or equivalent high school preparation.
FLFR 221 Reading French (3:3:0)
This is an intermediate level course designed to meet the needs of students who are interested in learning to read French. Students will develop both active and passive vocabulary through reading materials, which are graded as to level of difficulty. Prerequisite: FLFR 214 or equivalent.
FLFR 231 GE: French for Travelers (3:3:0)
This is an intermediate language course designed for the student who wishes to acquire conversational skills, which will enable the student to travel more efficiently and with greater language ease in French-speaking countries. Prerequisites: FLFR 116 and 117, or equivalent.

## FLFR 235 Listening/Speaking French (3:3:0)

This is an intermediate course designed to develop the listening/speaking skills in the target language. The exercises will include conversations, commercials, and formal speeches. Students will be able to distinguish between formal and colloquial language. Prerequisite: FLFR 214 or equivalent.
FLFR 251 Translation: French (3:3:0)
This is an intermediate course designed to develop the facility of translation into English with texts, which are graded as to level of difficulty. Readings may include several modern short stories, current newspaper articles, magazine articles, and excerpts from various texts. Offered on demand. Prerequisite: FLFR 214 or equivalent.
FLFR 290 Special Topics (3:3:0) (Semester hours arranged)
These courses are designed to meet specific needs of students. Such courses are offered on a trial basis to determine the demand for and value of introducing them as part of the curriculum.
FLFR 301 Introduction to French and Francophone Literature (3:3:0)
This course includes reading and analysis of representative works of French and Francophone literature. Students will develop their linguistic skills through a series of interpretative essays and oral reports. Prerequisite: FLFR 215 or equivalent.
FLFR 302 French and Francophone Media (3:3:0)
This course will introduce students to the diversity of present-day media in France and the Frenchspeaking world. The course will cover a wide range of sources including print (newspapers, magazines), audio (live and recorded radio broadcasts), video (recorded programs from French television), and various electronic resources. Class participation, oral reports and written assignments will emphasize the development of language skills needed to comprehend and discuss the issues raised. Prerequisite: French 215 or equivalent.
FLFR 305 French and Francophone Cinema (3:3:0)
This course will involve screenings and discussions of selected films from three distinct periods: classic French cinema (Gance, Carne', Renoir), the new wave (Truffaut, Godard, Rohmer) and contemporary Francophone cinema. Students will present oral reports and write analytic essays in French on the films viewed. Prerequisites: FLFR 215 or 4 years of high school French.

## FLFR 307 French for Professional Communication (3:3:0)

Students will read, discuss, evaluate and translate a variety of sources reflecting current developments in the realms of business, science and technology. There will be an introduction to the specialized vocabulary of each profession with extensive practice in discussing topics relevant to these fields. Students will complete a series of oral and written assignments, including technical translations. Prerequisite: FLFR 215 or equivalent.

## FLFR 312 French Poetry (3:3:0)

This course will trace the evolution of poetic discourse in France, focusing on four periods: Renaissance love lyric, the Romantic poetics of hyperbole, Symbolist poetics (Baudelaire, Verlaine, Rimbaud, Mallarme) and twentieth-century innovations (Apollinaire, Valery, Breton, Eluard, Ponge, Michaux). The intertexual relationship of poetry to painting and music will help situate our reading within a broad cultural context. Students will present several reports and write brief essays in French on the poems studied. Prerequisite: FLFR 215 and FLFR 301 or equivalent.

## FLFR 315 French Grammar and Composition (3:3:0)

This course consists of a thorough review of grammar, verbs, and idioms with much practical exercise in composition; it is required for all majors. The course is offered on demand. Prerequisite: FLFR 235.

## FLFR 336 French Oral Practice (3:3:0)

This course is designed to help the student attain fluency in French. It includes a presentation, discussion, and criticism of timed oral reports on a wide variety of subjects, as well as individual use of the language laboratory. The class limit is 12 students and offered on demand. Prerequisite: FLFR 235.

## FLFR 343 French Civilization (3:3:0)

This course covers the history, geography and cultural trends of France from early periods to the modern-day. The course is offered on demand. Prerequisite: FLFR 215.

## FLFR 401 Paris as Cultural Icon (3:3:0)

This course will examine selected works of fiction, poetry, films, paintings, photographs and other cultural artifacts which reflect the status of Paris as the capital of French culture. The class will study the links between the city's artistic status and the transformations operated by Haussmann, Mitterand and other civic leaders. Prerequisites: FLFR 301, and FLFR 215 or 4 years of high school French.

## FLFR 417 The French Literature of Ideas (3:3:0)

This course will trace the development of the "literature of ideas" in France from it's Renaissance origins in the "Essais" of Montaigne, through its Enlightenment manifestations in the writings of Voltaire, Diderot and Rousseau, its existential anxiety in Sartre and Camus, and its post-modern dissolution in texts by Barthes, Foucault and Derrida. A major theme of the course will be the historical and cultural implications of this tradition, such as the American Revolution's debt to the French Enlightenment or the pervasive post-war malaise in Europe which found its voice in existentialism. The course is conducted entirely in French. Prerequisites: FLFR 215 or 4 years of high school French, and FLFR 301.

## FLFR 423 Nineteenth Century French Literature (3:3:0)

This course examines the backgrounds and distinctive features of Romantic and Realistic periods. It includes readings in prose and poetry from representative authors, including Hugo, Vigny, Musset, Stendhal, Balzac, Zola, Flaubert, and Maupassant. The course is offered on demand. Prerequisites: FLFR 215, 221.

## FLFR 424 Twentieth Century French Literature (3:3:0)

This course surveys the significant writers of this century, including Proust, Gide, Colette, Sartre, Camus, and Beckett. The course is offered on demand. Prerequisites: FLFR 215, 221.

## FLFR 425 Seventeenth Century French Literature (3:3:0)

This course includes readings from Corneille, Racine, Moliere, and other representative writers of the century, as well as supplementary readings and reports on historical backgrounds. The course is offered on demand. Prerequisites: FLFR 215, 221.

## FLFR 426 Modern French Drama (3:3:0)

This course surveys the French Theatre from the late 19th century to the present. It includes a study of various dramatic forms as seen in the reading of significant plays. The course is offered on demand. Prerequisites: FLFR 215, 221.
FLFR 485 Independent Study (semester hours to be arranged)
FLFR 495 Seminar (3:3:0)

## GERMAN

## FLGR 116 GE: German I (3:3:0)

This is a foundation course designed for the beginning student. It includes the study of grammar and reading materials and emphasizes social and cultural values. Use of the language laboratory as required by the instructor. Prerequisites: Students with no previous study of the language, or no more than 1 year of previous study, will be admitted.

FLGR 117 GE: German II (3:3:0)
This is a continuation of German I. Its purpose is to further reinforce previously acquired basic language skills. Use of the language laboratory as required by the instructor. Prerequisite: FLGR 116 or equivalent of one semester of college-level study, or no more than 2-3 years combined total of junior high/high school language.
FLGR 120 GE: German Masterpieces in Translation (3:3:0)
Readings in English translation may include works by Kafka, Mann, Hesse, Brecht, and others. This is a general education course open to all students except German majors. No prerequisite.
FLGR 214 GE: German III (3:3:0)
This is an intermediate level course designed to meet the needs of students who are interested in reviewing German grammar. Students will practice patterns of grammatical structures both orally and in written exercises. Prerequisites: FLGR 117, or 4 years of high school German.
FLGR 215 GE: German IV (3:3:0)
This is a continuation of the German III course. The course is designed to further develop skills already learned as well as to introduce grammatical concepts of a more complex nature. Prerequisite: FLGR 214 or equivalent high school preparation.
FLGR 221 Reading German (3:3:0)
This is an intermediate level course designed to meet the needs of students who are interested in learning to read German. Students will develop both active and passive vocabulary through reading materials, which are graded as to level of difficulty. Prerequisite: FLGR 215 or equivalent.
FLGR 231 GE: German for Travelers (3:3:0)
This is an intermediate language course designed for the student who wishes to acquire conversational skills, which will enable the student to travel more efficiently and with greater language ease in German-speaking countries. Prerequisites: FLGR 116 and 117, or equivalent.
FLGR 235 Listening/Speaking German (3:3:0)
This is an intermediate course designed to develop the listening/speaking skills in the target language. The exercises will include conversations, commercials, and formal speeches. Students will be able to distinguish between formal and colloquial language. Prerequisite: FLGR 215 or equivalent.
FLGR 251 Translation: German (3:3:0)
This is an intermediate course designed to develop the facility of translation into English with texts, which are graded as to level of difficulty. Readings may include several modern short stories, current newspaper articles, magazine articles, and excerpts from various texts. Offered on demand. Prerequisite: FLGR 215 or equivalent.

## FLGR 290 Special Topics (3:3:0) (Semester hours arranged)

These courses are designed to meet specific needs of students. Such courses are offered on a trial basis to determine the demand for and value of introducing them as part of the curriculum.
FLGR 315 German Grammar and Composition (3:3:0)
This course is a thorough review of grammar with exercises in composition. Offered on demand. Prerequisite: FLGR 215 or equivalent.
FLGR 336 German Oral Practice (3:3:0)
This course is designed to help the student attain fluency in German. It includes the presentation, discussion, and criticism of timed oral reports on a wide variety of subjects, memorization of prose and poetry for improving diction, and individual use of the language laboratory. The class is limited to 12 students and is offered on demand. Prerequisite: FLGR 235.

## ITALIAN

## FLIT 116 GE: Italian I (3:3:0)

This is a foundation course in elementary Italian. It will emphasize the development of conversational skills and the study of basic language structures within a cultural context. Use of the language lab as determined by the instructor will be required. Prerequisites: Students with no previous study of the language, or no more than 1 year of previous study, will be admitted.

## FLIT 117 GE: Italian II (3:3:0)

This is a continuation of Italian I. Its purpose is to further reinforce previously acquired basic language skills. Use of the language lab as required by the instructor will be required. Prerequisites: FLIT 116 or equivalent of no more than one semester of college-level study.

## LATIN

## FLLN 116 GE: Latin I (3:3:0)

This is a foundation course designed for the beginning student. It includes the study of grammar and reading materials and emphasizes social and cultural values. Use of the language laboratory as required by the instructor. Prerequisites: Students with no previous study of the language, or no more than 1 year of previous study, will be admitted.

## FLLN 117 GE: Latin II (3:3:0)

This is a continuation of Latin I. Its purpose is to further reinforce previously acquired basic language skills. Use of the language laboratory as required by the instructor. Prerequisite: FLLN 116 or equivalent of one semester of college-level study, or no more than 2-3 years combined total of junior high/high school language.

## FLLN 221 Reading Latin (3:3:0)

This is an intermediate level course designed to develop reading skills in Latin while exploring the fundamental themes and remarkable diversity of Roman literary culture. A sequence of graded readings will include selections from Caesar, Cicero, Catullus, Ovid, and Virgil. Prerequisite: FLLN 117 or equivalent.

## PORTUGUESE

## FLPG 116 GE: Portuguese I (3:3:0)

This is a foundation course in elementary Portuguese. Emphasis will be placed on oral proficiency, the structure of the language, and the variety of its cultural contexts throughout the world. Multimedia resources from the Language Learning Center will supplement course materials. Prerequisites: Students with no previous study of the language, or no more than one year of previous study, will be admitted.

## FLPG 117 GE: Portuguese II (3:3:0)

This course completes the first-year introduction to Portuguese, providing students with the knowledge and skills to function with elementary fluency in the language. Emphasis will be placed on oral proficiency, the structure of the language, and the variety of its cultural contexts throughout the world. Multimedia resources from the Language Learning Center will supplement course materials. Prerequisites: FLPG 116 or the equivalent of one semester of college-level study, or no more than 2-3 years combined total of junior high/high school language.

## RUSSIAN

## FLRU 116 GE: Russian I (3:3:0)

This is a foundation course designed for the beginning student. It includes the study of grammar and reading materials and emphasizes social and cultural values. Use of the language laboratory as required by the instructor. Prerequisites: Students with no previous study of the language, or no more than 1 year of previous study, will be admitted.

## FLRU 117 GE: Russian II (3:3:0)

This is a continuation of Russian I. Its purpose is to further reinforce previously acquired basic language skills. Use of the language laboratory as required by the instructor. Prerequisite: FLRU 116 or equivalent of one semester of college-level study, or no more than 2-3 years combined total of junior high/high school language.

FLRU 120 GE: Masterpieces of Russian Literature in Translation (3:3:0)
This General Education course will introduce students to the extraordinary diversity and visionary depth of Russian literature within its historical context. Readings will be drawn from representative 19th and 20th century authors, including Pushkin, Dostoevsky, Tolstoy, Chekhov and Solzhenitsyn. Brief writing assignments will be required.

## SPANISH

FLSP 116 GE: Spanish I (3:3:0)
This is a foundation course designed for the beginning student. It includes the study of grammar and reading materials and emphasizes social and cultural values. Use of the language laboratory as required by the instructor. Prerequisites: Students with no previous study of the language, or no more than 1 year of previous study, will be admitted.

## FLSP 117 GE: Spanish II (3:3:0)

This is a continuation of Spanish I. Its purpose is to further reinforce previously acquired basic language skills. Use of the language laboratory as required by the instructor. Prerequisite: FLSP 116 or equivalent of one semester of college-level study, or no more than 2-3 years combined total of junior high/high school language.
FLSP 120 GE: Spanish Masterpieces in Translation (3:3:0)
This course is designed for non-Spanish majors in which English translations of Peninsular and Latin American literature are read and discussed. Attention is given to cultural understanding and to the interrelationships of literary works. The course is offered on demand.

## FLSP 143 GE: Spanish Language and Culture Through Media (3:3:0)

This course is designed to develop an awareness and understanding of the differences between the cultures of the Spanish-speaking peoples and that of the student. These objectives are met through the use of media, including slides, films, filmstrips, and recordings. This course is open to all students except Spanish majors. The course is conducted in English and offered on demand.

## FLSP 214 GE: Spanish III (3:3:0)

This is an intermediate level course designed to meet the needs of students who are interested in reviewing Spanish grammar. Students will practice patterns of grammatical structures both orally and in written exercises. Prerequisites: FLSP 117, or 4 years of high school Spanish.
FLSP 215 GE: Spanish IV (3:3:0)
This is a continuation of the Spanish III course. The course is designed to further develop skills already learned, as well as to introduce grammatical concepts of a more complex nature. Prerequisite: FLSP 214 or equivalent high school preparation.
FLSP 221 Reading Spanish (3:3:0)
This is an intermediate level course designed to meet the needs of students who are interested in learning to read Spanish. Students will develop both active and passive vocabulary through reading materials which are graded as to level of difficulty. Prerequisite: FLSP 215 or equivalent.
FLSP 231 GE: Spanish for Travelers (3:3:0)
This is an intermediate language course designed for the student who wishes to acquire conversational skills which will enable him to travel more efficiently and with greater language ease in Spanish-speaking countries. Prerequisites: FLSP 116 and 117, or equivalent.
FLSP 233 Conversational Spanish for Health Services (3:3:0)
Practical situations will be simulated in the classroom to provide individuals with basic conversational skills in Spanish in order to communicate with Spanish-speaking patients. Students will learn dialogues based upon typical hospital situations, i.e., parts of the body, useful phrases, and questions for testing, diagnosis, and treatment procedures. Students will also learn to respond more effectively to the needs and requests of the patient. The course may not be counted toward the major in Spanish. Prerequisites: FLSP 116 and 117, or high school equivalent.

## FLSP 234 Conversational Spanish for Social Services (3:3:0)

Practical situations will be simulated in the classroom to provide opportunities for developing conversational skills useful for personnel in social services (i.e., criminal justice administration and so-
cial work). The focus will be on appropriate vocabulary, analysis of native mores, expectations of the U.S. system, and other areas that will promote Spanish communication between social service personnel and people of Spanish-speaking backgrounds. The course may not be counted toward the major in Spanish. Prerequisites: FLSP 116 and 117, or high school equivalent.

## FLSP 235 Listening/Speaking Spanish (3:3:0)

This is an intermediate course designed to develop the listening/speaking skills in the target language. The exercises will include conversations, commercials, and formal speeches. Students will be able to distinguish between formal and colloquial language. Prerequisite: FLSP 215 or equivalent.
FLSP 251 Translation: Spanish (3:3:0)
This is an intermediate course designed to develop the facility of translation into English with texts which are graded as to level of difficulty. Readings include current newspaper articles, magazine articles, and excerpts from various texts. Offered on demand. Prerequisite: FLSP 215 or equivalent.
FLSP 290 Special Topics (3:3:0) (Semester hours arranged)
These courses are designed to meet specific needs of students. Such courses are offered on a trial basis to determine the demand for and value of introducing them as part of the college curriculum.
FLSP 305 Spanish and Latin American Culture through Cinema (3:3:0)
This course is designed to give students the opportunity to examine and appreciate the rich and diverse cultures of Spain, Latin America and Latinos in the United States through films, videos and selected readings, as well as to improve their formal knowledge of the language. The course will combine lecture, film viewing and discussion in each class. Prerequisite: FLSP 235.

## FLSP 310 A Critical Approach to Spanish Literature (3:3:0)

This is a course designed to acquaint Spanish students, advancing from skill courses in communication to liberated reading, with basic elements of literary appreciation and methods of literary evaluation. Prerequisite: FLSP 221.

## FLSP 315 Spanish Grammar and Composition (3:3:0)

This course is a thorough and systematic survey of Spanish grammar. Composition themes will be based on important phases of Spanish life and culture. Prerequisite: FLSP 215 or equivalent.

## FLSP 316 Spanish Language for Native Speakers (3:3:0)

This course is designed for native speakers of Spanish who want to improve their formal knowledge of the language. It is to be taken in place of FLSP 315 (Spanish Grammar and Composition). Admission will be determined by the Spanish component. Prerequisite: Native speaking ability as determined by the Department.

## FLSP 336 Spanish Oral Practice (3:3:0)

This course is designed to help the student attain fluency in Spanish. It includes the presentation, discussion, and criticism of timed oral reports on a wide variety of subjects, as well as one-to-one student-teacher conferences and individual sessions in the language laboratory. This class is limited to 12 students and is offered on demand. Prerequisite: FLSP 235.
FLSP 401 Readings in Spanish Literature (3:3:0)
Students undertake analytical readings of selected works of Spanish literature and engage in critical discussions of them. The course proceeds chronologically, beginning with a short introduction to the Latin roots of Castilian, and providing historical context for subsequent literary movements and writers as they are taken up. Each student will also engage in more focused research and writing on some aspects of the course material covered. Prerequisites: FLSP 310, 315 or 4 years of high school Spanish

## FLSP 402 Readings in Spanish-American Literature (3:3:0)

Students undertake analytical readings of selected works of Spanish-American literature and engage in critical discussions of them. The course proceeds chronologically, beginning with a short introduction to indigenous literary compositions, and providing historical context for subsequent Spanish-language movements and writers as they are taken up. Each student will also engage in more focused research and writing on some aspect of the course material covered. Prerequisites: FLSP 215, 310 or 4 years of high school Spanish.

FLSP 416 Spanish Language for Native Speakers (3:3:0)
This course is designed for native speakers of Spanish who want to improve their formal knowledge of the language. At the undergraduate level it is to be taken in place of FLSP 315 (Spanish Grammar and Composition). Admissions will be determined by Spanish faculty. Prerequisites: Native-speaking ability as determined by the Department and FLSP 310 and 336.
FLSP 421 Spanish Golden Age Literature (3:3:0)
This course includes reading and analysis of key literary works of the Spanish Golden Age, with contextual study of medieval and humanist influences upon authors of that period. Prerequisites: FLSP 310, 315.

## FLSP 423 Mexican Literature (3:3:0)

This course is an intensive study of prose literature which has appeared in Mexico since the Revolution. Reading and discussion of major works by Paz, Rulfo, Azuela, Yanez, Fuentes, and Ruben Romero are included. This course is offered on demand. Prerequisites: FLSP 310.
FLSP 426 Twentieth Century Spanish Drama (3:3:0)
This course is a study of the modern drama including the works of Frederico Garcia Lorca and Alejandro Casona, as well as Post-War dramatists. The course is offered on demand. Prerequisites: FLSP 310.
FLSP 427 The Representative Latin American Novel (3:3:0)
This course involves reading and analyzing significant Latin American novels which reflect social, political, intellectual, and cultural developments from the colonial period to the present. The course is offered on demand. Prerequisites: FLSP 310.
FLSP 428 Twentieth Century Spanish Literature (3:3:0)
This course is an in-depth study of representative works of prose and poetry from the generation of 1898 to the present. The course is offered on demand. Prerequisites: FLSP 310.
FLSP 430 Modernismo: Prose and Poetry (3:3:0)
This course is a study of the writings of the key figures of the Modernismo movement in Latin America and their impact on Hispanic literature in Europe and the Americas. The scope is multinational, and it includes the various generations that constitute this movement. This course is taught in Spanish. Prerequisites: FLSP 310 or 4 years of high school Spanish, FLSP 315

## FLSP 444 Cultural History of Spain

This course consists of selected readings and directed discussion on the cultural history of Spain from the pre Roman era to today. Cultural artifacts to be studied include literature, visual art, music and key historical documents. Each student will also engage in more focused research and writing on some aspect of the course material covered. Prerequisites: FLSP 215, 221 or equivalent.

## FLSP 445 Cultural History of Latin America (3:3:0)

This course consists of selected readings and directed discussion on the cultural history of Latin America from the pre-contact era to today. Cultural artifacts to be studied include literature, visual art, music and key historical documents. Each student will also engage in more focused research and writing on some aspect of the course material covered. Prerequisites: FLSP 215, 221 or equivalent.

## FLSP 450 U.S. Latino Literature and Culture (3:3:0)

This interdisciplinary course explores the presence, culture, literature and history of the Latino population in the US, through literary texts, film, media, newspapers and other cultural production. This course if offered in Spanish. Prerequisite: FLSP 215, 310 or their equivalents.
FLSP 485 Independent Study (semester hours to be arranged)
FLSP 495 Seminar (3:3:0)
This advanced level course will cover varied topics in Spanish and Spanish American literature and culture. Students will write a research paper and present an oral report. (In addition to presenting an in-depth oral report, graduate students will be required to submit a 15 -page research paper in strict compliance with MLA guidelines, which must include at least 3 documented sources). Prerequisites: FLSP 310 and one additional 300/400 level class.

## Four-Year Course Rotation Bachelor of Arts in French and Spanish

| Fall | Freshman Year | Year Spring | Spring |
| :---: | :---: | :---: | :---: |
| Language 214 | 3 | Language 215 | 3 |
| English Composition | 3 | General Education Humanities \#2 | 3 |
| General Education. Humanities \#1 | 3 | General Education Science | 3 |
| General Education Social Science \#1 | 3 | General Education Social Science \#2 | 3 |
| General Education Science \#1 | 3 | General Education Humanities \#3 | 3 |
| Subtotal | 15 | Subtotal | 15 |
| Fall | Sophomore Year Spring |  |  |
| Language 235 (French/300-level Spanish) | 3 | Language 310 (Spanish) / or Elective | 3 |
| Language 200/300 level | 3 | Language 336 | 3 |
| General Education Humanities \#4 | 3 | General Education Social Science \#4 | 3 |
| General Education Social Science \#3 | 3 | General Education Science \#4 | 3 |
| General Education Science \#3 | 3 | Elective | 3 |
| Fitness | 1 | Fitness | 1 |
| Subtotal | 16 | Subtotal | 16 |
| Fall | Junior Year | Spring |  |
| Language 315 | 3 | Language 300-level Elective | 3 |
| General Education Social Science \#5 | 3 | Elective | 3 |
| General Education Humanities \#5 | 3 | Language 343 (French) / or Elective | 3 |
| General Education Science \#5 | 3 | Elective | 3 |
| Elective/FLNG 361 Linguistics (Spanish) | 3 | Elective | 3 |
| Subtotal | 15 | Subtotal | 15 |


| Sall Senior Year |  |  |
| :--- | ---: | :--- | ---: |
| Language 400-level Literature 3 Language 400-level Elective <br> Elective 3 Elective <br> Elective 3 Elective <br> Elective 3 Elective <br> Elective 3 Elective <br> Subtotal $\mathbf{1 5}$ Subtotal |  |  |

TOTAL CREDITS

# Four-Year Course Rotation Bachelor of Science in French and Spanish 



Fall
Senior Year
Spring

| Language 400-level Literature | 3 | PSED 430 Student Teaching in Secondary <br> Education/Middle School/Junior High School | 6 |
| :--- | ---: | :--- | ---: |
| FLNG 361 Introduction to Linguistics | 3 | PSED 431 Student Teaching in Secondary <br> Education/Senior High School | 6 |
| PSED 416 Teaching of Foreign Language | 3 | FLNG 499 Student Teaching Internship | 1 |
| PSED 421 Seminar in Secondary Education II | 2 |  |  |
| Elective | 3 |  | $\mathbf{1 3}$ |
| Subtotal | 14 | Subtotal | $\mathbf{1 2 0}$ |
| TOTAL CREDITS |  |  |  |

NOTE: Students must schedule Praxis I before spring break of the sophomore year in order to be screened into the Secondary Education program.

## General Science

School of Arts and Sciences<br>The Faculty of Science<br>Gessner Science Hall, Room 107<br>570-422-3341<br>www.esu.edu/physics

Bachelor of Science with a General Science major (Secondary Education) - $\mathbf{5 2}$ semester hours Coordinator: Professor Robert Cohen, Department of Physics.

- Required major courses: BIOL 114, 115; CHEM 121, 123, 124, 126; PHYS 121, 122, 131 (or 161), 132 (or 162), 495; GEOG 120 (or 121), 220; 15 credits (200-level or above) chosen with the consent of the adviser in BIOL, CHEM and PHYS, with a minimum of three credits in each discipline. Nine of these 15 credits must be $300-$ level or above.
- Corequisite courses: CPSC 101; MATH 110, 140 (or 131).
- Required professional education courses: MCOM 262; PSED 161, 242, 346, 420, 421, 430, 431; REED 321, PHYS 499.
- Recommended courses: PHYS 486; CMST 111.

The Commonwealth of Pennsylvania has established new requirements for all candidates in teacher preparation programs. Please refer to the section The College of Education in this catalog for specific requirements for admission into teacher education programs.

- Additional requirements: At least 9 credits of required courses (not corequisites), $300-\mathrm{level}$ or above, must be completed at ESU. A minimum of a "C" must be attained in each of the required courses.
- Please see the university requirements in this catalog.

Bachelor of Science in General Science

Semester Two

| PSED 161 Foundations of Education | 3 | CPSC 101 PC's and Their Uses in Science | 3 |
| :--- | ---: | :--- | ---: |
| *GEOG 121 Physical Geology | 3 | MATH 110 General Statistics | 3 |
| BIOL 114 Introductory Biology I | 4 | BIOL 115 Introductory Biology II | 4 |
| **General Education (A) | 3 | General Education (A) | 3 |
| ENGL 103 English Composition | 3 | General Education (C) | 3 |
| Subtotal | 16 | Subtotal | 16 |

Semester Three
Semester Four

| PHYS 121 Astronomy I: Sky and Solar System | 3 | PHYS 122 Astronomy II: Stars and Galaxies | 3 |
| :--- | ---: | :--- | ---: |
| ${ }^{* * *}$ MATH 140 Calculus I | 4 | ${ }^{* *}$ General Education (C) | 3 |
| PSED 242 Educational Psychology | 3 | MCOM 262 Educational Communication and <br> Technology | 3 |
| CHEM 121 General Chemistry I | 3 | CHEM 124 General Chemistry II | 3 |
| CHEM 123 General Chemistry I Laboratory | 1 | CHEM 126 General Chemistry II Laboratory | 1 |
| Fit Elective | 1 | General Education (A; 2nd English) | 3 |
| Subtotal | $\mathbf{1 5}$ | Subtotal | $\mathbf{1 6}$ |

Semester Five
Semester Six

| REED 321 Teaching in Reading in Secondary <br> School | 3 | PSED 420 Seminar in Secondary Education I | 3 |
| :--- | ---: | :--- | ---: |
| PHYS 131 Fundamental Physics I | 4 | PHYS 132 Fundamental Physics II | 4 |
| GEOG 220 Meteorology | 3 | Chemistry Elective | 3 |
| General Education (A) | 3 | Biology Elective | 3 |
| General Education (C) | 3 | Upper Level Science Elective | 3 |
| Subtotal | $\mathbf{1 6}$ | Subtotal | $\mathbf{1 6}$ |


| Semester Seven | Semester Eight |  |  |
| :---: | :---: | :---: | :---: |
| PSED 421 Seminar in Secondary Education II | 2 | PSED 430 Student Teaching in Secondary Education/Middle School/Junior High School | 6 |
| PSED 446 Teaching of Science in the Secondary Schools | 3 | PSED 431 Student Teaching in Secondary Education/Senior High School | 6 |
| Upper-level science elective | 3 | PHYS 499 Student Teaching Internship | 1 |
| Physics elective | 3 |  |  |
| General Education (A) | 3 |  |  |
| FIT Elective | 1 |  |  |
| PHYS 495 Seminar | 1 |  |  |
| Subtotal | 16 | Subtotal | 13 |
| TOTAL CREDITS <br> *GEOG 120 (Physical Geography) can be taken in place of GEOG 121 (Physical Geology). <br> **MCOM 111 (Speech Communication) is recommended. <br> **If MATH 135 (Pre-Calculus) is necessary, it should be scheduled during the preceding summer. |  |  |  |

# Geography 

School of Arts and Sciences
The Faculty of Social Sciences
Stroud Hall, Room 103
570-422-3285
www.esu.edu/geog
Department faculty

Professor:
Associate Professor:
Assistant Professor:

Ian Ackroyd-Kelly (ak@po-box.esu.edu)
Jeffrey Hardy, chair (jhardy@po-box.esu.edu)
Shixiong Hu (shu@po-box.esu.edu)

## Bachelor of Arts with a Geography major- $\mathbf{3 3}$ semester hours

- Required major courses: GEOG 110, 120, 340, 440, 495; two courses from GEOG 230, 234, 330, 333; 12 semester hours in Physical or Human Geography areas. Physical Geography-one course from Group A and three courses from Group B. Human Geography-three courses from Group A and one course from Group B. Group A-GEOG 210, 212, 310, 311. Group B-GEOG 121, 220, 320, 321.
- Corequisite courses: CPSC 100 or 111 and MATH 110.
- In order to remain in the program, students must maintain a 2.50 average in major courses. A minimum of 18 credits in Geography requirements must be earned at ESU.
- Please see the university requirements in this catalog.
- Please see the foreign language competency in this catalog.


## Geography minor-21 semester hours

- GEOG 110, GEOG 120, GEOG 130, GEOG 340 or GEOG 341 ; and either GEOG 440 or GEOG 495. One course from the upper division physical geography courses and one course from the upper division human geography courses (GEOG 230, 231, 234, 330, 331).


## Course Descriptions

(Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title.)

## GEOG 110 GE: Cultural Geography (3:3:0)

This course offers a systematic approach to the understanding of human patterns on the Earth's surface. The course analyzes the form, cause, and interrelationship of economic, political, social, cultural, and urban landscapes.

## GEOG 120 GE: Physical Geography (3:3:0)

This course is a concentrated study of the physical aspects of the environment. Emphasis is placed on understanding the Earth and its planetary relations, the fundamentals of weather, climate, soils, and landforms, and the principles of map projections and interpretations. The course is of particular interest to Earth Science majors.

## GEOG 121 GE: Physical Geology (3:3:0)

This course focuses on a description and interpretation of the Earth's rock and mineral formations and study of their constant change under the influence of streams, wind, glaciers, volcanism, and other forces.

## GEOG 130 GE: World Regional Geography (3:3:0)

This course is a regional overview of the countries of the world combined with an introduction to geographic methodology. The course investigates the interaction between physical phenomena and human activity, the distribution of economic development, and the uniqueness of the world's regions.

## GEOG 210 GE: Economic Geography (3:3:0)

This course examines and analyzes the spatial patterns of primary, secondary, and tertiary economic activities around the world. The problems of these economies and their relationship to the developing world are emphasized as are the problems and methods of measurement of the developing world. Prerequisite: GEOG 110.

## GEOG 212 GE: Political Geography (3:3:0)

This course is a systematic treatment of the geographic patterns of political phenomena at the local, national and multinational levels with an emphasis on territorial control, definition, integrity, and diffusion. Prerequisite: GEOG 110.
GEOG 220 GE: Meteorology (3:3:0)
This course is a descriptive study of the atmosphere providing the student an opportunity to understand the underlying principles of atmospheric change, to become familiar with weather instruments, to observe and record weather data, and to read and interpret weather maps. Prerequisite: GEOG 120.
GEOG 230 GE: Geography of the United States and Canada (3:3:0)
This course is the study of the geographic regions of the United States and Canada. Physiography, climate, resources, and industry are reviewed and applied to the various provinces of North America. Special emphasis is placed on the physical and cultural differences among regions.
GEOG 231 GE: Historical Geography of the United States (3:3:0)
This course is a study of the spatial patterns of the historical development of the United States from Pre-Columbian times to the present with emphasis on regional development of various cultural phenomena. Prerequisite: GEOG 110.

## GEOG 234 GE: Geography of Europe (3:3:0)

The course is a regional analysis of Europe designed to develop spatial relationships underlying economic problems, land utilization, boundary disputes, and dominant international issues. Prerequisite: GEOG 110.

## GEOG 290 Special Topics (Semester hours arranged)

These courses are designed to meet specific needs of groups of students or are offered on a trial basis in order to determine the demand for and value of introducing them as a part of the curriculum.

## GEOG 310 GE: Population Geography (3:3:0)

This course examines the growth, diffusion, and distribution of population throughout the world; it forms a bridge between economic and cultural geography as a means for exploring ideas and methods concerning a problem of increasing interest. Prerequisite: GEOG 110.

## GEOG 311 GE: Urban Geography (3:3:0)

This course is a spatial treatment of the origins of urban growth, the economic, social and technological evolution of urban centers, and the design and functions of cities. Prerequisite: GEOG 110.

## GEOG 320 GE: Climatology (3:3:0)

This course is a review of climate controls and the regional characteristics of climate and the relation of climate to human activities. Prerequisite: GEOG 120.

## GEOG 321 GE: Geomorphology (3:3:0)

This course is an advanced treatment of the processes that shape the Earth's surface and the classification of their resulting landforms; it includes a study of the historical development of major theories through selected reading from classic works. Special attention is given to evolution of landscapes in the geological provinces of North America and other world areas. Prerequisite: GEOG 121.

## GEOG 330 GE: Geography of Eastern Asia (3:3:0)

This course is an intensive investigation of geographic, economic and political regions of eastern Asia with an emphasis on geographic background, natural resources, land utilization, population concentrations, and industrialization of countries. Prerequisite: GEOG 110.

## GEOG 333 GE: The Geography of Australasia (3:3:0)

This course is a regional geographic study of the area of Australia and the Pacific Ocean realm. The course will emphasize distinctive regional characteristics, physical geographic phenomena, exploration, and the diffusion of cultural geographic phenomena. Prerequisite: GEOG 110.

## GEOG 340 Cartography (3:3:0)

This course focuses on the use and interpretation of various map projections from a geographical point of view, the history of mapping, development of map symbols and scales, the construction of selected projections, and the construction and use of maps and diagrams. Prerequisite: GEOG 120.

## GEOG 341 Geographic Information Systems (3:3:0)

The course will examine the basics of Geographic Information System (GIS) technology using the Arc View program. Students will learn the principles of GIS and produce simple maps from a variety of data sources. Prerequisite: GEOG 110 or 120.

## GEOG 421 Marine Geology (3:2:3)

This course is an analysis of the structural and sedimentary environment of the continental shelf, slope, and ocean basin. The techniques and findings of recent geophysical and geochemical research are used to gain an insight into the genesis of ocean basins and their features. Emphasis is on laboratory and field problems. Offered periodically during summer sessions at the Marine Science field station at Wallops Island, Virginia. Prerequisites: GEOG 120, 121.

## GEOG 440 Field Techniques in Geography (3:3:0)

This course is an introduction to methods of collecting field data; it includes recognition of features of the physical or cultural environment or a combination of the two, interview procedures, field mapping, preparation of geographical reports and finished maps based on field work, and experience in use of field equipment and aerial photographs. Emphasis on cultural or physical geography depends on class interest. Prerequisites: GEOG 110, 120 and 340.

## GEOG 485 Independent Study (Semester hours arranged)

This course, offered by a faculty member to a student, does not properly fall within the scope of other courses listed in the catalog. Students will receive a reading list which will be accomplished on a set schedule and will meet periodically with the instructor for discussion and examination. The student will also prepare a paper or complete an exercise or workbook. Evaluation will be from discussion, examinations, papers, and/or exercises.

## GEOG 486 Field Experiences and Internship (Semester hours arranged)

GEOG 495 Seminar (3:3:0)
This course is an in-depth study of the history and philosophy of geography, an introduction to professional associations and their periodicals, and presentations of student research papers based on library or fieldwork. Prerequisites: GEOG 110, 120, 340.

## Bachelor of Arts in Geography Suggested Four-Year Plan of Study

First Year

| GEOG 110: Cultural Geography | 3 |
| :--- | ---: |
| GEOG 120: Physical Geography | 3 |
| ENGL 103: English Composition | 3 |
| Foreign Language I | 3 |
| General Education electives | 18 |
| Subtotal | $\mathbf{3 0}$ |

Second Year

| Computer Science | 3 |
| :--- | ---: |
| MATH 110: General Statistics | 3 |
| Foreign Language II | 3 |
| GEOG 340: Cartography | 3 |
| Upper division geography elective | 3 |
| Regional geography elective | 3 |
| General Education electives | 12 |
| Subtotal | $\mathbf{3 0}$ |

Third Year

| Field Techniques in Geography <br> or Seminar in Geography | 3 |
| :--- | ---: |
| Upper division geography electives | 6 |
| Regional geography elective | 3 |
| Open electives | 18 |
| Subtotal | $\mathbf{3 0}$ |

Fourth Year

| Field Techniques in Geography <br> or Seminar in Geography | 3 |
| :--- | ---: |
| Upper division geography electives | 6 |
| Open electives | 21 |
| Subtotal | $\mathbf{3 0}$ |

## Gerontology Certificate Program

## School of Health Sciences and Human Performance

## The Faculty of Health Sciences

Gerontology Interdisciplinary Program-21 semester hours
Required courses (select 3):

- BIOL 420/520 - Biology of Aging
- PSY 225 - Lifespan Developmental Psychology
- SOC 442 - Sociology of Aging
- A six-semester hour internship in gerontology related to the student's major.


## Electives (select 2):

- HLTH 340 - Nutrition for Healthful Living
- HLTH 432 - Death and Dying - Implications for Health
- HLTH 444/544 - Health Promotion Programs and Aging
- HLTH 530 - Nutrition Across the Lifespan
- HLTH 532 - Death and Dying Education
- EXSC 445 - Seminar in Adult Fitness Program
- EXSC 560 - Physical Activity Across the Lifespan
- NURS 304 - Gerontological Nursing
- RECR 261 - Leisure and Aging
- SPPA 321 - Communication and Aging

Please see the university requirements in this catalog.

Coordinator: Elaine Shuey, Speech-Language Pathology.
The primary focus of this interdisciplinary program is to provide concentrated knowledge in gerontology to supplement the course work completed in the student's academic major. The Gerontology Program will prepare students to work directly or indirectly with older adults. The program is open to students in any major.

## Health

School of Health Sciences and Human Performance
The Faculty of Health Sciences
The DeNike Center for Human Services, Room 249
570-422-3702
www.esu.edu/hlth

## Department faculty

Professors: Steven Godin (sgodin@po-box.esu.edu) Kathleen Hillman (khillman@po-box.esu.edu) Carolyn Woodhouse, chair (cwoodhouse@po-box.esu.edu)
Associate Professors: Adenike Bitto (abitto@po-box.esu.edu) Alberto Cardelle (acardelle@po-box.esu.edu)
Assistant Professors: Steve Shive (sshive@po-box.esu.edu)
Kimberly Razzano (krazzano@po-box.esu.edu)

## Bachelor of Science with an Allied Health Education major - $\mathbf{3 0}$ semester hours - Program in

 Moratorium- Required major courses: HLTH 240, 370, 460, 461, 486.
- Corequisite courses: MCOM 262; MATH 110; PSED 161, 242.
- Required specialized courses: HLTH 340, 365, 409 and 470 (This certification is being put on moratorium, please check with provost office for final approval).
The Allied Health Education program is designed for students who have completed an Associate Degree in one of the Allied Health areas. It is a unique opportunity that enables the student to apply the work completed in the Associate program to the Bachelor Degree requirements. It differs from the Health Education Degrees in that it does not include health content courses primarily building on the Allied Health skills and competencies gained at the associate level. The college general education requirements for all bachelor degrees are also completed with this program.


## Bachelor of Science with a Health Education major - 49 semester hours <br> Concentration: Community Health

- Required major courses: HLTH 210, 230, 260, 270, 280, 370, 386, 409, 440, 460, $461,470,486$; and 12 additional semester hours from 220, 240, 250, 290, 310, 340, $350,355,365,405,406,408,421,440,442,444,461,485$.
- Corequisite courses: BIOL 111, 112, CMST 111, CPSC 100, MATH 110, MCOM 262, PSY 100, 225, SOC 111.
- Note: A full-time, 12-credit internship experience (HLTH 486) is required. Completion of all health education coursework and an overall quality point average of 2.50 and a quality point average of 2.50 within the major is required for approval to enroll in the internship.
- Please see the university requirements in this catalog.

The Community Health Education Program is designed to prepare students for work in the public or private sector related to public health, health promotion, health education, and communitybased prevention programs. Common public health problems graduates of our program become involved with are: tobacco prevention, STD/HIV prevention, infectious disease prevention, and prevention of Cardiovascular disease and diabetes to name a few. Typical employment includes staff positions in governmental agencies (i.e., state or county health departments), communitybased hospitals and medical centers, worksite wellness programs in industry, insurance and managed care companies, and non-profit agencies (i.e., American Cancer Society).

## Bachelor of Science with a Health Education major - 44 semester hours

Concentration: School Health (Teacher Certification program)
For the Health and Physical Education certification, requiring a dual major see page 270.

- Required major courses: HLTH 210, 220, 230, 240, 310, 341, 350, 356, 365, 370, 431 and 461.
- Corequisite courses: BIOL 111, 112 (112 is waived for dual majors, majoring in Physical Education and Health), PSED 161, 242, CMST 111, PSY 100, SOC 111.
- Please see the university requirements in this catalog.

The student must complete the following requirements for admission into the health education teacher certification program:
I. Initial Requirements - Pass 60 credits including: 1) BIOL 111; BIOL 112; HLTH 210, 220, 230, \& 240. 2) Complete 6 credits MATH and 6 credits ENGL. 3) Pass Praxis Level I: Reading, Writing, and Math. 4) Demonstrate successful clearance of Act 34 and Act 151 (PSED 242). 5) Obtain membership to a health education professional organization.
II. Interview Process for Admission - Between 45-60 Credits: 1) All Initial Requirements must be complete. 2) Participate in an interview with School Health Teacher Education faculty and present the admission criteria portfolio (including: Praxis I results, Act 34 and 151, HLTH 240 certification cards, current transcript, Eligibility Checklist, Membership from professional organization). 3) Submit an autobiographical sketch to adviser. 4) Obtain two recommendations from health professors. 5) Receive a letter about Candidacy: endorsement for SH-CERT, OR denial, choose a different concentration or major.
III. Continued Enrollment - 1) Pass Praxis II: Fundamental Subjects: Content Knowledge prior to HLTH 431. 2) Eligibility for Student Teaching (2.8 QPA, complete all GE, HLTH and PSED courses, and successful Act 34 and 151 clearances).
IV. Certification and Graduation Standards - Pass HLTH 431 (with a grade of C or better). 2) Satisfy degree and program requirements including a 3.0 QPA in HLTH and overall. 3) Pass Praxis II: Health Content Knowledge. 4) Complete certification application and immigration form. 5) Complete Act 34 and 151 Clearances for employment.
The Commonwealth of Pennsylvania has established new requirements for all candidates in teacher preparation programs. Please refer to the section The College of Education in this catalog for specific requirements for admission into teacher education programs.

The School Health Education Program is designed to provide training and certification in preparation for a health education career as a teacher in the elementary or secondary schools. The program is also advisable for careers as health coordinators for elementary or secondary schools or as health instructors in school related health centers.

## Bachelor of Science in Health Services Administration - 54 semester hours

- Required major courses - HLTH 210, 230, 260, 270, 280, 370, 380, 381, 382, 386, 440, 460, 470, 486.
- Corequisite courses - BIOL 111, 112, CPSC 100, MATH 110, CMST 111, EMGT 200, 211, POLS 293.
- Four additional credits from - HLTH 290, 340, 365, 370, 405, 406, 408, 409, 440, 442, 444, 485.
- Another 6 additional credits from - ECON 332, EMGT 204, 212, 352, POLS 416, 466, 467, 468.

The Health Service Administration Program is an interdisciplinary program that provides the educational foundation for careers in health services administration, delivery, and policy. The program prepares students to work in the challenging healthcare sector in the administration of health services. The program prepares students for careers that make a significant contribution to improving the health of communities. The program consists of courses from the Economics Department, the Political Science Department, and the Health Department. The program is designed to prepare students to enter careers in health care delivery settings (hospitals, clinics, home health agencies), public health settings (county and state health departments or communitybased organizations), in other allied health settings (nursing homes) or in the insurance segment (insurance companies and HMOs).

## Health Education Teacher Certification concentration - $\mathbf{3 3}$ semester hours

- Required courses: HLTH 220, 230, 240, 310, 341, 350, 355 or $356,365,370,430$, 431 and 461.
- Corequisite courses: BIOL 112, PSY 100, SOC 111, PSED 161, 242, CMST 111.
- Note: A full-time student teaching experience (HLTH 431) is required. A 2.80 quality point average is required in the major courses for approval to enroll in student teaching.
Teacher certification in health is built into the school health concentration of the health education degree. Students in other disciplines may enroll in this program as an adjunct to their primary area of study. The Commonwealth of Pennsylvania has established new requirements for all candidates in teacher preparation programs. Please refer to the section The College of Education in this catalog for specific requirements for admission into teacher education programs.


## Bachelor of Science with a Health and Physical Education Certification Program

See Physical Education Teacher Education, Page 270

## Health Services Administration Minor - $\mathbf{1 8}$ semester hours

- Required concentration courses: EMGT 200; HLTH 280, 381; POLS 293
- Co-Requisite courses: 6 credits from HLTH 260, 270, 380, 382; POLS 416, 467, 468; EMGT 204, 211.
- Required quality point average: 2.00 for the seven courses.

This concentration program is designed for students planning to enter public health careers. Enrollment in a major related to public health is strongly recommended. Some of these courses offered by other departments are scheduled on an every other year basis.

## Course Rotation

Some of the Health Department courses may be available every other year. Therefore, students must begin taking required and elective courses as they become available during the second semester of the sophomore year to be able to accommodate an internship or student teaching in the senior year. Students having questions about the waiver of prerequisites should contact the Health Department.

## Course Descriptions

(Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title.)

## HLTH 210 Foundations of Health Science (3:3:0)

The historical and philosophical perspectives of the development of health science will be discussed in this course. A comparison will be made of the major concepts and theories of health and characteristics of health education programs in schools and communities. For those interested in the Health major only.

## HLTH 220 Personal and Consumer Health (3:3:0)

This course deals with the identification of individual capability and responsibility for the development of attitudes and patterns of health behavior leading to a full and satisfying life. In addition, the course investigates the factors to be considered by a consumer purchasing products and services, including a study of the agencies and programs designed for consumer protection.

## HLTH 230 Community Health (3:3:0)

This course consists of an exploration of the current major community health problems, the programs for preventing and controlling health problems, and the various community organizations which deal with these problems.

## HLTH 240 Health Emergencies (3:3:0)

This course deals with training in life saving measures for all types of emergency situations with the opportunity to become certified in First Aid instruction and Cardiopulmonary Resuscitation (heart-lung resuscitation).

## HLTH 250 Human Sexuality for Healthful Living (3:3:0)

This course examines the current knowledge and attitudes of human sexual behavior with emphasis on topics ranging from the sex act, orgasm, childbirth, birth control, sexual dysfunction, masturbation, to homosexuality.

## HLTH 260 Foundations of Epidemiology in Public Health (1.5:1.5:0)

This course is a study of the basic principles and methods of epidemiological investigations for human health problems. An overview of the nature of epidemiological research will be provided. Special emphasis will be placed on the use of epidemiology in health services administration, and public health practice, including the planning of health promotion and health education programs in the community.

## HLTH 270 The Environmental Determinants of Community Health (1.5:1.5:0)

This course is a study of the basic principles and methods of epidemiological investigations for human health problems. An overview of the nature of epidemiological research will be provided. Special emphasis will be placed on the use of epidemiology in health services administration, and public health practice, including the planning of health promotion and health education programs in the community.

## HLTH 280: Fundamentals of Health Administration (3:3:0)

This course is designed to acquaint students with fundamental concepts and methods of modern management in health care settings. Various administrative practices among private for-profit, not for profit, and public health agencies are covered with particular focus on common integral principles and responsibilities of administration.

## HLTH 290 Special Topics (Semester hours arranged)

These courses are designed to meet specific needs of groups of students or are offered on a trial basis in order to determine the demand for them as a part of the curriculum.

## HLTH 303 Elementary School Health (3:3:0)

This course develops a health education curriculum designed for K-6 including an investigation of methods, materials, and evaluative techniques.

## HLTH 310 Family Health Education (3:3.0)

The course examines human sexual behavior from a historical and socio-psychological perspective. It also includes biological and psychosocial development from infancy to adulthood, sexual response, and sexual dysfunction. The goals of sex education and the need for discussing sexuality in the schools will be stressed. Curriculum development, content and implementation will be included. Prerequisite: Advanced standing of 60 semester hours or HLTH 220 or 230.

## HLTH 340 Nutrition for Healthful Living (3:3:0)

This course is an overview of the principles of nutrition and how nutrition applies during the critical periods throughout the life cycle. Special attention will be given to the planning of diets for a better quality of health. Prerequisite: Advanced standing of 60 credits.

## HLTH 341 Nutrition Education (1.5:1.5:0)

This course is designed to prepare students in the health and physical education teacher certification program to teach the principles of nutrition in the school setting. Emphasis will be placed upon methods and materials necessary for the teaching of nutrition in grades K-12. Prerequisite: HLTH 220 or 230.

## HLTH 350 Mental Health for Public and School Health (3:3:0)

This course is designed to assist the health educator in developing an understanding of mental health and mental illness within a total social, physical, and emotional health perspective. Historical and popular approaches to health are examined in relation to mental health with particular emphasis on behavioristic and cultural approaches. Mental health as a public health problem is studied in relation to individual, economic, and social impact in light of related physical and social health problems and community health programming. Mental health in the school is examined with emphasis on both environment and instruction. Prerequisite: Advanced standing of 60 credits.

## HLTH 355 Drug Abuse Education (3:3:0)

This course is designed to prepare teachers who can organize and administer a drug education program in the school and community. Prerequisite: Advanced standing of 60 credits.

## HLTH 356 Drug and Alcohol Teacher Preparation (1.5:1.5:0)

This course provides future teachers with the understanding, information, attitudes, and skills for use in the application of primary prevention programs for drug abuse. Special emphasis will be placed on decision-making skills, coping behaviors, and interpersonal growth. Prerequisite: HLTH 220 or 230.
HLTH 365 School Health Administration (3:3:0)
This course deals with the organization and administration of the school health program including healthful school living, health services, and health science instruction. Prerequisite: HLTH 220 or 230.

## HLTH 370 Planning and Evaluation for Health Education (3:3:0)

The course serves as an introduction to the means of assessing the need for health education, the planning of health education, and the evaluation of the effects of health education. It includes selection and development of appropriate instruments of assessment/evaluation of both Community and School Health, and the theoretical foundations and practical applications of planning for health education. Prerequisite: HLTH 220 or 230.

## HLTH 380 Health Project and Grant Development (3:3:0)

By the end of the course students will know how and where to collect qualitative and quantitative community data to plan needed health services, and a rational paradigm of community health project planning. Students will have practical experience with laboratory exercises with communitybased organizations. Prerequisites: HLTH $230 \& 280$.

## HLTH 381 Health Economics and Finance (3:3:0)

Students are acquainted with socioeconomic factors influencing the health care industry and the ways these factors influence health services development and health policy, regulation, and law. Students learn the history of health care financing in the United States and study comparative health systems and the effects of changing social and economic factors on the financing of health care. Prerequisite ECON 111, 112 or equivalent; EMGT 211, 212; and HLTH 230, 280.
HLTH 382 Health Ethics and Law (3:3:0)
The student learns how professional ethics and health law interrelate and how both influence the development and delivery of health services by governments and the private sector. Prerequisites: POLS 268, HLTH 230, 280

## HLTH 386 Pre-Practicum in Health Education (3:1:5)

This guided early field experience is designed to introduce students to the application of health education skills in a supervised setting. This practicum provides an introduction to the various roles and competencies for health education in applied settings. Prerequisite: HLTH 210, 230 and two additional health courses.

## HLTH 405 Non-Medical Healing Arts (1:1:0)

This course examines the role of Osteopathy, Acupuncture, Faith Healing, and other health ser-
vices which deviate from or compete with "Medicine" in relation to health education. The social and legal issues concerning these services, reliability of sources of information about the services, and the role of health education in utilization of these services are studied. Focus of the course will be on the development of guidelines for utilization of these services. Prerequisite: Advanced standing of 90 credits.

## HLTH 406 Analysis of Health Information (1:1:0)

This course is an overview of the use and misuse of statistics, the manipulation of human needs and drives, and the provision of false and misleading information by providers and suppliers of health products and services. All major sources of information related to consumer health will be examined for inherent biases and common forms of misinformation. Prerequisite: Advanced standing of 90 credits.

## HLTH 407 Trends in Dieting (1:1:0)

This course is a study of the issues surrounding popular health foods and diets. The desirable and undesirable qualities of "natural" and "organic" foods, "exotic" foods, and nutrient enriched foods are examined. The advantages and disadvantages of diets emphasizing specific nutrients or types of foods, crash diets, drug aided diets, and diets for specific purposes are also studied. Focus of the course is on development of guidelines for evaluating information and sources of information. Prerequisite: Advanced standing of 90 credits.

## HLTH 408 Women's Health Concerns (3:3:0)

This course is designed to address the unique health concerns of women in today's society. Specific topics such as alcoholism, anorexia nervosa, premenstrual syndrome, sexually transmitted diseases, domestic violence, child abuse, rape, and others will be included. Prerequisite: Advanced standing of 90 credits.

## HLTH 409 Health Counseling (1:1:0)

The purpose of this course is to provide health professionals with an introduction to counseling theory and the skills of counseling techniques. The course emphasis is on the use of counseling techniques to improve the quality of health care, facilitate health-related decision-making, and enhance the relationships between client and the health professional. Health behavior theory will also be addressed. Prerequisite: HLTH 360; PSY 225.

## HLTH 420 Cardiopulmonary Resuscitation Instructor's Training (1:1:0)

This is an instructor's training course in cardiopulmonary resuscitation. This course is designed to train the student in proper techniques and procedures in emergency measures in cardiopulmonary resuscitation. The course is recognized by the American Heart Association and the American Red Cross. Offered on demand. Prerequisites: Advanced standing of 90 credits, HLTH 240.

## HLTH 421 Advanced Emergency Care (3:3:0)

The course will consist of advanced emergency procedures including CPR during transportation, shallow water rescue and emergency measures in cervical (neck) and back injuries, extrication from an automobile, and proper procedures in the administration of oxygen to a victim of an accident or sudden illness. There is also the opportunity to become certified in advanced emergency care and as an emergency medical technician. Prerequisites: Advanced standing of 90 credits, HLTH 240.

## HLTH 430 Professional Practicum in Health Education (2:2:0)

This course is designed to develop insight during field experiences of student teachers. It includes the study of typical problems encountered in student teaching, analysis of materials and methods being used, management of health promotion activities, consideration of current priorities in the field, and orientation to professional and legal responsibilities in the field. Prerequisites: Advanced standing of 96 credits; department approval; HLTH 360,220 , or 230.

## HLTH 431 Student Teaching in Health Education (6-12:0:3)

This experience consists of a semester of guided teaching experience in the elementary and/or secondary school. This field experience is designed to provide the student teacher with the opportunity to develop and refine competencies and understanding of the teaching-learning process. Prerequisites: Cumulative quality point average of 2.5 overall and a 2.5 in Health; department approval; HLTH 220, 230, 240, 310, 355 or 356, 360; PSED 161, 242; MCOM 262.

HLTH 432 Death and Dying-Implications for Health (3:3:0)
This course investigates the phenomenon of death and dying with the focus on the development of reinforcement of healthy attitudes, values, and behaviors. Prerequisite: Advanced standing of 60 credits.

## HLTH 440 Behavior Modification for Health Education (3:3:0)

This course is an overview of the major principles of behavior modification as they relate to health education in both theory and practice. It examines theory in relation to current issues of education in general and health education in particular. Applications of principles are studied in the context of health programs specifically designed as behavior modification programs and in the context of health programs which contain behavior modification principles but were not designed with these principles in mind. Prerequisite: HLTH 360, 220, or 230.

## HLTH 442 HIV and AIDS Prevention and Education (3:3:0)

This course is designed to provide a comprehensive overview of HIV/AIDS infection in Pennsylvania, New Jersey, and other states. The course will provide information about recent research on modes of HIV transmission and risk reduction strategies. Particular emphasis will be placed on the design and evaluation of HIV prevention and education programs geared towards high-risk populations.

## HLTH 444 Health Promotion Programs and Aging (3:3:0)

This course will emphasize health promotion programming for elderly populations. Social and demographic factors will be addressed in regard to health education's role in the aging process. Healthful aging will be examined and discussed from a public health and school health perspective with a primary focus on developing and implementing programs that enhance the health of the elderly.

## HLTH 460 Community Health Organizations (3:3:0)

This course is designed to investigate the theories, principles, and practices of community organizations for health, techniques of group work, current research in community organizations, and examination of programs of community health agencies. Prerequisites: Advanced standing of 90 credits; HLTH 230.

## HLTH 461 Methodology in Health Education (3:3:0)

This course is designed to acquaint students with a school health program, which involves health instruction, health services, and a healthful school environment. The major emphasis is focused upon the methods and materials which can be utilized for effective teaching of health content. Prerequisite: 18 health credits.

## HLTH 470 International Health Science (3:3:0)

The course is designed to familiarize the student with international health problems and the social, physical, emotional, and spiritual complexities related to changing health status. Emphasis is placed on how change instituted for improvement of physical health may positively or negatively affect the total well being of people. Examination of international health organizations and programs is included. Prerequisites: HLTH 230; advanced standing of 90 credits.

## HLTH 482 Health Leadership and Strategic Management (3:3:0)

This course familiarizes students with theories of personnel supervision, leadership style, and the application of behavioral sciences and techniques of strategic planning in organizational development and work group behavior, and different modes of administrative decision making. Advanced standing of 90 credits.

## HLTH 485 Independent Study (Semester hours arranged)

With the guidance of a faculty member of the Health Department, the student pursues a pattern of readings, study, and research related to professional knowledge and understanding in health science. Topics should be established prior to enrollment. Prerequisites: Department approval; advanced standing of 90 credits.

## HLTH 486 Field Experiences and Internships (Semester hours arranged)

Prerequisites: Department approval; 2.50 overall QPA, 2.50 QPA in major, completion of all requisite and corequisite courses, and advanced standing of 90 credits.

# Bachelor of Science Degree in Health Education Concentration in Community Health Education Program Curriculum Plan 

Freshman Year

| HLTH 210 Foundations of Health Science | 3 | HLTH 230 Community Health | 3 |
| :--- | ---: | :--- | ---: |
| CPSC 100 GE: Personal Computers and Their <br> Uses | 3 | BIOL 112 GE: Human Anatomy \& Physiology <br> II | 4 |
| MATH 110 GE: General Statistics | 3 | PSY 100 GE: General Psychology | 3 |
| CMST 111 GE: Speech Communications | 3 | SOC 111 GE: Introduction to Sociology | 3 |
| BIOL 111 GE: Human Anatomy \& Physiology I | 4 | General Education | 3 |
| Subtotal | 16 | Subtotal | $\mathbf{1 6}$ |


| Fall |  |  |  |
| :--- | :---: | :---: | :---: |
| Sophomore Year |  |  |  |
| MCOM 262 Educational Communication and <br> Technology 3 HLTH 280 Fundamentals of Health Admin- <br> istration 3 <br> Health Elective 3 Health Elective 6 <br> General Education 9 General Education 9 <br> Subtotal 15 Subtotal 18 |  |  |  |


| Fall |  |  |  |
| :--- | ---: | :--- | ---: |
| HLTH 386 Pre-Practicum in Health Education 3 PSY 225 Lifespan Developmental Psychol- <br> ogy | 3 |  |  |
| HLTH 409 Health Counseling | 1 | HLTH 370 Planning \& Evaluation for Health <br> Education | 3 |
| HLTH 470 International Health Science | 3 | Health Electives | 3 |
| General Education | 9 | General Education | 6 |
| Subtotal | $\mathbf{1 6}$ | Subtotal | $\mathbf{1 5}$ |


| Fall |  |  |  |
| :--- | ---: | :--- | ---: |
| HLTH 460 Community Health Organization 3 HLTH 486 Field Experience \& Internship <br> HLTH 461 Methodology in Health Education 3  <br> General Education 6  <br> Subtotal 12 Subtotal |  |  |  |

## Bachelor of Science Degree in Health Education Concentration in School Health Program Curriculum Plan

Freshman Year

| ENGL 103 English Composition | 3 | ENGL 1... English Literature | 3 |
| :--- | ---: | :--- | ---: |
| BIOL 111 GE: Anatomy and Physiology I | 4 | BIOL 112 GE: Anatomy \& Physiology II | 4 |
| HLTH 210 Foundations of Health Science | 3 | HLTH 220 Personal and Consumer Health | 3 |
| MATH GE (100/101) | 3 | PSED 161 Foundations of Education | 3 |
| General Education | 3 | FIT Activity | 1 |
| Subtotal | 16 | Subtotal | $\mathbf{1 4}$ |

Fall
Sophomore Year
Spring

| HLTH 230 Community Health | 3 | HLTH 240 Health Emergencies | 3 |
| :--- | ---: | :--- | ---: |
| FIT Activity | 1 | SOC 111 GE: Introduction to Sociology | 3 |
| PSY 100 GE: General Psychology | 3 | CMST 111 GE: Speech Communications | 3 |
| MATH 110 GE: General Statistics | 3 | General Education | 3 |
| General Education | 3 | Elective | 3 |
| PSED 242 Educational Psychology | 3 |  |  |
| Subtotal | $\mathbf{1 6}$ | Subtotal | $\mathbf{1 5}$ |


| Fall Junior Year |  |  |  |
| :--- | ---: | :--- | ---: |
| HLTH 341 Nutrition Education 1.5 HLTH 350 Mental Health <br> HLTH 356 Drug Education 1.5 HLTH 365 School Health Administration <br> HLTH 310 Family Health 3 General Education <br> General Education 6 Electives <br> Electives 5  <br> Subtotal 17 Subtotal | 6 |  |  |

Fall Senior Year Spring

| HLTH 461 Methods in Health Education | 3 | HLTH 431 Student Teaching | 12 |
| :--- | ---: | :--- | ---: |
| HLTH 370 Planning and Evaluation | 3 |  |  |
| Electives | 3 |  |  |
| General Education | 6 |  |  |
| Subtotal | 15 | Subtotal | 12 |

[^4]
# Bachelor of Science Degree In Health Services Administration Program Curriculum Plan 



## History

School of Arts and Sciences
The Faculty of Social Sciences
Stroud Hall, Room 409
570-422-3286
www.esu.edu/history
Department faculty

| Professors: | Neil Hogan (nhogan@po-box.esu.edu) |
| :--- | :--- |
| Associate Professors: | Lawrence Squeri (lsqueri@po-box.esu.edu) |
|  | Marie Donaghay (mdonaghay@po-box.esu.edu) |
| Assistant Professors: | Martin Wilson (mwilson@po-box.esu.edu) |
|  | Don Dellipriscoli, chair (ddelliprisoli@po-box.esu.edu) <br>  <br>  <br>  <br>  <br>  Sichael Gray (mpgray@po-box.esu.edu) |
|  | Stephertiz (sortiz@po-box.esu.edu) |

## Bachelor of Arts with a History major (Concentration: American and World)- $\mathbf{3 6}$ semester hours

Required major courses: HIST 390 and 495; one of the following: HIST 111, 112, or 113; one of the following: HIST 141, 142, 143, or 144; one of the following: HIST 270, 271, 272, $281,282,288,335,371,381,382,424,471,472,473$, or 474; 21 additional semester hours in History.

Bachelor of Arts with a History major (Concentration: Public History)- $\mathbf{3 9}$ semester hours

- Required major courses: HIST 320, 352, 390, and 495; one of the following: HIST 111, 112, or 113; two of the following: HIST 141, 142, 143, or 144; one of the following: HIST 270, 271, 272, 281, 282, 288, 335, 371, 381, 382, 424, 471, 472, 473, or 474; HIST 486 ( 6 semester hours); nine additional hours in History.
- Corequisites: One of the following: ART 101, 201, or 202; CMST 111; CPSC 100; ENG 205; GEOG 110; EMGT 200. One semester of a foreign language.

Bachelor of Arts with a History major (Concentration: Latin America and Latino)- $\mathbf{3 6}$ semester hours

- Required major courses: HIST 315, 360, 363, 390, and 495; one of the following: HIST 141 or 142; one of the following: HIST 143 or 144; one of the following: HIST 111 or 113; one of the following: HIST 270 or 271; nine additional semester hours in History.
- Corequisites: ENG 190, POLS 111, POLS 211, ECON 111, SOC 111, SOC 343, GEOG 110; one of the following: GEOG 210 or 212.

Required Minor in Spanish--See Foreign Languages.

Students may also choose a dual major in History and Education. See "Social Studies."

## History minor- $\mathbf{1 8}$ semester hours

- Required courses: at least one course in each of three areas: United States History, European History, and Area Studies/World History; nine additional semester hours of History.
- Note: Nine credits of this coursework must be at the 300-400 level.


## Course Descriptions

(Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title.)

## HIST 111 GE: World Civilization to 1300 (3:3:0)

This course traces the development of civilization through the rise and fall of cultures in Europe, Asia, Africa and the Americas to 1300 A.D.
HIST 112 GE: Modern World Civilization, 1300-1914 (3:3:0)
This course acquaints students with the history of Europe, Asia, Latin America, and Africa.
HIST 113 GE: Twentieth Century World, Since 1914 (3:3:0)
This course examines political and social developments since World War I and their relationship to the wars of the century, materialism, imperialism, industrialism, socialism, communism and democracy. Selected events and problems may be examined to illustrate basic trends and concepts.

## HIST 115 GE: History of the Non-Western World, Since 1800 (3:3:0)

This course traces developments in Asia, Africa, and Latin America from the colonial era to independence. Special emphasis is given to the diverse cultures in the non-western world and their interaction with the west.

## HIST 141 GE: Foundations of the United States (3:3:0)

This course deals with European colonization of the New World, the social, economic and political development of the colonies, the growth of revolutionary movements, and the political and social consequences of independence.
HIST 142 GE: The United States as a Developing Nation in the Nineteenth Century (3:3:0)
This course is a study of continued growth of the federal republic from the age of Jackson to the end of the century with particular attention to political problems, economic development, social changes, the Civil War and growing industrialization, culminating with the emergence of the United States as a world power.

## HIST 143 GE: Twentieth Century United States History (3:3:0)

This course is a study of the United States during the twentieth century. The course has strong emphasis on the Progressive movement, World War I, the Great Depression, the New Deal, World War II, the Cold War, the Civil Rights Movement and contemporary social, political and cultural changes and their origins.

## HIST 211 GE: The Ancient World (3:3:0)

This course studies the origins of western cultural traditions in the Middle East and the rise and fall of the Greco-Roman world with special emphasis on political institutions, intellectual, religious, artistic, and literary achievements. Prerequisite: One of HIST 111, 112, or 113.

## HIST 241 GE: American Colonial History (3:3:0)

This course is an in-depth study of the colonial period. It stresses developments that later contributed to the growth of the United States. Prerequisite: HIST 112 or 141.

## HIST 253 GE: Women in American History (3:3:0)

This course is a study of the role of women in American history from colonial times to the present. Prerequisite: One of HIST 141, 142, 143, or 144.
HIST 270 GE: Early Modern Europe, 1500-1789 (3:3:0)
This course explores the development of Europe between the Reformation and the French Revolution, focusing on the religious revolution of the sixteenth century, the rise of absolute rulers, mercantilism and the European state system, the Scientific Revolution, and the Enlightenment.
HIST 271 GE: Foundations of Modern Europe, 1789-1914 (3:3:0)
The course presents the history of Europe from the French Revolution to World War I: the fall of the Old Regime in France and its effect upon European political developments in the 19th century; the Napoleonic episode and the conservative reaction; romanticism, nationalism, socialism, democracy; and imperialism, and international relations.
HIST 272 GE: Modern European History, 1914-1990 (3:3:0)
This course presents Europe since 1914: World War I, Paris Peace Conference, The League of Nations and Collective Security, rise of Bolshevism and Fascism, World War II, the Cold War, NATO and the Warsaw Pact, the political and economic search for a new Europe in the 1980's.

## HIST 278 GE: History of Everyday Life, Since 1800 (3:3:0)

This course explores changes in the everyday activities of common people. It deals with leisure, entertainment, sports, health, urban and suburban life, non-elite mass media, the social effects of modern transportation, and other selected topics.

## HIST 281 GE: The Third Reich-from Hitler to Holocaust (3:3:0)

This is an interpretive survey of Europe during the Hitler era centered on the history of Nazi Germany. Topics covered include the origins of National Socialism, Adolf Hitler, Nazi political and social revolutions, the S.S. terror system, the Nazi "new order" in Europe, the Holocaust, and the Nuremberg Trials. Prerequisite: One of HIST 112, 113, or 144.

## HIST 282 GE: Women in European History (3:3:0)

This course is a study of the role of women in European history up to the present. Emphasis is placed on the changing social and political position of women in European society since the Industrial Revolution. Prerequisite: One of HIST 111, 112, 113, 141, 142, or 143.

## HIST 288 GE: Social History of Victorian \& Twentieth Century England (3:3:0)

Using the new social history the course will explore the character of upper, middle, and working class society in England from the Victorian era to the present. It will study the social changes and continuity of English society since 1832. Prerequisite: HIST 112 or 113.

## HIST 290 Special Topics (Semester hours arranged.)

These courses are designed to meet specific needs of students or are offered on a trial basis in order to determine the demand for and the value of introducing them as a part of the university curriculum.
HIST 313 China: History and Politics (3:3:0)
This is a study of China since traditional times examining political, cultural, and economic aspects of her society up to the present and her influence on East Asia and the world. A companion to HIST 314. Prerequisite: One of HIST 111, 112, 113, or 115.

HIST 314 Japan and the Rimland of East Asia (3:3:0)
This course presents the historical and cultural evolution of Japan, Korea, and the nations of Southeast Asia and their contemporary government and politics. This is a companion course to HIST 313. Prerequisite: One of HIST 111, 112, 113, or 115.
HIST 320 Introduction to Public History (3:3:0)
The focus of this area study is to promote the subject of public history as a way of offering a new dimension to the study of history. Public history will be examined through the exploration of the role of museums and historic sites, and by studying their purposes, practices and relationships to the scholar and classroom educator. Prerequisite: Any two of the following: HIST 141 or 142 or 143 or 144; any one of the following: HIST 111 or 112 or 113.
HIST 323 The Gilded Age and Progressive Era (3:3:0)
This course explores the major themes and issues in American history from the end of Reconstruction to the United States entry into World War I (1877 to 1917). Some of the topics covered in this course will be industrialization and its impact on the United States, the populace and progressive movements, how the United States became an imperial power and how questions of race and ethnicity shape American culture and politics. Prerequisite: HIST 142 or 143.

## HIST 330 South Asia (3:3:0)

This course examines the social, political, and cultural history of the South Asian subcontinent in the modern period. Topics discussed will include the establishment and consequences of foreign rule, the rise of nationalism and the partition of the subcontinent. Prerequisite: one of HIST 111 or 112 or 113 or 115 .
HIST 333 Africa (3:3:0)
Substantial attention is given to the African experiences before 1800, emphasizing the roots of modern Africa. The course traces the development of European empires in the 19th century, the emergence of African nationalism in the 20th Century, and the interaction of Western and African cultures. This course is also listed as POLS 333. Prerequisite: Advanced standing of 60 credits.

## HIST 335 History of Modern Italy (3:3:0)

This course traces the development of Italy from the Napoleonic Era to the present. Among topics covered are unification, the Liberal Period, Fascism, and the postwar years. Emphasis is on social, political, and economic trends. Prerequisite: HIST 112 or 113.

## HIST 341 GE: U.S. Military History (3:3:0)

This course is a study of the development of American military institutions, policies, and traditions from colonial times to the present. Emphasis is on the strategic and tactical deployment of our armed forces in war and peace. Prerequisite: One of HIST 141, 142, 143, or 144.

## HIST 342 Civil War and Reconstruction (3:3:0)

This course examines the major events, battles, and leaders of the Civil War, Union and Confederate, and the outcome of the conflict. The Reconstruction period is studied with emphasis on the political, social, and economic conflicts of the era and the reasons for the failure of Reconstruction. Prerequisite: One of HIST 141 or 142.

## HIST 343 The Middle East (3:3:0)

This is an introductory survey of ancient civilization and an intensive study of growth and effects of colonialism and imperialism. Emphasis is placed on cultural backgrounds and the revolutionary nationalism of the modern period, and discussion of contemporary events. This course is also listed as POLS 343. Prerequisite: One of HIST 111, 112, 113, or 115.

## HIST 344 Frontier History (3:3:0)

This course is a study of the movement of the American Frontier from colonial times to 1890. Emphasis is placed on the impact of the changing frontier on Native Americans, westward expansion, the development of the various forms of transportation, and the environmental factors which contributed to the rise of the conservation movement. Prerequisite: Any one of the following: HIST 141, 142, 143, or 144.

## HIST 346 GE: History of Urban America (3:3:0)

This course provides an examination of the growth and transformation of the American city from the colonial period to the present. Attention is focused on the evolution of political and economic institutions, social change, technological innovations, planning theories, and reactions of sensitive observers to the process of urbanization as expressed in imaginative literature and scholarly studies. Prerequisite: One of HIST 141, 142, 143, or 144.

## HIST 347 GE: American Business History (3:3:0)

This course traces the growth and development of American business from the late 18th century to the present. Emphasis is placed on the transportation revolution, labor, technology, the impact of the Civil War, modern industrialization, trusts and antitrust movements, unionization, the Great Depression, World War II, and the problems of contemporary business. Prerequisite: One of HIST $141,142,143$, or 144.

## HIST 350 Economic History of Modern Europe (3:3:0)

This course traces the economic development of Europe from industrialization to the creation of the European Union. Emphasis is placed on the industrial revolution, patterns of development, strategic sectors, the role of the state, the economic consequences of war, planning for the postwar economy, and the origins and evolution of the European Union. Prerequisite: One of HIST 141, 142,143 , or 144.

## HIST 352 History of Pennsylvania (3:3:0)

This course will cover the development of Pennsylvania from the period of exploration and colonization to the present and its inter-relationships with the rest of the country. Prerequisite: One of HIST 141, 142, 143, or 144.

## HIST 359 Labor History and Industrial Relations (3:3:0)

This course examines the roles of labor and management in industrial relations with special references to labor history, wage-rate determination, collective bargaining, and government intervention into labor relations. The implications of the changing structure of the American economy are analyzed. Prerequisite: One of HIST 141, 142, 143, or 144.

## HIST 360 Latinos in Modern America (3:3:0)

This course explores the historical experiences of the peoples from Latin America and the Span-ish-speaking Caribbean, and those of their descendents, in the modern United States. The focus of the course will be to compare and contrast the twentieth-century experiences of the four largest Latino populations: those who can trace their heritage to Mexico, Puerto Rico, Cuba and the Dominican Republic. Prerequisite: HIST 143 or 144.

## HIST 363 Latin America (3:3:0)

This course is an examination of Latin America since European contact. It focuses on the area's political, economic, and social development. This course is also listed as POLS 363. Prerequisite: One of HIST 112, 113, or 115.

## HIST 371 Medieval and Renaissance Europe, 500-1500 (3:3:0)

This course traces the history of Europe from the fall of the Roman Empire to the Reformation. Topics covered include origins of the European States, the feudal system, Church-State relations, international relations, origins of the universities, scholasticism, literature and arts, the Renaissance of the 14th and 15th centuries. Prerequisite: HIST 111 or 112.

## HIST 381 GE: The Rise of England to 1760 (3:3:0)

This course is a survey from the Anglo-Saxon Conquest to the beginning of the Industrial Revolution, centering on the development of the common law and Parliament as well as the growth of England as a national state. Particular emphasis is placed on economic, social, and political developments in the Tudor, Stuart, and early Georgian periods. Prerequisite: One of HIST 111, 112,113 , or 141.

## HIST 382 GE: Modern Britain (3:3:0)

This course stresses the growth of modern industrial Britain from 1760 with emphasis on social and economic factors of growth, the position of Britain as a world power, the development of the cabinet system, and the emergence of modern social and political reform, including the welfare state. Britain's role in world affairs is analyzed along with her changing status in contemporary Europe. Prerequisite: One of HIST 112, 113, 141, 142, or 144.

## HIST 390 Seminar I: Introduction to Historical Methodology (3:3:0)

This course is required of History majors who have completed 12 credits in history. It is writing intensive and introduces basic research techniques in primary and secondary sources. The course also surveys historical literature and examines conflicting historical interpretations and approaches. For History majors only. Prerequisite: Must have completed at least 30 credits, at least 12 credits of which must be in history.

## HIST 395 Scapegoats and Witchhunts (3:3:0)

This course is an interdisciplinary seminar that explores the phenomena of cultural scapegoating and witchhunting. The primary perspectives will be rhetorical, historical, and psychological. By focusing on various targeted individuals and groups, past and present, the seminar will culminate in a synthesized view based on the instructor's various disciplines. Prerequisite: Honors program or permission of instructor.

## HIST 424 Russia and Eurasia (3:3:0)

This course focuses on the emerging political units created as a result of the break up of the Soviet Union. Students will examine the causes, nature, and course of the Soviet collapse, the challenges of the successor states, and the consequences of this major historical development for the postcold war world. This course is also listed as POLS 424. Prerequisites: Advanced standing of 90 credits; one of POLS 101, 111, 211, or 222.

## HIST 441 Diplomatic History of the United States, to 1900 (3:3:0)

This course examines American diplomacy and foreign policies from the Revolution to the end of the Spanish-American War. Particular attention is given to the evolution of basic concepts such as isolationism, neutrality, and manifest destiny. This course is also listed as POLS 441. Prerequisite: Advanced standing of 90 credits.

## HIST 442 Diplomatic History of the United States, Since 1900 (3:3:0)

This course emphasizes the United States' emergence from a tradition of isolationism into a position of international responsibility by examining its progressively deeper involvement in the world's diplomatic and military confrontations. This course is also listed as POLS 442. Prerequisite: Advanced standing of 90 credits.

## HIST 471 History of Russia, to 1917 (3:3:0)

This is a study of the political, social, and cultural evolution of Russia from the 9th century to the Bolshevik Revolution of 1917 with special emphasis on the development of institutions, social classes, reform and revolutionary movements, foreign policy objectives and achievements, and the growth of Russia as a world power. Prerequisite: Advanced standing of 90 credits.

## HIST 472 The Soviet Union (3:3:0)

This course is a study of the origins of the development of the U.S.S.R., the social, economic and political transformation of old Russia into a socialist state under Lenin and Stalin, the Bolshevik Revolution of 1917, the civil war, the struggle for power and the great purges, Soviet foreign policy before and after World War II, the cold war, and the post-Stalin era of Khrushchev, the Brezhnev-Kosygin regime, and the collapse of the Soviet Union. Prerequisite: Advanced standing of 90 credits.

## HIST 473 Modern Germany (3:3:0)

This course studies the Napoleonic impact, the Prussian reform movement, romanticism, liberalism, and nationalism in Germany, the Revolutions of 1848, the age of Bismarck, the Wilhelmian period, World War I, the Weimar Republic, the Nazi revolution, World War II, and the post war era. Emphasis is on political, cultural, and economic changes, 1789 to the present. Prerequisite: Advanced standing of 90 credits.

## HIST 474 History of Modern France, 1789-1990 (3:3:0)

This course acquaints students with a basic knowledge of France's political, social, economic, and diplomatic history since 1789 and provides a firm grasp of French institutions. Prerequisites: HIST 112 or 113 or advanced standing of 90 credits.

## HIST 485 Independent Study (Semester hours arranged)

Independent study is designed to provide in-depth coverage of subject matter not covered in courses offered by the Department and must be justified to meet a specific need. A student wishing to take independent study should discuss the plan first with his/her adviser and then with a member of the Department. If a faculty member agrees to supervise the study, the proposal will be submitted to the chair of the Department. The chair, after acting on the proposal, shall present it to the Department for action. It will then be transmitted to the dean of the school.

## HIST 486 Field Experiences and Internships (Semester hours arranged)

HIST 495 Seminar: Historical Research and Presentation (3:3:0)
This course is required of seniors majoring or minoring in history. Students must write and defend a research paper that shows a grasp of historical logic and exposition. The course also covers historiography and the major schools of historical thought. Prerequisites: 90 Credits and over.

## HIST 499 Student Teaching Internship (1:0:TBA)

This course is designed to provide the student with an opportunity to work with a faculty member in the student's primary Arts and Sciences discipline during the student teaching experience. The course will enhance the student's ability to understand and maximize the relationship between disciplinary subject matter and pedagogy.

# Hotel, Restaurant and Tourism Management 

College of Business, Economics and Management<br>The Faculty of Leisure and Sport Management<br>Hospitality Management Center<br>570-422-3511<br>Department faculty<br>Professor: Robert McMullin (rmcmullin@po-box.esu.edu)<br>Associate Professors: Carol Miller (cmiller@po-box.esu.edu)<br>Albert Moranville, chair (moranville@po-box.esu.edu)<br>Richard Donnelly (rdonnelly@po-box.esu.edu)<br>Michael McCorkle (mmccorkle@po-box.esu.edu)<br>Margaret Persia (mpersia@po-box.esu.edu)

www.esu.edu/hrtm

The travel and tourism industry is one of the largest, most dynamic industries in the world. Students of the Hotel, Restaurant, and Tourism Program are introduced to this exciting industry and will be prepared to enjoy a successful career in the hospitality industry. The Department of Hotel, Restaurant and Tourism Management offers a Bachelor of Science degree with three concentration options for majors: Hotel and Lodging Management, Restaurant Management or Tourism Management. All courses are taught by faculty who combine excellent academic credentials with a strong professional background.

The Hotel, Restaurant and Tourism Management Department is enhanced with activities supported by the hospitality industry. Students participate in hotel \& restaurant shows, tour hospitality facilities, interact with industry professionals, attend career days and conduct special projects for the industry. Students are encouraged to participate in department activities. Students are required to complete an internship in the hospitality industry. The faculty supervised internship provides each student the opportunity to apply the knowledge gained from their coursework in a professional industry setting. Students are encouraged to select an internship that meets their individual learning objectives. Information concerning internship and career opportunities may be acquired by contacting the Hotel, Restaurant and Tourism Management Department.

## Bachelor of Science with a Hotel, Restaurant and Tourism Management major-57-60 semester hours

## Concentration: Hotel Management

- Required major courses: HRTM 101, 211, 212, 241, 321, 331, 351, 391, 392, $421,431,441,451,486$ ( $9-12$ credits), 491 and 2 HRTM electives courses ( 6 credits)
- Corequisite courses: ECON 111, 112; ENGL 205; PSY 100; CMST 111 or 210; EMGT 211.
- Note: ECON 111, 112; PSY 100; \& CMST 111 or 210 may be used to satisfy university general education requirements.
- Please see the university requirements in this catalog.
- Majors must attain an overall quality point average of not less than 2.5 for enrollment in HRTM 486 and graduation.


## Concentration: Restaurant Management

- Required major courses: HRTM 101, 211, 212, 251, 311, 321, 331, 351, 391, 392, $421,441,451,486$ ( $9-12$ credits), 492 and 2 HRTM electives courses ( 6 credits)
- Corequisite courses: ECON 111, 112; ENGL 205; PSY 100; CMST 111 or 210; EMGT 211.
- Note: ECON 111, 112; PSY 100; and CMST 111 or 210 may be used to satisfy university general education requirements.
- Please see the university requirements in this catalog.
- Majors must attain an overall quality point average of not less than 2.50 for enrollment in HRTM 486 and graduation.


## Concentration: Tourism Management

- Required major courses: HRTM 101, 211, 212, 232, 321, 331, 334, 335, 351, $421,431,432,436441,451,486$ ( $9-12$ credits) and 2 HRTM electives courses ( 6 credits)
- Corequisite courses: PSY 100; SOC 111; CMST 111 or 210; ECON 112; EMGT 211.
- Note: ECON 112; PSY 100; SOC 111 \& CMST 111 or 210 may be used to satisfy university general education requirements.
- Please see the university requirements in this catalog.
- Majors must attain an overall quality point average of not less than 2.5 for enrollment in HRTM 486 and graduation.


## Course Descriptions

(Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title.)

## HRTM 101 Introduction to Hotel Management (3:3:0)

This course introduces the scope, historical development, and current trends and prospects in hotel administration. It includes an investigation into the goals, managerial duties and responsibilities, organization structure, and career opportunities in the hospitality industry.

## HRTM 211 Basic Food Techniques (3:2:2)

This course is an introduction to the science of foods with special attention given to foods as ingredients of recipes. It includes explanation and demonstration of the physical and chemical changes that occur in the preparation, mixing, and cooking phases of food production.

## HRTM 212 Menu Planning and Presentation (3:3:0)

This course is designed to develop the student's knowledge of recipe use, menu preparation, and the concepts of theme, color, and decor in food production. Emphasis on international foods and an introduction to wines in relation to foods is included. Prerequisite: HRTM 211.

## HRTM 232 Principles of Travel and Tourism (3:3:0)

This course is designed to acquaint the student with the growing importance of travel and tourism as a worldwide industry. Topics include an overview of tourism terminology, travel and tourism suppliers, the social, cultural, and economic impacts of tourism, trends in transportation, research, and consumerism, introduction to tourism marketing, and tourism in the future.

## HRTM 241 Rooms Division Management (3:3:0)

This course is the study of the service function as it relates to the Rooms Division. Specifically, it is the study of the front office and housekeeping departments as they relate to the total hotel organization. Topics include organizational structure of the Rooms Division, front office and reservation procedures, price structures and accounting, and scheduling and training in these areas. Prerequisite: HRTM 101.

## HRTM 251 Applied Foodservice Safety and Sanitation (3:3:0)

Applied Foodservice Safety and Sanitation is a course designed to provide the student with the fundamentals and techniques of food management that apply to environmental sanitation. Emphasis is placed on the application of principles necessary to manage a sanitary and safe foodservice operation. For Certification with the National Restaurant Association. Prerequisite: HRTM 212.

## HRTM 261 Club Management (3:3:0)

An overview of the club management industry with emphasis on the analysis of country clubs, nightclubs, and private clubs. Students should be exposed to the history and structure of club management, physical organization, operating club departments, and entertainment. Within club management, an introduction to beverage management component will include the history, development, preparation, and implementing of mixed beverages.

## HRTM 271 Casino Management (3:3:0)

An overview of Casino Management with emphasis on the analysis of casino hotel operations, the gaming industry and its trends, and casino organizational structure. Students will learn the gaming history, casino management, physical organizations, and government regulations of gambling. Related topics include layout and design of facilities, surveillance, demographic profiles, psychological profiles, and economic impact.

## HRTM 290 Special Topics (Semester hours arranged)

This course is designed to meet specific needs of groups of students or courses to be offered on a trial basis in order to determine the demand for and value of introducing them as a part of the curriculum.

## HRTM 311 Haute Cuisine and Oenology (3:3:0)

This course consists of an introduction to the classic dishes of haute cuisine, general information on menu planning, preparation of various international dishes, and sources and characteristics of selected wines of the world, how they are produced, stored, and selected. Prerequisites: HRTM 101, 212.

## HRTM 321 Human Resources I (3:3:0)

This course introduces the language, responsibilities, and relationships of the personnel function in a hotel. It stresses interviewing techniques, staffing, training, employee relations, and wage and benefit administration in the hospitality field. Prerequisites: HRTM 101, 211.

## HRTM 331 Hospitality Marketing I (3:3:0)

This course establishes the importance of a formalized marketing/advertising program in successful hotel operation. It traces the steps in developing a sales presentation, a product and marketing analysis and the development of a marketing plan and its relationship to the overall profitable operation of the hotel or restaurant. Prerequisites: HRTM 101, 211.

## HRTM 334 Tourism Destinations (3:3:0)

This course examines the major national and international tourism destinations according to their attractiveness and accessibility to tourists. Prerequisite: HRTM 232.

## HRTM 335 Perspectives of International Tourism (3:3:0)

This course presents an overall view of the scope, structure, and function of international tourism. Political relationships necessary for international tourism exchange are investigated, and cultural, social, and economic impacts of travel and tourism are examined. Prerequisite: HRTM 232.
HRTM 336 Community Tourism Development (3:3:0)
This course presents a localized perspective of the organizational, planning, promotional, and operational procedures utilized for successful tourism development at the community level. Prerequisite: HRTM 232.

## HRTM 351 Information Systems for Hospitality Management (3:3:0)

This course is a study of the various types of computer-based information and communication systems used by managers in the hospitality industry. Topics will include reservations, registration, accounting and point of sale systems, telecommunications, spreadsheet applications, and information processing. Prerequisites: HRTM 321, 331; EMGT 211; CPSC 100.

## HRTM 371 Hotel Development and Design (3:3:0)

The development of market and feasibility studies, location and site selection, creation of concept, budgetary planning, selection of equipment, space allocation, and maintenance costs are covered in this course. Prerequisites: HRTM 101, HRTM 211.

## HRTM 381 Hotel Energy/Engineering Management (3:3:0)

This course consists of an introduction to the management of the major engineering systems required to operate the physical plant of a hotel, the importance of energy conservation and controls, impact on efficient cost management, and the need for a continuing rehabilitation program for all areas of the physical plant. Prerequisites: HRTM 101, 211; one of PHYS 101, 103, 117.
HRTM 391 Hotel Purchasing (3:3:0)
This course presents the vocabulary, systems, controls specifications, and products typical to hotels. It shows how to set up a purchasing department and defines and establishes its relationship to other hotel departments and hotel operations as a whole. Prerequisites: HRTM 101, 211.

## HRTM 392 Quantity Food Production and Service (3:0:6)

In this course the student learns to integrate all of the techniques and information of previous culinary courses and participates in the operation of a food service business on campus. Emphasis is placed on planning, preparation, service, and stewarding phases of the operation. Prerequisites: HRTM 101, 211.

## HRTM 421 Human Resources II (3:3:0)

This course provides an in-depth study of supervisory techniques from first-line to top management in a hotel. It investigates training programs and techniques at all levels of supervision in a hotel, including hotel opening. Prerequisite: HRTM 321.

## HRTM 431 Hospitality Marketing II (3:3:0)

This course is designed to introduce the student to the scope and importance of group business to hotels. Market sources for tour groups and corporate business, as well as conventions and conferences, will be investigated. Instruction in the importance of association and meeting planners will be emphasized. Sales management techniques for servicing this segment of the hospitality market so important to successful sales operations will be stressed. Prerequisites: HRTM 101, 211, 331.
HRTM 432 Tour Planning and Management (3:3:0)
This course familiarizes the student with the tour planning process including designing, costing, and marketing an escorted tour. Responsibilities of the tour manager and the tour operator are discussed. Prerequisites: HRTM 232, 334 or 335.

## HRTM 436 Meeting and Convention Planning and Management (3:3:0)

This course provides students with a basic understanding of the organizational and operational aspects of meeting and convention planning and management from the perspectives of the sponsoring organization as well as that of the facility manager. Prerequisites: HRTM 232, 331.

## HRTM 439 Touring Abroad (3:3:0)

This course is designed to be an educational experience which combines classroom instruction in the basics of international travel and tour operations within an authentic setting. Destination of the tour varies. Prerequisites: HRTM 232, 335.

## HRTM 441 Hospitality Financial Management (3:3:0)

This course continues the study of the financial structure of business at an advanced level with emphasis in the hotel/restaurant (hospitality) industry. It includes an examination of food, beverage, room, and labor cost controls, franchise accounting, hotel/restaurant cost-volume-profit analysis, pricing methods, and other management interests in the financial structure of the hotel entity. Emphasis is placed upon the preparation, interpretation, and application of financial instruments. Prerequisites: HRTM 101, 211; EMGT 211

## HRTM 451 Hotel Law (3:3:0)

This course traces the origin and development of innkeeping law and introduces the language and role of common law and statutory law in delineating the legal rights and responsibilities in the hotel industry through the analysis and interpretation of actual case studies. Prerequisites: HRTM 101, 211, 321.

## HRTM 485 Independent Study (Semester hours arranged.)

Enrollment is contingent upon the student's compliance with all departmental standards and requirements.
HRTM 486 Field Experience and Internship (Semester hours arranged)
Placement for the intern is arranged on an individual basis by the internship instructor in consultation with the intern and the intern-employer. Enrollment in this course requires a minimum cumulative point average of $2.5,90$ semester credits, departmental approval, and 400 hours of documented work experience in the hospitality industry.

## HRTM 488 Research Skills in Psychology and Hospitality (Semester hours arranged)

This course is designed for students preparing for and others already employed in the hospitality industry who need a greater degree of sophistication in the methodological problems and the research strategies which are employed in the industry to enable them to become better consumers as well as planners of such applied research. Also listed as PSY 488. Prerequisites: PSY 101; HRTM 101; or advanced standing of 90 credits and permission of departments.

HRTM 491 Advanced Hotel Management (3:3:0)
This course involves the techniques for developing management policy and managerial expertise including goal setting, financial planning, and property development and maintenance. Prerequisites: HRTM 321, 392.
HRTM 492 Advanced Food and Beverage Management (3:3:0)
This course is an advanced investigation into the vocabulary, systems, policies, and procedures for all of the food and beverage operations in a hotel including food and beverage management. Prerequisite: HRTM 392.

## Industrial Physics

## School of Arts and Sciences

The Faculty of Sciences
Gessner Science Hall, Room 107
570-422-3341
www.esu.edu/physics
Bachelor of Science with an Industrial Physics major - 55 Semester Hours
Coordinator: Professor David Larrabee, Department of Physics.

- Required major courses: PHYS 111, 161, 162, 201, 202, 240, 261, 262, 333, 403, $411,415,428,431,441,451,485$, plus two of the following PHYS 301, 311, 421, 423, 432, 471, CHEM 371.
- Corequisite courses: MATH 140, 141, 240, 320, 341, CHEM 121, 123, 124, 126, BIO 114, ECON 111, 112, ENGL 204, CMST 111, CPSC 211.


## Interdisciplinary Studies

## Bachelor of Arts or Bachelor of Science with an Interdisciplinary Studies major

## - 42 semester hours

An interdisciplinary program of study can be arranged to satisfy an educational objective of an individual student. Such programs may involve either two or three departments. Normally a student must declare an interdisciplinary studies major before completing 60 credits (or before the completion of the first semester for students transferring in 60 or more credits). Exceptions may be approved in extraordinary circumstances. In any case, the student must complete 30 credits after officially declaring an interdisciplinary studies major.
Application forms, available in the Center for Enrollment Services, require a student statement of the goals of the program and how it addresses the student's professional aspirations, a list of courses to be taken from each department, and dated signatures of the student and of the department chair of each cooperating department. The completed form will be filed in the Center for Enrollment Services and copied to the student and each adviser.

## - Required Courses:

- Two department program - a minimum of 21 credits (at least 9 at the 300 level or above) from each department.
- Three department program - a minimum of 15 credits (at least 6 at the 300 level or above) from each of two departments and a minimum of 12 credits (at least 3 at the 300 level or above) from the third department.
- Note: Grades of A, B, or C must be earned in all 42 credits.
- Please see the university requirements in this catalog.


## International Studies

## International Studies Minor -24 semester hours

The International Studies Minor at East Stroudsburg University is based on the philosophy that international studies should enhance the knowledge and skills acquired in the student's major. It is designed to provide the undergraduate student with a structured interdisciplinary program of international studies which complements a field of study in a traditional major. The minor is open to all matriculating students at East Stroudsburg University, and it may be used to enrich any degree program.

NOTE: Students must submit a pre-approved study plan in consultation with a faculty adviser from the coordinating department.

- Required courses:
A. $\mathbf{1 2}$ credits in International Studies distributed as follows: At least 6 of the 12 credits must be from the following departments: Economics, Geography, History or Political Science. Only 3 of the 12 credits may be from a 100 -level course. At least 6 of the 12 credits must be at the $300-400$ level. All courses must fit the student's pre-approved study plan. More than 12 credits may be accepted for this requirement if fulfillment of the language requirement (below) requires fewer than 9 credits.
B. Foreign Language proficiency (up to 9 credits) - Students must achieve in-termediate-level fluency in a second language.
- Students will be very strongly encouraged to pursue a semester or summer studyabroad experience. Credits earned overseas can be applied toward completion of the minor's 21 credits.
- A QPA of 2.5 in the minor must be maintained.

Coordinating Department: Foreign Languages.

## Marine Science

School of Arts and Sciences<br>The Faculty of Sciences<br>Bachelor of Science with a Marine Science major- $\mathbf{6 3}$ semester hours<br>See Biological Sciences, Page 83

## Mathematics

School of Arts and Sciences<br>The Faculty of Science

Stroud Hall, Room 408C

## Department faculty Professors:

## Assistant Professors:

> Joseph Cavanaugh, chair (jcavanau@po-box.esu.edu) Mary Ann Matras (mmatras@po-box.esu.edu)
> Deborah Prince (dprince@po-box.esu.edu)
> Niandong Shi (nshi@po-box.esu.edu)
> Andrzej Zarach (azarach@po-box.esu.edu)
> Olivia Carducci (ocarducci@po-box.esu.edu)
> Eugene Galperin (egalperin@po-box.esu.edu)
> Jonathan Keiter (jkeiter@po-box.esu.edu)
> Eugenia Skirta (eskirtapo-box.esu.edu)

## Bachelor of Arts with a Mathematics major-40 semester hours

The Bachelor of Arts in Mathematics is a rigorous introduction to the discipline of mathematics. Students in this program will be exposed to both applied and theoretical mathematical ideas. This program prepares students to enter graduate school for further study or to seek employment in fields that value people with well-honed quantitative and problem-solving skills.

- Required major courses: MATH 140, 141, 220, 240, 311, 320, 421, 425, and two math courses numbered 300 or higher, except MATH 351, 430 and 431, 486 and 499.
- Corequisite course: CPSC 111.
- Please see the Foreign Language Competency Requirement in this catalog.
- Please see the university requirements in this catalog.
- Note: Grades of A, B, or C must be earned in all of the required MATH and CPSC courses. A minimum cumulative quality point average of 2.00 in Mathematics is required.
- A minimum of 15 credits of the mathematics courses required for this degree must be completed at East Stroudsburg University.

> Suggested four-year schedule of required courses
> Year 1: Fall MATH 135 or 140; Spring MATH 140 or 141, CPSC 111
> Year 2: Fall MATH 141 or 240, 220; Spring MATH 240, 320
> Year 3: Fall MATH *311, elective; Spring MATH425, *341
> Year 4: Fall MATH 421, 440; Spring MATH 422 or 441
> (* Only one of MATH 311 and 341 is required)

Bachelor of Science with a Mathematics major (Secondary Education)-44 semester hours
A combination of courses in mathematics and pedagogy, this major prepares students for a successful career as a mathematics teacher in grades seven to twelve. In this program which has achieved National Recognition status from the national council of Teachers of Mathematics, students complete a full and rigorous mathematics program that satisfies state and national standards for content and which blends practical and theoretical knowledge with hands on experiences.

- Required major courses: MATH 140, 141, 220, 240, 311, 320, 351, 421, 425, $430,431,499$; three semester hours from courses numbered 300 to 485 .
- Corequisite course: CPSC 111.
- Required professional education courses: MCOM 262, PSED 161, 242, 336, 420, 421, 430, 431, REED 321.
- Note: Grades of A, B, or C must be earned in all of the required MATH and CPSC courses. A minimum of 15 credits of the mathematics courses required for this degree must be completed at East Stroudsburg University. The Commonwealth of Pennsylvania has established new requirements for all candidates in teacher preparation programs. Please refer to the section The College of Education in this catalog for specific requirements for admission into teacher education programs.
- Please see the university requirements in this catalog.


## Suggested four-year schedule of required courses

Year 1: Fall MATH 135 or 140; Spring MATH 140 or 141, CPSC 111
Year 2: Fall MATH 141 or 240, 220; Spring MATH 240, 320
Year 3: Fall MATH 311, 351; Spring MATH 425, 431, elective, PSED 336
Year 4: Fall MATH 421, 430; Spring PSED 430, 431 MATH 499

## Bachelor of Science in Applied Mathematics major - $\mathbf{6 0}$ - $\mathbf{6 1}$ semester hours

This program provides the student intent on seeking employment once the bachelor's degree is completed with an opportunity to gain a solid and comprehensive knowledge of mathematics together with an extensive introduction to one of the many areas that rely heavily on mathematics. Students in this program will have an option of including an internship experience as part of their studies.

The student must complete the core requirements and the requirements for one of the tracks below to fill the requirements for this major.

- Core Courses - Required for all tracks: MATH 140, 141, 220, 240, 311, 320, 425, and three (3) MATH courses numbered 360 or higher except MATH 351, 430, 431 and MATH 499.
- Corequisites - All tracks CPSC 101, and 111, ENGL 204, and CMST 111

Tracks:

- Biology Track: MATH 341, BIOL 114, 115, and 3 credits of 300 or higher level Biology courses
- Chemistry Track: MATH 341, CHEM 121, 123, 124, 126, and 3 credits of 300 or higher level Chemistry courses
- Computer Science Track: MATH 341, CPSC 141, 151, 251, and 3 credits of 300 or higher level Computer Science courses
- Finance Track: MATH 280, ECON 111, 112, 332, and 3 credits of 300 or higher level Economics courses
- Physics Track: MATH 341, PHYS 161, 162, and 3 credits of 300 or higher level Physics courses
A minimum of 15 credits of the mathematics courses required for this degree must be completed at East Stroudsburg University.


## Suggested four-year schedule of required courses

Year 1: Fall MATH 135 or 140, CPSC 101, CMST 111; Spring MATH 140 or 141, CPSC 111
Year 2: Fall MATH 141 or 240, 220, ENGL 204; Track course 1 Spring MATH 240, 320, Track course 2
Year 3: Fall MATH 311, Elective; Track course 3; Spring MATH 341, Elective, Track course 4
Year 4: Fall MATH Elective; Spring MATH 425, Elective

## Mathematics minor-21 semester hours

- Required courses: MATH $140,141,220,240,320$, and one MATH elective (300 level or higher).


## Actuarial Science concentration-21 semester hours

- Required courses: MATH 140, 141, 240, 311, 320, 411.
- The above courses should provide the student with the mathematics background needed for the first two actuarial examinations. Students who wish to take the third examination should also take MATH 480.
- Suggested courses: MATH 280; ECON 111, 112.
- Students must demonstrate competency in Basic Mathematical Skills before enrolling in mathematics courses numbered 100 or higher. (See page 49.)


## Course Descriptions

(Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title.)

## MATH 090 Intermediate Algebra (3:1:4)

This course covers topics from basic algebra, solutions of first degree equations and inequalities, graphing of polynomial functions, polynomial functions, polynomial algebra, solutions to linear systems of equations, exponential and logarithmic expressions. Credits may not be used toward the 120 hours required for graduation.

## MATH 100 GE: Numbers Sets and Structures (3:3:0)

This course presents mathematics as a deductive science which starts with empirical observations but goes beyond the level of simple, unrelated facts. Search for patterns and, when discovered, justification of them is the essence of this course. Similarities and differences between structures of numbers, sets, and some algebraic objects are discussed. Does not apply toward the Mathematics major. Prerequisite: MATH 090 or 3 units of high school mathematics including Algebra 1 and Geometry.

## MATH 101 GE: Excursions in Mathematics (3:3:0)

This introductory course deals with selected topics in contemporary mathematics applied to the social and natural sciences. Topics include voting and weighted systems, fair division, apportionment, game theory, Euler circuits, the Traveling Salesman Problem, minimum networks, scheduling, linear programming, types of growth, measurement, symmetry and patterns, collecting and describing data, elementary probability and inference. Does not apply to the Mathematics Major. Prerequisite: MATH 090 or three units of high school mathematics including Algebra I.

## MATH 105 Mathematical Problem Solving for Elementary Education Majors (3:3:0)

This course is designed to give elementary education majors experiences in being independent solvers of mathematical problems while giving them the mathematical foundation for early mathematics. Concepts in elementary education including sets, whole, integer, rational, real, and complex numbers are covered. Prerequisite: MATH 090 or three units of high school mathematics including Algebra I.

## MATH 110 GE: General Statistics (3:3:0)

This course deals with the collection and presentation of data, frequency distributions, measures of central tendency and dispersion, elementary probability, randomness, expectations, significance testing on large and small samples, correlation, regression, introduction to analysis of variance, and other common statistical methods. Does not apply toward Mathematics major. Prerequisite: MATH 090 or three units of high school mathematics including Algebra 1.

## MATH 130 GE: Applied Algebraic Methods (3:3:0)

This course introduces students to mathematical modeling using linear, exponential, and power functions and systems of equations. Algebraic and geometric techniques are developed. Applications to the life, social, and management sciences include linear programming and difference equations. Does not apply toward the Mathematics major. Prerequisite: MATH 090 or three years of college preparatory high school mathematics including Algebra I and Geometry.

## MATH 131 GE: Applied Calculus (3:3:0)

A one-semester introduction to the techniques of differential and integral calculus, this course will concentrate on the application of these techniques in the life and social sciences. Does not apply toward the mathematics major. Prerequisite: MATH 130 with a grade of C or higher.

## MATH 135 GE: Pre-Calculus (3:3:0)

This course is designed to prepare students for calculus. Topics include equations, inequalities, functions and their graphs, polynomial, rational, exponential, logarithmic, and trigonometric functions. Prerequisites: College preparatory mathematics including Algebra 2 and Geometry and an appropriate score on the mathematics placement test.

## MATH 140 GE: Calculus 1 (4:4:0)

Together with Calculus 2 and Multivariate Calculus, the basic concepts and applications of elementary analysis are covered. Calculus 1 topics include functions, continuity, the derivative and its applications, and an introduction to the definite integral. Prerequisites: MATH 135 with a grade of C or better, or four units of college preparatory mathematics including Algebra 2, Geometry, and Trigonometry and a satisfactory score on the Calculus Readiness Test.

## MATH 141 GE: Calculus 2 (4:4:0)

The concept of the integral is developed in detail. Techniques of integration, applications of the integral, and an introduction to differential equations are covered. Also, infinite series of numbers and functions are used to illustrate approximation theory. Prerequisite: MATH 140 with a grade of C or higher.

## MATH 150 GE: Mathematics and Western Civilization (3:3:0)

This course examines mathematics as a cultural force in Western civilization. Some of the relationships of mathematics to philosophy, economics, politics, art, and the natural sciences will be considered. Emphasis will be placed on how mathematical solutions were obtained for human problems.

## MATH 205 Geometry for Elementary Education Majors (3:3:0)

This course is designed to give Elementary Education majors experience in being independent solvers of mathematical problems while giving them the mathematical foundation for early mathematics. Topics include probability, geometry, and geometric systems. Prerequisite: MATH 105; Early Childhood or Elementary Education major.

## MATH 220 Discrete Mathematical Structures (3:3:0)

This course introduces some basic concepts of finite algebraic structures. Topics covered include logic, sets, induction, matrices, order relations, Boolean algebras, semigroups, and groups. Prerequisite: MATH 140.

## MATH 240 Multivariate Calculus (4:4:0)

This course develops calculus of several variables. Topics covered include vectors, functions of many variables and their derivatives and integrals, optimization, parametric curves and surfaces, and applications. Prerequisite: MATH 141 with a grade of C or higher.

## MATH 280 Mathematics of Finance (3:3:0)

This course consists of an introduction to the theory and mathematics of simple and compound interest with application to and emphasis on annuities, sinking funds, amortization, life insurance, stocks, bonds, and installment buying. Prerequisite: MATH 130.

## MATH 290 Special Topics (Semester hours arranged)

These courses are designed to meet specific needs of groups of students or are offered on a trial basis in order to determine the demand for and value of introducing them as a part of the curriculum.

## MATH 311 Statistics I (3:3:0)

This course gives a rigorous introduction to descriptive statistics, discrete and continuous probability distributions, sampling estimation, and hypothesis testing. Prerequisite: MATH 141.

## MATH 320 Linear Algebra (3:3:0)

This course deals with the arithmetic of matrices, linear transformation of the plane, algebra of determinants with applications to the systems of linear equations, vector spaces, characteristic values and their application. Prerequisite: MATH 220.

## MATH 341 Differential Equations (3:3:0)

This course examines solutions of first order differential equations, linear equations of higher order, numerical techniques of solution, power series methods, LaPlace transform, and applications. Prerequisite: MATH 240 or permission of instructor.

## MATH 351 Modern Geometry (3:3:0)

Problem solving in geometry will be the main focus of this course. Three types of problems are studied. The first will be straightedge and compass constructions from Euclidean Geometry. The next will develop the Newton-Poincare model of Lobachevskian Geometry. The third will be isometries of the Euclidean plane. Prerequisite: MATH 220.

## MATH 360 Introduction to Combinatorics (3:3:0)

This course introduces the basic techniques and modes of reasoning of combinatorial problem solving. Topics covered include elementary counting principles, permutations and combinations, the inclusion/exclusion principle, recurrence relations, basic properties of graphs and digraphs, trees, graph coloring, and Eulerian and Hamiltonian circuits. Prerequisite: MATH 220.

## MATH 411 Statistics II (3:3:0)

The mathematical properties of the sampling distributions of statistics will be investigated to develop criteria for precise estimation, powerful hypothesis testing, and assessing the robustness of model assumptions. Emphasis will be placed on the classical methods associated with the normal distribution and to the analysis of real data with linear models. Standard software packages will be used. Prerequisite: Math 311.

## MATH 416 Linear Statistical Modeling Methods with SAS (3:3:0)

This course is intended for advanced undergraduate students, graduate students, and working professionals who engage in applied research. Statistical linear modeling methods are used in conjunction with SAS computer software to analyze data from experiments and observational studies. Topics include regression analysis, analysis of variance, multiple comparisons and multiple tests, mixed models, analysis of covariance, logistic regression, and generalized linear models. Prerequisites: Satisfactory completion of a college course in statistics.

## MATH 420 Number Theory (3:3:0)

This course deals with the study of the divisibility properties of integers, the theory of congruences, continued fractions, linear diophantine equation in one variable and more than one variable, algebraic number fields, and rings of algebraic integers. Prerequisite: 12 hours of college mathematics.

## MATH 421 Abstract Algebra I (3:3:0)

This course will introduce the students to the basic algebraic structures, including groups, rings, and fields. Prerequisites: MATH 220, 240.

## MATH 422 Abstract Algebra II (3:3:0)

A continuation of MATH 421, this course will cover the structure of abelian groups, the Sylow Theorem, polynomial rings and unique factorization, algebraic extension fields, finite fields, and Galois Theory. Prerequisite: MATH 421.

## MATH 425 Introduction to Mathematical Modeling (3:3:0)

This course initiates the construction, analysis and research of real world mathematical models in order to promote creativity and emphasize ingenuity for finding reasonable solutions to openended problems, including experimentation and simulation. The study of theoretical model types is left for more advanced courses. Prerequisites: MATH 240, 320

## MATH 430 History of Mathematics (3:3:0)

This course studies the biographies of leading mathematicians and their contributions to mathematics, the historical development of subject-matter fields of mathematics, and the role that mathematics has played in the development of civilization. Prerequisite: MATH 220, 240

MATH 431 Teaching Mathematics Using Technology (3:3:0)
This course is designed for pre-service and in-service teachers of secondary mathematics. It is a capstone course in both mathematics and the technology used in the mathematics classroom. Students will use various calculators and computer programs to solve significant problems and prepare lessons in calculus, statistics and geometry. This course may not be used as an elective for the B.A. in Mathematics or the B.S. in Applied Mathematics. Prerequisites: 24 credits of mathematics (140 or higher) or graduate standing in Mathematics Education.

## MATH 440 Real Analysis I (3:3:0)

This course introduces students to the basic analytical structures of the real number and functions, including limits, sequences, series, topology, and continuity. Prerequisites: MATH 220, 240.

## MATH 441 Real Analysis II (3:3:0)

A continuation of MATH 440, this course will cover differentiation, integration, sequences and series of functions and additional topics such as Fourier series, metric spaces, and approximation. Prerequisite: MATH 440.

## MATH 470 Numerical Methods I (3:3:0)

This course will develop the numerical algorithms and error estimates for finding roots, solving equations, and curve fitting. The emphasis is on algorithms with good error characteristics and reduction of round off error. Prerequisites: MATH 240, 320; CPSC 111 or 211.
MATH 480 Operations Research (3:3:0)
This course gives an introduction to both deterministic and stochastic operations research. The covered topics will include the nature of operations research, linear programming, project scheduling, dynamic programming, integer programming, queuing theory and stochastic simulation. Prerequisites: MATH 311 and 320 with grades of C or higher.

## MATH 485 Independent Study (Semester hours arranged)

This experience is taken upon the initiative of a student who seeks to study with a knowledgeable faculty member in order to deepen a specific interest in a particular academic discipline.

## MATH 486 Applied Mathematics Internship (Semester hours arranged)

This course consists of in-depth involvement in an environment that focuses on the use of mathematics to model and solve industrial, administrative, business or governmental problems. The student will work under direct professional supervision. Prerequisites: MATH 220, 240, 311, and 320.

## MATH 499 Student Teaching Internship (1:0:TBA)

This course is designed to provide the student with an opportunity to work with a faculty member in the student's primary Arts and Sciences discipline during the student teaching experience. The course will enhance the student's ability to understand and maximize the relationship between disciplinary subject matter and pedagogy.

## Bachelor of Arts in Mathematics



## Bachelor of Science in Applied Mathematics

| Fall |  |  |  |
| :--- | ---: | :--- | ---: |
| MATH 140 Calculus 1 or <br> MATH 135 Pre-Calculus | 3 or | MATH 141 Calculus II or |  |
| ENGL 103 English Composition | 4 | MATH 140 Calculus I | 4 |
| CPSC 101 PC's and Their Uses in Science | 3 | CPSC 111 Introduction to Computer <br> Programming | 4 |
| General Education | 3 | CMST 111 Speech Communication | 3 |
| General Education | 3 | General Education | 3 |
| Subtotal | 3 | FIT courses | 2 |


| Soll Spring |  |  |
| :--- | :---: | :---: |
| MATH 220 Discrete Mathematical Structures 3 MATH 240 Multivariate Calculus 4 <br> MATH 240 Multivariate Calculus or 4 MATH 320 Linear Algebra 3 <br> MATH 141 Calculus II   3 or <br> Track Course 1 3 or Track Course 2 4 <br> General Education 4  3 <br> Subtotal 6 ENGL 204 Technical Writing 13 or <br>  16 or Subtotal 14 |  |  |


| Fall | Junior Year <br> I MATH Track Course |  |  |
| :---: | :---: | :---: | :---: |
| MATH 311 Statistics |  |  | 3 |
| Track Course 3 | 3 | Track Course 4 | 3 |
| General Education | 3 | General Education | 3 |
| General Education | 3 | General Education | 3 |
| General Education | 3 | General Education | 3 |
| Subtotal | 15 | Subtotal | 15 |
| Fall | Senior Year Spring |  |  |
| MATH Elective | 3 | MATH 425 Intro to Mathematical Modeling | 3 |
| MATH Elective | 3 | MATH Elective | 3 |
| General Education | 3 | General Education | 3 |
| General Education | 3 | Elective | 3 |
| Elective | 3 |  |  |
| Subtotal | 15 | Subtotal | 12 |

## Bachelor of Science in Mathematics Secondary Education



## Media Communication and Technology

## College of Education

Rosenkrans Hall East
570-422-3763
www.esu.edu/mcom

## Department faculty

Professor:
Associate Professor:
Assistant Professors:

Elzar Camper, chair (ecamper@po-box.esu.edu)
Gary Braman (gbraman@po-box.esu.edu)
Susan Amirian (samirian@po-box.esu.edu)
Steven Koehn (skoehn@po-box.esu.edu)
Beth R. Sockman (bsockman@po-box.esu.edu)

This four-year program in Media Communication and Technology is designed to offer students a curriculum of communication theory, application and practice in media production. The curriculum is designed to provide the theoretical foundation for applying skills in digital media (photography and sound), electronic (television and video). Web-based publishing, multimedia, animation, visualization and graphic processes. Majors are encouraged to qualify for either the semester or summer-long internship where they can apply their skills in an on-the-job situation. The program prepares students for entry-level positions in the communications field.

Bachelor of Science with a Media Communication and Technology major-48 semester hours

- Required major courses: MCOM 105, 140, 160, 210, 225, 230, 255, 275, 315, 440; any 3 of prescribed advanced MCOM courses; and completion of 6 semester hours of related electives.
- Corequisites: CMST 111 or 253; PSY 100; SOC 111, and an advanced writing course.
- A 2.50 grade average in the major is required for graduation.
- Please see the university requirements in this catalog.


## Track I Internship and Practicum-(14 semester hours).

A 2.75 grade average in MCOM courses, no incompletes in MCOM courses, and faculty approval are required before enrolling in an Internship. Notice to the academic adviser or intent to apply for Internship must be made upon completion of 80 semester hours and before completing 90 semester hours.

- OR -

Track II-( 15 semester hours)
A minimum of 9 additional hours of 300 or 400 level MCOM courses and 6 hours of 200 level MCOM courses or related electives.

Suggested course sequence that can be adjusted with guidance from the student's adviser:

First Year:
First Year/Sophomore Year:
Sophomore Year/Junior Year:
Junior Year/Senior Year:
Senior Year:

MCOM 105, 140, 160
MCOM 210, 225, 230
MCOM 255
MCOM 275, 315, 440, Advance MCOM courses Advanced MCOM courses Track I or Track II

Media Communication and Technology Minor- $\mathbf{1 8}$ semester hours
This program offers a choice of one of three different tracks - photography, graphics or video. Selection of one of these tracks is done after consultation with the appropriate faculty adviser in the student's major and the chair of the Department of Media Communication and Technology.

## Track requirements:

Photography: MCOM 105, 140, 160, 205, 275, 305.
Graphics: MCOM 105, 140, 160, 255, 275, 350.
Video: MCOM 140, 160, 210, 225, 310, 315.

## Course Descriptions

(Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title.)

## MCOM 001 Information Highway: Coming up to Speed (0:1:0)

This one-day workshop will focus on the electronic information highway now being developed. The sessions will introduce e-mail, Internet, etc. to the novice user and will offer a diverse mix of computer practice, public policy, and simplified media presentation techniques.

## MCOM 105 Photography: Camera Techniques (3:3:0)

Designed for the student who wishes to learn the skill of taking quality photographs, this course concentrates on those elements and skills which may be applied by a photographer to produce good photographs. General topics include how a camera works, how to take better pictures, special techniques, handling color, how to choose films, how to have pictures processed, and how to display pictures. The course will consist only of picture taking, analysis and technique application.

## MCOM 140 Communication Theories and Practices (3:3:0)

Communication theories, practices, problems, and issues in a variety of settings are examined. This is a foundation survey course for the majors in the Media Communication and Technology program.

## MCOM 160 Electronic Communication Technologies (3:2:2)

The use of desktop media, the application of microcomputers to text editing, graphic design and layout, desktop publishing, and desktop video are presented. This is a foundation course giving competencies applicable to Department of Media Communication and Technology courses.

## MCOM 205 Photography: Wildlife and Nature (3:2:2)

Methods for photographing wildlife and nature are explored. Equipment needs, fieldwork techniques, and special considerations necessary in performing wildlife and nature photography will be emphasized.

## MCOM 210 Television: Studio Production I (3:2:2)

Television studio production techniques including directing, lighting, audio, and camera operation are covered with actual practice and application in the TV studio. Students will script and produce a variety of television programs.

## MCOM 225 Introduction to Motion Media (3:3:0)

This course presents the common elements of basic motion media production, including filmmaking and videotaping. It includes the study of the theoretical, photographic, mechanical, and electronic methods used in the production of motion media. In addition to studying the various aspects of motion media, students will also produce motion media projects. Prerequisites: MCOM 140, 160.

## MCOM 230 Sound Recording and Amplification Techniques (3:3:0)

This course offers preparation necessary for successful activity in music sound recording and reinforcement. It deals with the history of recorded sound, technical principles of microphone usage, and console and tape recorder operations including multi-track and sound amplification techniques. The course includes actual hands-on experience in recording sessions and concert reinforcement.

## MCOM 255 Desktop Publishing (3:3:0)

This course gives the student the opportunity to use the microcomputer for producing cameraready layout to be used in various print media. Topics include graphic design image manipulation, publication layout, typography, and type specification. Prerequisite: MCOM 160.
MCOM 262 Educational Communications and Technology (3:2:2)
Techniques in the preparation, selection, and proper use of media for educational communications are presented. Included are the design, preparation, and selection of still photographs, motion pictures, audiotape, videotape, transparencies, and microcomputer software.

## MCOM 265 Instructional Computing Methods (3:2:2)

Techniques of using computers in the classroom will be presented. Students will become familiar with software and computer tools used for instructional and classroom administrative tasks. Prerequisite: MCOM 262.

## MCOM 275 Imaging Technology (3:2:2)

This course offers an introduction to the use of image design and production for education, marketing, business, and training. Extensive work will be on the use of the microcomputer as a tool in image creation. Animation, 3D effects, and overlay techniques will be introduced. Prerequisite: MCOM 160.

## MCOM 290 Special Topics (Semester hours arranged)

These courses are designed to meet specific needs of groups of students or are offered on a trial basis in order to determine the demand for and value of introducing them as part of the University curriculum.
MCOM 305 Digital Photography (3:2:2)
Students will create photographic images in a variety of situations. These photographs will be manipulated using computer technology to create images that can be used in various media formats. Prerequisites: MCOM 105 and 160.

## MCOM 310 Television: Studio Production II (3:2:2)

Studio production techniques beyond those presented in Television: Studio Production I including electronic special effects, computer graphics and the directing of programs to be broadcast from a television studio are covered. Prerequisite: MCOM 210.

## MCOM 315 Videotaping Techniques (3:3:0)

This course is an introduction to the uses of videotaping as well as hands-on experiences in designing and producing a variety of videotape productions. The course will focus on the uses of videotape for public relations, performance evaluation, skill developing, coaching and athletics, and creative video. Simple, readily available videotaping equipment will be used. Prerequisites: MCOM 105 and 225.

## MCOM 318 New Media Technologies (3:3:0)

This course introduces students to new media product development and emerging trends in the areas of media communication and technology. The rapidity of change in media product development in photography, graphics, television and film and the application and implementation of evolving regulatory communications policy in accessing of and production in telecommunications for academic and business will be covered.

## MCOM 350 Media Graphics and Design II (3:2:2)

This course expands upon the concepts and processes presented in Instructional Graphics and Design I. Classroom demonstrations are presented, and students gain hands-on experience through work on assigned projects. Prerequisite: MCOM 255.
MCOM 355 Electronic Publishing (3:2:2)
Students will learn the basics of producing electronic publications which can be used for various media including the Internet. Assignments will give students hands-on experience in designing and producing Web pages. Topics include: Web page design, anatomy of the Internet, proper use of type and graphics in electronic publishing, creating links and integration of various media into electronic publications. Prerequisite: MCOM 255.

## MCOM 440 Law and Ethics in Media (3:3:0)

This course offers an examination of the role of ethics and legal issues in the field of professional media. Students will study how society's ethical heritage provides a basis for guidance in ethical decision-making. Prerequisite: MCOM 140 and junior class standing.

## MCOM 464 Media Communication \& Technology Projects (Semester hours arranged)

Students are provided with the opportunity to work on an in-depth project which presents experiences in planning, implementation, and follow-up activities. Projects are done with a cooperating faculty member. Prerequisite: 90 credit hours.

## MCOM 475 Educational Software for Computers (3:3:0)

Techniques for designing and developing educational courseware for computers are presented. Author language systems and interactive instructional system software will be examined. Students will also learn to develop materials which combine computer and video technologies (interactive video). Prerequisites: MCOM 262, 470.
MCOM 477 Interactive Media (3:3:0)
This course is designed to introduce the student to the technology of interactive media. Special emphasis is placed on the various applications for interactive media. Students will gain practical experience in creating interactive media programs. Prerequisite: MCOM 160, 275.

## MCOM 485 Independent Study (Semester hours arranged)

Directed research and study on an individual basis.
MCOM 486 Field Experiences and Internship (Semester hours arranged)
The internship experience is to provide professional supervision in an on-the-job situation to apply skills learned in the university classroom. Enrollment requires the completion of 90 semester hours, a 2.75 cumulative point average in the major, no incompletes in the major, and departmental approval.

## MCOM 488 Professional Practicum (2:2:0)

Students are provided with insights into professional experiences and job requirements through an examination of the activities of the internship. This course must be taken concurrently or the semester immediately following MCOM 486. Prerequisites: Senior class standing; approval of instructor.

## Media Paraprofessional Program

College of Education
Rosenkrans Hall East
570-422-3763
www.esu.edu/mcom
This two-year technically oriented program is designed for students seeking to develop media production skills. Completion of the program prepares students for entry-level positions in the field of communication. Students may transfer into the four-year Bachelor of Science degree program.
Associate of Applied Science Media Paraprofessional Program- $\mathbf{6 0}$ semester hours

- Required major courses: MCOM 105, 160, 210, 225, 230, 255, 275,315 and 486 ( 12 credits); six semester hours of advanced level MCOM courses.
- Corequisite courses: ENGL 103 and 3 semester hours of prescribed courses. The balance of coursework is to be selected with approval of the faculty adviser.
Coordinating Department: Media Communication and Technology.


## Medical Technology

School of Arts and Sciences
The Faculty of Science
Bachelor of Science with a Medical Technology major- $\mathbf{6 2}$ semester hours
See Biological Sciences, Page 83

## Music

School of Arts and Sciences
The Faculty of Arts and Letters
Fine and Performing Arts Center, Room 205
570-422-3694 www.esu.edu/music

## Department faculty

Professor: Robert Miller (rmiller@po-box.esu.edu)
Associate Professors: Patrick Dorian (pdorian@po-box.esu.edu)
Terry Flatt (tflatt@po-box.esu.edu)
James Maroney (jmaroney@po-box.esu.edu)
Instructor: Elizabeth Buzzelli-Clarke, chair (bbuzzelli@po-box.esu.edu)

## Bachelor of Arts with a Fine Arts major (core emphasis Music)

Screening into the major will be by audition and/or meeting with adviser in the area of concentration

- Required Core Courses (21 credit hours): MUS 203, 220, 211, 311, 320,410, and 496 Senior Seminar

Senior Seminar will consist of a major recital (Applied Music concentration majors and/or Jazz Studies concentration majors) a lecture-presentation conducting experience with one or more of the university ensembles (to include program notes), or a research project (Music Theory/History/Literature majors and/or Jazz Studies concentration majors not doing a recital).

All students are required to pass a basic piano proficiency consisting of:

- One prepared piece equivalent to a late beginner level of Anna Magdeline Book of Piano Literature
- One sight reading piece equivalent to a standard hymn

Two semesters of piano class will fulfill this requirement.

## Applied Music Concentration (48 credits)

- 21 credits of core music credits
- 12 credits of applied music (voice, piano, instrument)
- 15 credits from the following electives: MUS 204, 245, 304, 306, 370, 400, 403 and MUS 400 level applied music (4 credits maximum)

All students are required to participate in a major performing ensemble each semester. Piano majors may fulfill this requirement by serving as an accompanist for major performing ensembles and/or recitals.

## Jazz Studies Concentration (48 credits)

- 1 credits of core music credits
- 8 credits of applied music
- 13 credits from the following electives: MUS 204, 245, 306, 315, 403 and 404 (this may be taken twice towards degree)
- 6 additional credits of music electives

All students are required to participate in either the ESU Jazz Ensemble or the ESU Pop/Jazz Singers each semester.

Music

## Music Literature and Theory Concentration (45 credits)

- 15 credits of core music credits
- 12 credits of Music Literature from the following: MUS 204, 304, 315, 400, 404
- 4 credits of Keyboard Music Theory (MUS 370 \& 403)
- 8 credits of music electives

Corequisites: ART 101 and either 201 or 202 and three additional semester hours THTR 100 and either 302 or 304 and three additional semester hours
All majors are required to attend a minimum of 4 recitals each semester. The concerts must be varied in content and may not be one in which the student is performing.

## Music minor-24 semester hours <br> Applied Music emphasis:

Applied Music - 8 semester hours in one of piano, voice or band instrument (at least 4 credits at the 300-400 level); 8 or 9 semester hours selected from MUS 120, 203, 204, 211, 220, 245, 303, $306,311,370,400,411$ (at least 3 credits at the 300-400 level); 7 or 8 semester hours of music electives (at least three credits at the 300-400 level), Minimum Piano Proficiency.

## Jazz Studies emphasis:

MUS 203; 245; 306; 6 semester hours of Applied Music (at least 4 credits at the 300-400 level); 6 semester hours in MUS 240 or 6 semester hours in MUS 242; 5 semester hours of music electives (at least 3 credits at the 300-400 level).

## Music Theory emphasis:

MUS 101; 120; 220; either MUS 306 or MUS 370; an additional 13 semester hours of music electives, no more that 4 credits from Performing Ensembles; Minimum Piano Proficiency.

## Music History and Literature emphasis:

MUS 100; 18 semester hours from MUS 203, 204, 211, 303, 311, 400, 411.

## Course Descriptions

(Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title.)

## §MUS 100 GE: Introduction to Music (3:3:0)

This course is a survey of western music from the Pre-Renaissance to the present; styles and musical periods are studied and correlated with other areas of learning; listening both in and out of class is stressed.

## §MUS 101 GE: Fundamentals of Music (3:3:0)

This course is designed to give students basic knowledge and skills in music reading, theory or harmony, and aural theory so that they can intelligently read, sing, and perform a simple musical score or diatonic melody. It is recommended that the course be taken during the semester prior to enrolling in Music Theory I.
$\ddagger$ MUS 110 GE: Piano Class I (2:1:2)
This course provides elementary class instruction in piano and keyboard harmony and harmonic materials applicable to the piano. An individual approach is used.
§ Courses with the § symbol fulfill the requirements for Fine Arts.
$\neq$ Courses with the $\ddagger$ symbol fulfill the requirements for Performing Arts.
\#MUS 111 GE: Piano Class II (2:1:2)
This course is a continuation of the study of material in MUS 110. Since an individual approach is used, this course may be elected more than once for credit. Prerequisite: MUS 110.
$\ddagger$ MUS 113 GE: Class Voice (2:1:2)
Group voice instruction for the beginning singer will include emphasis upon posture, breathing, voice building, and the appropriate vocal literature which will develop the full potential of each student.
$\ddagger$ MUS 115 GE: Guitar I (2:1:2)
This is a course that includes elementary class instruction in classic guitar technique and performance, fingerboard harmony, and applied music theory. An individual approach is used.
$\ddagger$ MUS 116 GE: Guitar II (2:1:2)
This course is a continuation of the material studied in Guitar I with an emphasis on sight-reading and performance. Since an individual approach is used, this course may be elected more than once for credit. Prerequisite: MUS 115.
\$MUS 130 GE: Concert Choir (1:0:3)
The Concert Choir is the university's large mixed voice choral group. Rehearsals stress the preparation of high quality choral music from various periods of music history and in various musical styles. Musical skills such as reading musical notation, ensemble blend, tone quality, and proper interpretation are emphasized at rehearsals. Public performances may be scheduled by the group's director.
$\ddagger$ MUS 135 GE: University/Community Concert Band (1:0:3)
The University/Community Concert Band is open to all university and community instrumentalists with previous experience in high school and/or college band. This group will be exposed to standard concert band literature, marches, musical show selections, and pop music. Emphasis will be on developing musicianship, especially tone, blend, balance, intonation, rhythmic accuracy, and sight-reading. Public performances may be scheduled by the group's director.
\$MUS 140 GE: University/Community Orchestra (1:0:3)
The University/Community Orchestra is open to all university and community instrumentalists with prior experience at the high school or college level. The group will be exposed to standard orchestral literature as well as seasonal and popular music. Emphasis will be placed on developing musicianship in the areas of intonation, rhythm, sight-reading, and the nuances of playing in an ensemble.
\$MUS 160, 161, 260, 261, 360, 361, 460, 461 GE: Applied Music: Piano (2:Arr)
This course offers the private music study of developmental skills as it relates to tone production, phrasing, and other performance related concerns. Repertoire and technique requirements will be selected by the instructor. Prerequisite: Permission of instructor who will assign the course number based on the student's prior experience and skill level.
$\ddagger$ MUS 162, 163, 262, 263, 362, 363, 462, 463 GE: Applied Music: Voice (2:Arr)
This course offers the private music study of developmental skills as it relates to tone production, phrasing, and other performance related concerns. Repertoire and technique requirements will be selected by the instructor. Prerequisite: Permission of instructor who will assign the course number based on the student's prior experience and skill level.
\$MUS 164, 165, 264, 265, 364, 365, 464, 465 GE: Applied Music: Band/Orchestra Instruments (2:Arr)

This course offers the private music study of developmental skills as it relates to tone production, phrasing, and other performance related concerns. Repertoire and technique requirements will be selected by the instructor. Prerequisite: Permission of instructor who will assign the course number based on the student's prior experience and skill level.
§ Courses with the § symbol fulfill the requirements for Fine Arts.
$\neq$ Courses with the $\ddagger$ symbol fulfill the requirements for Performing Arts.
§MUS 203 GE: Jazz and Popular Music (3:3:0)
This course traces the evolution of jazz from roots in African, European, and American folk music to its emergence as a new art music that is indigenous to the U.S.A. The stylistic genres of jazz history are studied including Dixieland, Blues, Ragtime, Bebop, Free Jazz, and Jazz Rock Fusion. These styles are also discussed in their relationship to popular music. Recordings are studied to exemplify the skills of major jazz artists and the styles with which they are associated.

## §MUS 204 GE: Musical Theatre (3:3:0)

This course is a broad study of the various elements and repertoire that constitute musical theatre. This study will examine the music, characters, plots of specific works relating them to the music, and artistic achievement, characters, historical significance, social relevance, and performance practices. Material will cover various aspects of musical comedy, operetta, cabaret, and opera. This is a general course for all students interested in broadening their awareness of the form.
§MUS 211 GE: Music of the Renaissance and Baroque Era (3:3:0)
This course is a survey of the development of musical art form from ancient times to around 1750. Music listening is an integral part of the course. Prerequisite: MUS 100. Offered biennially.

## §MUS 220 GE: Music Theory I (3:3:0)

This course begins with a review of basic music fundamentals and continues with the study of harmonic progressions in the major and minor mode, principles of voice leading, first inversion and second inversion chords, figured bass, function and structure of melody, non-harmonic tones, harmonization of a melody, and sight singing and dictation activities. Prerequisite: MUS 101 or equivalent experience. Offered every other year.

## §MUS 225 Ear Training and Music Reading I (2:2:0)

This course is designed to develop skills in aural perception of music through melodic/rhythmic performance \& dictation, and harmonic identification. Students will learn to perform and identify melodies in major keys with solfege, major/minor intervals within the octave, and basic rhythm patterns in essential simple and compound meters. Students will also learn to recognize chord voicings and progressions integral to Western music compositional techniques. Prerequisite: MUS 101.

## §MUS 226 Ear Training and Music Reading II (2:2:0)

This course is designed as a continuation of MUS 225, further developing skills in aural perception of music through melodic/rhythmic performance \& dictation, and harmonic identification. Students will learn to identify and sing melodies with wide intervals, minor keys and chromaticism. They will also learn to identify and perform rhythm patterns featuring dotted rhythms, triplets, syncopations, and diverse meters. Students will learn to recognize more advanced chord progressions, including those with inversions and dominant seventh chords. Prerequisite: MUS 225
\$MUS 240 GE: Pop/Jazz Singers (1:0:3)
The Pop Singers are a medium-sized select ensemble of mixed voices that focus on popular, folk, and Broadway show music. Rehearsals stress all the usual vocal musical skills and, in addition, those special musical and show business techniques that are needed for the successful rendering of music in these styles. Prerequisite: Permission of the instructor. Public performances may be scheduled by the group's director.

## $\ddagger$ MUS 241 Instrumental Chamber Ensemble (1:0:2)

Special ensembles are formed to perform instrumental chamber music works. Ensembles may include a variety of combinations, i.e. strings, woodwinds, brass, percussion, piano, etc. Participants must be prepared to perform works either in recital or for a faculty jury at the conclusion of the semester. Prerequisite: Permission of instructor.

[^5]$\ddagger$ MUS 242 GE: University Jazz Ensemble (1:0:3)
This group will consist of the following instrumental sections: saxophone, trumpet, trombone, and rhythm. The music rehearsed will reflect a wide variety of jazz styles with emphasis on the development of good ensemble techniques, rhythmic accuracy, tonal balance, intonation, improvisation, and sight reading skills. Prerequisite: Permission of instructor. Public performances may be scheduled by the group's director.

## \#MUS 243 A Cappella Ensemble (1:0:2)

A Cappella Ensemble is a medium-sized select group of mixed voices specializing in unaccompanied choral masterpieces from the Renaissance to the 21st century. Enrollment is only by permission of instructor through audition. Rehearsals stress good musicianship, music reading skills, choral tone, blend, and intonation, as well as the learning of different performance styles and languages. The group performs every semester on campus, and additional public performances may be scheduled by the director. The course can be repeated for credit. Prerequisite: Enrollment by audition.
¥MUS 245 GE: Jazz Improvisation I (2:1:2)
This course explores jazz scales and modes so that instrumentalists and vocalists develop fluency in various jazz styles. By using practice patterns in all keys, transcribed solos, recordings of the jazz masters, and play-along records, students will approach the goal of playing what they hear in their minds. Prerequisite: Permission of instructor.

## §MUS 250 GE: American Movie Music (3:3:0)

This course emphasizes and explores the connection of American music to film via exceptional American composed scores and the use of American popular music. Basic musical terms and concepts will be applied toward communication about music as sound, and music's relation to the visual aspects of movies. Films will be experienced from not only an auditory perspective, but also from the perspective of American culture and sociology, analyzing American music's effect on many aspects of a film. Prerequisite: MUS 100 or CMST 163.

## MUS 290 Special Topics (Semester hours arranged)

These courses are designed to meet specific needs of groups of students or are offered on a trial basis in order to determine the demand for and value of introducing them as part of the university curriculum.
§MUS 304 GE: Opera for Everyone (3:3:0)
Through the use of videos, popular operas will be studied in complete and abridged versions with English subtitles. Emphasis will be placed on characters, plot social historical significance, and vocal performance styles. A research project will be required. Prerequisite: MUS 100 and/or MUS 204.
$\ddagger$ MUS 306 GE: Jazz Improvisation II (2:1:2)
This course is a continuation of Jazz Improvisation I (MUS 245) and explores advanced rhythms, harmonic structures, minor modes, whole-tone scales, and chord substitutions. Transcribed solos of the jazz masters are analyzed while participants improvise using the above elements. Prerequisite: MUS 245.
§MUS 311 GE: Music of the Classical and Romantic Era (3:3:0)
This course consists of discussion and study of the background of classicism and romanticism as it applies to music: forms, content, types of music and their application to the Classic and Romantic periods including correlations with various economic, political, and social phases of the periods. Prerequisite: MUS 100. Offered biennially.

[^6]§MUS 315 GE: The Art of Film Music (3:3:0)
This course will concentrate on how to listen to a film in an analytical and critical manner. This will allow film music to go from being an unconscious experience to a conscious experience. It will focus on the evolution of the unique art of film music, especially its meanings, functions, associations, techniques, and styles. Topics will include the interaction between visual and musical elements; significant film scores/soundtracks and composers; and technological, sociological, practical, and aesthetic issues. Prerequisites: MUS 100 or CMST 163.
§MUS 320 Music Theory II (3:3:0)
This course is a continuation of MUS 220. Further aspects of music theory to be explored include cadence types, harmonic rhythm, dominant seventh chords, secondary dominants, modulation, and more complex sight singing and diction activities. Prerequisite: MUS 220. Offered biennially.

## $\ddagger$ MUS 343 GE: Brass Ensemble (1:0:2)

This course consists of a select instrument ensemble composed of instruments of the brass family. The course is offered as proper instrumentation warrants. Prerequisite: MUS 135 or permission of instructor. Public performances may be scheduled by the group's director.
$\ddagger$ MUS 344 GE: Woodwind Ensemble (1:0:2)
This course consists of a select instrumental ensemble composed of instruments of the woodwind family. The course is offered as proper instrumentation warrants. Prerequisite: MUS 135 or permission of instructor. Public performances may be scheduled by the group's director.
§MUS 370 Keyboard Harmony (2:1:2)
This course is designed to develop the musician's ability to invent and organize musical ideas at the piano. Emphasis is placed on harmonizing and transposing melodies with appropriate easy accompaniment, working with harmonic progressions, reading figured bass accurately, reducing easy choral and instrumental scores at the piano, and improvisation. Prerequisite: MUS 101 or equivalent experience, permission of instructor.
MUS 400 Keyboard Literature (3:3:0)
This course is a historical survey of music for harpsichord and piano from the Renaissance to the Twentieth Century. The course emphasizes keyboard composers, style, forms, and performance. Prerequisite: MUS 100, one of MUS 211, 311, 411, or Applied Music: Piano.

## MUS 403 Jazz Keyboard Chords (2:1:2)

Students will learn to perform standard jazz chords with extensions in major and minor keys on a keyboard. Standard chord voicings for two hands and left hand only will assist auditory training, knowledge of music theory, and some jazz improvisation. Students will accompany pre-existing melodies with jazz chords. Prerequisite: MUS 245; MUS 306.

## MUS 404 Jazz Masters Seminar (1-3:3:0)

Students will study the lives, music, and careers of several accomplished, active jazz professionals. Each artist will then be a guest speaker, interacting with the class. Writing assignments will make this the culminating academic jazz experience. Prerequisite: Any two: MUS 100, 203, 242, $245,303,306,403,411,492,496$.

## MUS 405 Choral Reading Techniques Workshop (1:1:0)

This course will emphasize various approaches to reading choral music in terms of diction, nuance, rhythm, phrasing, and dynamics. Nationally known guest conductors and composers will present several sessions where participants will execute reading techniques as an ensemble. Prerequisite: 90 undergraduate credit hours or permission of instructor.

## MUS 410 Twentieth Century and American Music (3:3:0)

This course is designed to acquaint the student with important developments in twentieth century and American music. An historical background of music in the United States will be explored with an emphasis on American music of the 20th century. Major musical developments in Europe and South America will also be included. Prerequisite: MUS 101 and MUS 211 or 311.

[^7]
## MUS 485 Independent Study (Semester hours arranged)

Directed research and study is provided on an individual basis in order to deepen a specific interest in the discipline.

## MUS 491 Choral Music Symposium (1:1:0)

This course will be a comprehensive choral training symposium for church choral directors and directors of school choirs. Clinicians, including composers, will direct sessions in choral rehearsal techniques and performance practices and conduct studies on curriculum materials.

## MUS 492 Instrumental Music Master Class (1:1:0)

This course is a master class taught by a renowned professional instrumental performer. Topics stressed will include instrumental techniques, phrasing, expressive nuances, and practice/performance strategies. Student performance will be evaluated, and constructive suggestions will be provided. Prerequisite: Permission of instructor.
MUS 493 Nonsecular Music Symposium (1:1:0)
This workshop will train choir directors and musicians in repertoire selection, performance practices, and the execution of musical elements of various events. Different rehearsal methods and vocal techniques will be demonstrated and discussed. The latest literature and trends in traditional and contemporary choral music programming will be presented in choral reading sessions. Prerequisite: 90 undergraduate credit hours or permission of instructor.

## MUS 496 Fine Arts Seminar (3:3:0)

This is a team taught interdisciplinary capstone experience for senior Fine Arts majors. In conjunction with this seminar the student and faculty explore selected topics in the fine arts relative to the preparation of a thesis project in Art, Music or Theatre through which the student will demonstrate a satisfactory level of performance and/or research skills. Prerequisite: Advanced standing of 90 credits and permission of the instructor.

## Nursing

School of Health Sciences and Human Performance The Faculty of Health Sciences
DeNike Center for Human Services 570-422-3474 www3.esu.edu/academics/hshp/nurs/home.asp

Department faculty
Associate Professors: Suzanne Fisher-Prestoy, chair (sprestoy@po-box.esu.edu)
Mary Tod Gray (mgray@po-box.esu.edu) Laurel T. Pierangeli (lpierangeli@po-box.esu.edu)
Assistant Professors:
Corinna Dotter (cdotter@po-box.esu.edu)

Marcia Gasper (mgasper@po-box.esu.edu)
Diane Haleem (dhaleem@po-box.esu.edu)
Patty Hannon (phannon@po-box.esu.edu)
Claranne Mathiesen (cmathiesen@po-box.esu.edu)
Jacqueline Myrie-Nichols (jacquelinem@po-box.esu.edu)
Janet Primrose (jprimrose@po-box.esu.edu)
Laura Waters (lwaters@po-box.esu.edu)

The Nursing degree program is accredited by the National League for Nursing Accrediting Commission (61 Broadway, New York, NY 10006; 1-800-669-1656) a specialized accrediting agency recognized by the U.S. Secretary of Education. In addition, the program is approved by the Pennsylvania State Board of Nursing.

Bachelor of Science with a Nursing major- $\mathbf{6 0}$ semester hours

- Required major courses: NURS 101, 301, 302, 303, 304, 305, 306, 307, 308, 320, 321, 322, 400, 421, 422, 423, 424, 481.
- Corequisite courses: BIOL 111, 112, 424, 461; CHEM 115, 117; CMST 111; ENGL 103; MATH 110; PSY 100, 225; SOC 111.
- Please see the university requirements in this catalog.

Graduates of this degree program are eligible to write the National Council of State Boards of Nursing examination for licensure to practice as Registered Nurses.
Licensed Practical Nurse to Bachelor of Science with a Nursing major- $\mathbf{6 5}$ semester hours

- Required major courses: NURS 301, 302, 303, 304, 305, 306, 307, 308, 320*, 321*, 322*, 323, 324, 400, 421*, 422*, 423, 424, 481.
- Corequisite courses: BIOL 111, 112, 424, 461; CHEM 115, 117; CMST 111; ENGL 103; MATH 110; PSY 100, 225; SOC 111.
- Please see the university requirements in this catalog.
* Eligible students can validate through testing.

Graduates of this degree program are eligible to write the National Council of State Boards of Nursing examination for licensure to practice as Registered Nurses.

## Registered Nurse to Bachelor of Science with a Nursing major- $\mathbf{5 9}$ semester hours

- Required major courses: NURS 301, 302, 304, 305, 306, 307, 308, 309, 320*, 321*, 322*, 400, 421*, 422*, 423*, 424, 481.
- Corequisite courses: BIOL 111, 112, 424, 461; CHEM 115, 117; CMST 111; ENGL 103; MATH 110; PSY 100, 225; SOC 111.
- Please see the university requirements in this catalog.
* Courses acceptable for transfer by eligible RN students. Additional courses in the major may be considered for transfer on a case-by-case basis.


## School Nurse Certification

Registered nurses with the baccalaureate degree in nursing are eligible to apply for admission into the School Nurse Certification program. For program requirements, please see the Graduate Catalog.

## Time Limit for Completing the Program of Study

All requirements for the degree in the nursing program must be completed within seven years from the date students begin their studies. Exceptions to this requirement may be approved by the department if extenuating circumstances exist.

## Core Performance Standards for Admission and Progression

Applicants and students enrolled in the Department of Nursing must possess the necessary behavioral, intellectual, physical, interpersonal, and communication skills to provide nursing care that is safe for the clients, for themselves, and for other health care providers. They must be able to provide safe nursing care in a wide variety of settings with diverse clients. Students must meet these core performance standards to qualify for and remain in the nursing program. Where possible, reasonable accommodations will be provided for those individuals with disabilities to enable them to meet these standards and ensure that students are not denied the benefits of, excluded from participation in, or otherwise subjected to discrimination in this program. Students who are eligible for accommodations are invited to make an appointment to deliver their letter from the Office of Disability Services to faculty and to discuss their accommodation requests.
The core performance standards for this program are identified below. These examples are not inclusive of all expected abilities and should be used only for simple comparative purposes by applicants to the program and students currently enrolled in the program.

## Core Performance Standards for Admission and Progression

1. Critical thinking sufficient for clinical judgment
2. Ongoing capacity to learn new information and skills to provide safe nursing care. This includes the ability to comprehend, measure, calculate, analyze and evaluate diverse forms of information.
3. Interpersonal abilities sufficient to interact with individuals, families, and groups from a variety of social, emotional, cultural and intellectual backgrounds.
4. Communication abilities sufficient for interaction with others in verbal and written form.
5. Physical abilities sufficient to move oneself from room to room, along hallways, and in small or confined spaces. The ability to meet the physical demands of providing nursing care.
6. Gross and fine motor abilities sufficient to provide safe and effective nursing care.
7. Tactile dexterity sufficient for physical assessment.
8. Visual ability sufficient for observation and assessment necessary in nursing care.
9. Auditory ability sufficient to monitor and assess health needs.
10. Maintains personal behaviors consistent with the American Nurses' Association Code for Nurses.

## Admission

The admission policies for the nursing program are consistent with the university policies found in this catalog with the following exceptions.

## Freshman Students

Students admitted to the university as non nursing majors may not be eligible for transfer into nursing due to space limitations.

## Transfer Students

Transfer students will be considered for admission to the nursing program on a space available basis. The student must provide evidence of a minimum cumulative point average of 3.0.

## Registered Nurses Admission Criteria

- Minimum cumulative point average of 2.75 .
- Graduation from an NLNAC (National League for Nursing Accrediting Commission) Program; Current PA License.


## Licensed Practical Nurses Admission Criteria

a. Minimum cumulative point average of 2.75 .
b. Current PA License.
c. Eligibility for advanced placement for Licensed Practical Nurses is reviewed using the following criteria:

- Nurses graduating less than 3 years from the time they apply are eligible for advanced placement.
- Nurses who graduated 3 or more years prior to application must have 1000 hours of nursing practice within the last 12 months.
- Completion of the NLN Mobility Profile I \& II standardized tests with a passing score on all tests.


## Academic Progression Criteria

Minimum academic criteria have been established for all students in this degree program. Students are evaluated at the end of each semester based on the following criteria:

1. Cumulative quality point average below 2.25 ; Removal from the program.
2. Cumulative quality point average between 2.25 and 2.74 at the conclusion of the fall or spring semester: Probation. Student will be considered on probation for an additional semester on a full-time basis. If a cumulative point average of 2.75 has not been attained, dismissal from the program will occur.
3. A grade of C or above is required in all prerequisites to nursing courses.
4. A grade of C or above is required in all nursing courses.

## Clinical Nursing Course Requirements

One month prior to beginning a clinical nursing course, students must submit evidence of current Act 34 clearance and Act 151 child abuse clearance, current CPR certification, professional liability insurance ( $\$ 1,000,000$ per occurrence/ $\$ 3,000,000$ aggregate minimum coverage), appropriate immunizations and titers, and verification of good health, including a negative Mantoux test, or chest x-ray. Immunizations and titers include DT, measles, mumps, Hepatitis B, Rubella vaccine or titer showing immunity and a serology test (VDRL, RPR or STS). University Health Services offers health examinations and the Mantoux test as a service to students who are enrolled in classes at the university and have a health form on file at the Health Center. The Mantoux test is required annually, and a health examination is required every other year. The basic nursing student will pay for malpractice insurance, which can be processed by the Nursing Department office. LPN and RN students must purchase their own insurance and present evidence prior to enrolling in a clinical nursing course. LPN and RN students are also required to present evidence of current licensure in PA. Act 34 and Act 151 clearance forms can be obtained in the Nursing Department office.

## Additional Expenses

Additional expenses required of students as they progress through the Nursing Program are: uniform costs, travel expenses to clinical sites and application fees for licensure.

## Credit By Examination

Credit for some of the nursing courses may be earned through credit by examination. Other methods of earning credit are explained in the Advanced Placement section of this catalog.

## Eligibility for Licensure Examination

Graduates of the BS program are eligible to write the National Council of State Boards of Nursing Examination for licensure to practice as Registered Nurses. Prospective students should note that there are restrictions on licensure due to felony convictions related to controlled substances. For additional information, contact the Nursing Department at 570-422-3474.

## Student Organizations

Students are encouraged to join their professional organization, the Student Nurses Association. This is the local chapter of the National Student Nurses Association.

## Grievance Procedure

The university's grievance procedure can be found in the university's Student Handbook.

## Nursing Honor Society

Senior students who have achieved a 3.0 cumulative grade point average and who rank in the highest 35 percent of their class are eligible to apply for induction into the Xi Beta Chapter of Sigma Theta Tau International, the nursing honor society.

## Course Descriptions

(Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title.)

## NURS 101 Nursing Seminar (1:1:0)

This seminar is designed to enable the beginning student in nursing to identify knowledge from support courses relevant to the practice of professional nursing. The functions of caring, communication, critical thinking, therapeutic intervention, and leadership/management are explored from a professional nursing practice perspective. Systems theory is introduced as the integrating mechanism of the ESU Nursing curriculum. corequisites: BIOL 111, PSY 100.

## NURS 102 Concepts of Professional Nursing (3:3:0)

This course is an introduction to selected concepts that contribute to the foundation of the nursing profession and nursing practice. The individual, environment, health and nursing are the four primary phenomena of concern to the nursing profession. The historical and theoretical basis of nursing professional values and knowledge base are introduced in relationship to the changing health needs of society. The unique contribution of Nursing to health care delivery is explored with emphasis on personal, interpersonal and critical decision making skills inherent in the profession. corequisites: BIOL 111, PSY 100, NURS 101.

## NURS 290 Special Topics (Semester hours arranged)

These courses are designed to meet specific needs of groups of students or are offered on a trial basis in order to determine the demand for and value of introducing them as part of the university curriculum. Prerequisite: Permission of the chair and the faculty of the Department of Nursing.

## NURS 301 Nutrition and Diet Therapy (3:3:0)

This course is designed to provide a comprehensive overview of nutrition and its crucial role in maintaining health and promoting rehabilitation. The course focuses on nutritional and public health; nutrients; metabolism; food sources; food selection for nutritional, psychological and cultural values; and on various therapies for disease conditions. Enrollment is not limited to nursing majors. Prerequisite: BIOL 111, BIOL 112; CHEM 115, 117, NURS 320, 321, 322.

## NURS 302 Introduction to Community Health Nursing (2:2:0)

The Introduction to Community Health Nursing course is designed to provide students with a foundation for community health nursing practice. The evolution of public health and community health practice will be addressed throughout the course along with the following: health, health care economics, the health care system, levels of prevention, family dynamics, cultural concepts, and the and the community assessment process. Prerequisites: BIOL 111, 112, 424, 461; CHEM 115, 117; CMST 111; ENGL 103; MATH 110; NURS 101, 301; PSY 100, 225; SOC 111.

## NURS 304 Gerontological Nursing (2:2:0)

Unique health and nursing needs of older adult clients and their significant others will be explored as well as the political, social, economic, ethical and moral issues that have implications for an aging society. This course is designed to provide basic knowledge in gerontological nursing so that the student is better prepared to assist older adults in realizing their potential for continued growth and better health, regardless of setting or health status. The emphasis is on healthy aging and wellness and for the student to develop a positive perspective on aging. Prerequisite: BIOL 111, 112; ENGL 103; PSY 100, 225; SOC 111.

## NURS 305 Health Assessment for Nurses (2:2:0)

This course is designed to provide an overview of the skills necessary to perform comprehensive health assessments. The course focuses on the health history and physical assessment of the well adult client, although problems such as impairment of skin integrity and ineffective airway clearance are also discussed. Prerequisite: BIOL 111, 112; ENGL 103. corequisite: NURS 306.

## NURS 306 Health Assessment for Nurses Laboratory (1:0:2.5)

This course is taken with NURS 305 and consists of laboratory experiences designed to enhance the student's ability to apply cognitive and psychomotor skills related to health assessment. Prerequisite: BIOL 111, 112; ENGL 103. corequisite: NURS 305

## NURS 307 Introduction to Research in Nursing (3:3:0)

This course is designed to develop an understanding of the fundamental principles of scientific investigation. The basis of study design, methods of data collection and analysis, interpretation of data, and the significance of conclusions to nursing theory and nursing practice are considered. Students will have guided experience in the evaluation and utilization of nursing research. Prerequisites: ENGL 103; MATH 110; NURS 320

## NURS 308 Pharmacology: Implications for Nursing Practice (3:3:0)

This course is a study of the use of drugs/medications with respect to mechanism of action, therapeutic uses, side effects, contraindications, interactions, expected outcomes, toxicity/ management of overdose, and safe, effective dosages. Emphasis is placed on lifespan considerations, commu-nity-based care, drug prototypes, client teaching, health promotion, economics, and ethical and legal aspects of drug administration. This course may be taken by non-nursing majors. Prerequisite: BIOL 111, 112, 424, 461; CHEM 115, 117; ENGL 103.

## NURS 309 Dynamics of Nursing Practice (3:3:0)

In this course the Registered Nurse student will examine various nursing themes and concepts; nursing education; adult education; nursing process; leadership, management, systems theory; and components of the U.S. health care system. Emphasis is placed on effective oral and written communication. Students are expected to refine critical thinking skills and express views in class discussion from readings and material presented. Prerequisite: RN status. (This course replaces NURS 101 Nursing Seminar and NURS 303 Concepts of Professional Nursing for Registered Nurse students.)

## NURS 320 Introduction to Nursing Practice (5:3:7.5)

This course introduces the student to therapeutic interventions utilized in the helping relationship. Acquisition and application of therapeutic communication and psychomotor skills to the nursing care of individuals is the focus of this course. Prerequisite: BIOL 111, 112, 424, 461; CHEM 115, 117; CMST 111; ENGL 103; MATH 110; NURS 101, 301; PSY 100, 225; SOC 111. corequisite: NURS 302, 303, 304, 305, 306.
NURS 321 Nursing Care of the Childbearing Family (5:3:7.5)
This course focuses on the role of the nurse in promoting the optimal health of the childbearing family. The course is designed to develop and sharpen the student's assessment skills of expectant and new families and of neonates; to further develop the student's formulation of nursing diagnoses; and to give him/her practice in planning, implementing, and evaluating holistic care for the childbearing family. Principles of care, which are fundamental to Maternal-Child Nursing, are developed throughout the course, along with associated clinical skills. Clinical experiences and opportunities will be provided in a variety of acute care and community settings to enable students to apply nursing care principles. Prerequisite: BIOL 111, 112, 424, 461; CHEM 115, 117; CMST 111; MATH 110; NURS 101, 301, 302, 303, 304, 305, 306, 320; PSY 100, 225; SOC 111. corequisite: NURS 307, 308.

## NURS 322 Nursing Care of Children, Adolescents, and Families (5:3:7.5)

The focus of this course is to provide an opportunity for the student to learn about the developmental health needs of children and their families. Current trends and nursing skills are stressed regarding the physical and emotional needs of infants, toddlers, and preschoolers, school-age children, adolescents, and the families. Growth and development of the child and the family are discussed. Nursing care of relevant pathological conditions is derived through the application of critical thinking and the nursing process. Prerequisite: BIOL 111, 112, 424, 461; CHEM 115, 117; CMST 111; ENGL 103; MATH 110; NURS 101, 301, 302, 303, 304, 305, 306, 307, 308; 320; PSY 100, 225; SOC 111. corequisite: NURS 307, 308.

## NURS 323 Nursing in Transition I

This is a transition course for licensed practical nurses which includes the study of selected health needs related to infants and childbearing families and to children, adolescents and families. This theory is applied in a clinical component. The following concepts are also applied in the clinical component: critical thinking communication skills, group interaction, beginning leadership and management skills, and theoretical rationale for nursing interventions. Prerequisites: BIOL 111, 112, 424, 461; CHEM 115, 117; CMST 111; ENGL 103; MATH 110; NURS 301; PHYS 101; PSY 100, 225, SOC 111; NURS 302, 303, 304, 305, 306, 307, 308 and successful completion of NLN ACE I (Foundations of Nursing) and ACE II (Child and Childbearing) Exams.

## NURS 324 Nursing in Transition II

This is a transition course for licensed practical nurses which included the study of selected health needs related to adult health care. This theory is applied in a clinical component. The following concepts are also applied in the clinical component: critical thinking, comm8unication skills, group interaction, beginning leadership and management skills, and theoretical rationale for nursing interventions are explored. A clinical component is included. Prerequisites: BIOL 111, 112, 424, 461; CHEM 115, 117; NURS 303, 304, 305, 306, 307, 308 and successful completion of NLN ACE I (Foundations of Nursing) and ACE II (Adult Client) Exams.

## NURS 400 Senior Seminar (1:1:0)

This is a seminar course which focuses on developing personal roles as professional practitioners through an examination of contemporary issues and career opportunities. Prerequisite: BIOL 111, 112, 424, 461; CHEM 115, 117; CMST 111; ENGL 103; MATH 110; NURS 101 (Basic students only), 323, 324 (LPN students only), 301, 302, 304, 305, 306, 307, 308, 309 (RN students only), $320,321,322,421,422$; PSY 100, 225; SOC 111.

## NURS 420 Analysis of Aging (3:3:0)

This course is designed to analyze the aging process with a multidisciplinary approach. Physiological, psychological, and sociological factors which influence the individual's response to aging are studied. This course is geared for students preparing for health disciplines. Enrollment is not limited to nursing majors. Prerequisites: BIOL 111, 112; PSY 100, or permission of the instructor.

## NURS 421 Adult Health Nursing I (6:3:11.25)

This course focuses on maximizing the health of adults and older adults and their families experiencing responses to altered nutrition, skin integrity, immune function, endocrine function, gastrointestinal function, urinary elimination, and sexual and reproductive function. Emphasis is placed on the development of clinical decision making skills, utilization of nursing research, leadership skills, health promotion, treatment of illness, and rehabilitation. This course builds upon knowledge gained from nursing and other disciplines pertaining to the holistic care of adults and older adults. The clinical component of this course allows the direct application of theory to practice. Clinical laboratory experiences will be provided in acute and community based settings. Prerequisite: BIOL 111, 112, 424, 461; CHEM 115, 117; CMST 111; ENGL 103; MATH 110; NURS 101, $301,302,303,303,304,305,306,307,308,320$; PSY 100, 225; SOC 111.

## NURS 422 Adult Health Nursing II (6:3:11.25)

This course focuses on maximizing the health of adults and older adults experiencing responses to altered cardiac function, peripheral tissue perfusion, respiratory function, neurologic function, and visual and auditory function. Emphasis is placed on the development of clinical decision making skills, health promotion, leadership skills, utilization of nursing research, treatment of illness, and rehabilitation. This course builds upon knowledge gained from nursing and other disciplines pertaining to the holistic care of adults and older adults. The clinical component of this course allows the direct application of theory to practice. Clinical laboratory experiences will be provided in both acute care and community based settings. Prerequisite: BIOL 111, 112, 424, 461; CHEM 115, 117; CMST 111; ENGL 103; MATH 110; NURS 101, 301, 302, 303, 304, 305, 306, 307, 308, 320, 421; PSY 100, 225; SOC 111.

## NURS 423 Psychiatric/Mental Health Nursing (5:3:7.5)

The course is based on selected theories of normal and abnormal behavior, psychiatric disorders, treatment modalities and the therapeutic use of self with growing knowledge of self-awareness and self-acceptance. Critical thinking, as well as the nursing process are applied in caring for clients (individuals, families, groups) both in the acute care and community settings. Prerequisite: BIOL 111, 112, 424, 461; CHEM 115, 117; CMST 111; MATH 110; PSY 100, 225; SOC 111; NURS 101 (Basic students only), 300 (LPN students only), 301, 302, 303, 304, 305, 306, 307, 308, 320, 321, 322, 421, 422.
NURS 424 Community Health Nursing in Practice (5:3:7.5)
The Community Health Nursing in Practice course provides opportunities for senior nursing students to holistically care for families, aggregates, and communities as clients. Concepts inherent to community health nursing practice build on prior and concomitant theory and clinical course content. Prerequisite: BIOL 111, 112, 424, 461; CHEM 115, 117; CMST 111; ENGL 103; MATH 110; NURS 101 (Basic students only), 300 (LPN students only), 301, 302, 303, 304, 305, 306, 307, 308, 309 (RN students only), 320; 421, 422; PSY 100, 225; SOC 111. corequisite: NURS 423.
NURS 481 Senior Internship (Semester hours arranged; minimum $\mathbf{2}$ credit, $\mathbf{1 1 2 . 5}$ hours)
This course is designed to facilitate professional development and/or transition into practice. Experiences provide for continuous clinical exposure that will assist the student in further development of the nursing generalist role and/or build upon previously attained nursing knowledge and skills. Opportunities for leadership and management development, as well as decision-making are encouraged through participation in the delivery of health services and nursing care. Prerequisite: BIOL 111, 112, 424; CHEM 115, 117; CMST 111; MATH 110; PSY 100, 225; SOC 111; NURS 101 (Basic students only), 323, 324 (LPN students only), 301, 302, 303, 304, 305, 306, 307, 308, 309 (RN students only), 320, 321, 322, 421, 422, 423, 424.

## NURS 485 Independent Study (Semester hours arranged)

This course will provide the opportunity to identify and explore in depth a nursing area of special interest to the student. This study will be under the guidance of a faculty member. Prerequisites: approval by the chair and faculty of the Department of Nursing.

## NURS 486 Field Experience and Internship-School Nursing (3:0:9)

This course is designed to serve as a field experience for students pursuing certification in school nursing. In addition to validating competencies learned in prerequisite courses, students will have an opportunity to become familiar with the role of the school nurse in various settings and to apply cognitive, affective, and psychomotor skills in an actual practice environment. Experience will be provided in preschool, K-8, and senior high school levels. Prerequisites: HLTH 360 or 539; MCOM 262 or 520; PSED 161 or 510, 242 or 516.

## NURS 490 School Nursing (3:3:0)

This course is designed to provide an overview of the skills needed to function as a school nurse. Topics addressed include the well child and the child with special needs. Introduction to screening programs will be addressed.

# Bachelor of Science Degree With A Major In Nursing Curriculum Plan 

| Fall | Freshman Year | Year Spring | Spring |
| :---: | :---: | :---: | :---: |
| BIOL 111 Human Anatomy and Physiology I | 4 | BIOL 112 Human Anatomy \& Physiology II | 4 |
| PSY 100 General Psychology | 3 | PSY 225 Lifespan Developmental Psychology | 3 |
| NURS 101 Nursing Seminar | 1 | ENGL 103 English Composition | 3 |
| ELEC Elective (General Education) | 3 | ELEC Elective (General Education) | 3 |
| ELEC Elective (General Education) | 3 | FIT Fitness Activity Course | 1 |
| FIT Fitness Activity Course | 1 |  |  |
| Subtotal | 15 | Subtotal | 14 |
| Fall S | Sophomore Year Spring |  |  |
| CMST 111 Speech Communication | 3 | MATH 110 General Statistics | 3 |
| SOC 111 Intro to Sociology | 3 | NURS 301 Nutrition \& Diet Therapy | 3 |
| BIOL 424 Mechanisms of Disease | 3 | CHEM 115 Chemistry M\&L | 3 |
| BIOL 461 Mechanisms of Disease Lab* | 1 | CHEM 117 Chemistry M\&L Lab | 1 |
| NURS 102 Concepts of Professional Nursing | 3 | ELEC Elective (General Education) | 3 |
| ELEC Elective (General Education) | 3 | ELEC Elective (General Education) | 3 |
| Subtotal | 16 | Subtotal | 16 |
| Fall | Junior Year Spring |  |  |
| NURS 302 Intro Comm Health Nursing | 2 | NURS 307 Nursing Research | 3 |
| NURS 304 Gerontological Nursing | 2 | NURS 308 Pharmacology | 3 |
| NURS 305 Health Assessment (lecture) | 2 | NURS 321 Nursing Care Childbearing Family | 5 |
| NURS 306 Health Assessment (lab) | 1 | NURS 322 Nursing Care Children, Adol., \& Families | 5 |
| NURS 320 Intro to Nursing Practice | 5 |  |  |
| ELEC Elective (General Education) | 3 |  |  |
| Subtotal | 15 | Subtotal | 16 |


| Fall |
| :--- |
| Senior Year |
| NURS 421 Adult Health I 6 NURS 400 Senior Seminar 1 <br> NURS 422 Adult Health II 6 NURS 423 Psychiatric-Mental Health Nursing 5 <br> ELEC Elective (General Education) 3 NURS 424 Community Health Nursing 5 <br>   NURS 481 Senior Internship 2 <br> Subtotal 15 Subtotal 13 <br> TOTAL CREDITS    <br> *Not required for students who transfer a microbiology course. 120   |

## RN to BS With a Nursing Major Curriculum Plan

Freshman Year

| BIOL 111 Human Anatomy and Physiology I | 4 | BIOL 112 Human Anatomy \& Physiology II | 4 |
| :--- | ---: | :--- | ---: |
| PSY 100 General Psychology | 3 | PSY 225 Lifespan Developmental Psychology | 3 |
| ELEC Elective (General Education) | 3 | ENGL 103 English Composition | 3 |
| ELEC Elective (Free) | 1 | ELEC Elective (General Education) | 3 |
| FIT Fitness Activity Course | 1 | FIT Fitness Activity Course | 1 |
| Subtotal | 12 | Subtotal | 14 |
| Fall Spring |  |  |  |
| CMST 111 Speech Communication | Sophomore Year |  |  |
| SOC 111 Intro to Sociology | 3 | MATH 110 General Statistics | 3 |
| BIOL 424 Mechanisms of Disease** | 3 | NURS 301 Nutrition \& Diet Therapy | 3 |
| BIOL 461 Mechanisms of Disease Lab** | 3 | CHEM 115 Chemistry M\&L | 3 |
| ELEC Elective (General Education) | 1 | CHEM 117 Chemistry M\&L Lab 1 | 1 |
| ELEC Elective (General Education) | 3 | ELEC Elective (General Education) | 3 |
| Subtotal | 3 | ELEC Elective (General Education) | 3 |


| Fall Junior Year |  |  |  |
| :--- | ---: | :--- | ---: |
| NURS 302 Intro Comm Health Nursing 2 NURS 307 Nursing Research 3 <br> NURS 309 Dynamics of Nursing Practice 3 NURS 308 Pharmacology 3 <br> NURS 304 Gerontological Nursing 2 NURS 321 Nursing Care Childbearing Family* 5 <br> NURS 305 Health Assessment (lecture) 2  <br> Families* 5 <br> NURS 306 Health Assessment (lab) 1   <br> NURS 320 Intro to Nursing Practice 5  $\mathbf{1 6}$ <br> Subtotal $\mathbf{1 5}$ Subtotal  |  |  |  |


| Fall |
| :--- |
| Senior Year |
| NURS 421 Adult Health I  NURS 400 Senior Seminar 1 <br> NURS 422 Adult Health II* 6 NURS 423 Psychiatric Mental Health Nursing 5 <br> ELEC Elective (General Education) 3 NURS 424 Community Health Nursing 5 <br>   NURS 481 Senior Internship 2 <br>   ELEC Elective (General Education) 3 <br> Subtotal $\mathbf{1 5}$ Subtotal $\mathbf{1 6}$ |

TOTAL CREDITS
*RNs graduating from NLNAC accredited, State Board of Nursing approved schools typically transfer credits equivalent to these courses.
**Course content is fulfilled for RNs who transfer a microbiology course.

## LPN to BS With a Nursing Major Curriculum Plan



## Philosophy and Religious Studies

School of Arts and Sciences The Faculty of Arts and Letters 428 Normal Street

570-422-3601
www.esu.edu/phil/index.html

Department faculty
Professors:
Associate Professor:
Assistant Professor:

George Thompson, Jr. (gthompson@po-box.esu.edu)
Martin Weatherston, chair (mweather@po-box.esu.edu)
Peter Pruim (ppruim@po-box.esu.edu)
Storm Heter (sheter@po-box.esu.edu)

ESU offers both a major and a minor program in Philosophy. The ESU Philosophy major is designed to give the best possible undergraduate grounding in philosophy. The program focuses on the intensive study of the classic texts of the history of philosophy. Issue-based courses in topics such as Logic, Political Philosophy, Aesthetics and Ethics round out the major. Whether you are interested in going on to graduate school in philosophy, or using your degree as a preparation for further study in other disciplines such as law, our program gives you a solid basis. Philosophy majors are prized even outside the discipline for their clear thinking and their articulateness. Our program will help you to attain these abilities.

## Bachelor of Arts with a Philosophy major- $\mathbf{3 0}$ semester hours

- Required courses: PHIL 251, 356, 357, 457, (315, 417, or 418); an additional 15 semester hours. No more than one 100 level course in Philosophy or Religious Studies (or transferred course equivalent to a 100 level course) may count towards the major. No more than twelve (12) transferred credits may count toward the major.
- Please see the Foreign Language Competency in this catalog.
- Please see the university requirements in this catalog.

Suggested four-year schedule of required courses
Year 1: Fall PHIL 110
Year 2: Fall PHIL 251
Year 3: Fall PHIL 356, PHIL 357; Spring PHIL 457, 315
Year 4: Fall PHIL 417; Spring PHIL 418
PHIL 110, 221, 231, 251 and 353 are taught every year. All other courses are offered on a twoyear rotation. Therefore, the order of years 3 and 4 above may be switched, depending on the year of entry. The students may start taking 200-level elective courses with prerequisit\&s once PHIL 110 has been completed. 300- and 400-level courses should not be taken at least until the second year.

## Philosophy minor- 18 semester hours

- Required courses: PHIL 110, two (2) of PHIL 221, 231 and 251, and 3 courses at the 300-level or above.
- A minimum of nine (9) of the credit hours used to complete the Minor in Philosophy must be completed at East Stroudsburg University.


## Course Descriptions

(Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title.)

## PHIL 110 GE: Introduction to Philosophy (3:3:0)

This course is an introduction to the basic issues and critical techniques of philosophy. Philosophical issues such as ethics, the theory of knowledge, metaphysics and logic will be explored, as well as the social, political and religious aspects of human existence.

## PHIL 171 GE: RELS: Introduction to Religious Studies (3:3:0)

This course provides an introduction to topics of general interest in religion, including the nature of man in the religious perspective, the many varieties of religious experience, the religious perspective on death, and the religious dimension of current social and moral issues; current trends in American religion will also be considered.

## PHIL 172 GE: RELS: Introduction to World Religions (3:3:0)

In this course the basic components-beliefs and rituals-of Amerind, African tribal, Middle Eastern, and Asian religions are presented and their distinctive characters are examined in the light of dominant features such as animism, magic, shamanism, priesthood, credal affirmation, liturgy, and sacraments.

## PHIL 212 GE: Introduction to Eastern Philosophy (3:3:0)

This course will present the ideas of thinkers from cultures as diverse as those of India, China, Japan and the Middle East. The main areas of concern will be metaphysics, logic and epistemology. Excerpts from texts by numerous authors will be read and discussed. Prerequisite: PHIL 110.

## PHIL 213 GE: Black Humanism (3:3:0)

This course is a study of philosophical, literary, and artistic contributions of African-American and African writers. Though major emphasis will be given to contemporary black authors, some emphasis will be put on the historic DuBois controversy and Marcus Garvey and his "Back to Africa" movement.

## PHIL 221 GE: Logic I (3:3:0)

Logic is the study of proper reasoning. This course explores the concepts of soundness, validity, implication, equivalence and consistency. Techniques are developed for evaluating arguments as they are encountered in ordinary language. Included are examinations of deductive inference, inductive inference, the use of observation to support theory, and a survey of commonly committed fallacies. Prerequisite: PHIL 110.

## PHIL 231 GE: Ethics (3:3:0)

This course is a survey of major ethical theories in Western philosophy. The moral theories of Plato, Aristotle, Aquinas, Kant, J.S. Mill, and Nietzsche will be examined. Prerequisite: PHIL 110.

## PHIL 235 Human Rights and Freedom (3:3:0)

This course examines the theory and application of human rights in political society. We study both liberty (a central ethical and political value) and rights (those instruments used to codify and enforce our liberties). Readings are drawn from classical and contemporary sources. The course may include topics such as torture, genocide, economic justice and women's rights. Prerequisite: PHIL 110.

## PHIL 238 GE: Philosophy of Law (3:3:0)

This course surveys the major theoretical and conceptual questions underlying law. The course is designed for both students hoping to pursue law as a career, and students interested broadly in the conceptual issues behind law. Prerequisite: PHIL 110.

## PHIL 241 GE: Aesthetics (3:3:0)

This course will examine major philosophical attempts to treat issues such as the nature of art and the standards of beauty. Texts by Plato, Aristotle, Plotinus, Kant, Hegel, Nietzsche and Heidegger will be examined. Prerequisite: PHIL 110.

## PHIL 251 GE: Ancient Philosophy (3:3:0)

This course investigates the foundation of Western philosophy from the pre-Socratics to Neo-Platonism; particular attention is given to Socrates, Plato, Aristotle, the Stoics, and Plotinus. Prerequisite: PHIL 110.

## PHIL 260 WS: Women and Religion (3:3:0)

This class will explore women's religious experience in a variety of religious traditions, including ancient and modern, eastern and western, with a view to illuminating the application of feminist methodologies to the examination of those experiences.

## PHIL 265 GE: Philosophy of Religion (3:3:0)

This course comprises an examination of views on various aspects of religion postulated by thinkers both within and without the confines of orthodoxy. Among the topics to be discussed are: God's nature and existence; the problem of evil; faith and unbelief; mysticism; faith and miracles; eschatology. Prerequisite: PHIL 110.

## PHIL 273 GE: Religion and Black Consciousness (3:3:0)

This course is a study of the interrelationship of the substance of Black Religion and the thought forms of white folk religion on institutionalized and non-institutionalized forms of religion among blacks and the role of both in contributing to and dealing with heightening contemporary black consciousness.

## PHIL 274 Religion and Technology (3:3:0)

The course begins with a survey of the various types of orientation to technological society (the "manipulative," the "alienative," and the "consensual"). These orientations are then assessed from the perspective of the religious philosophy of creativity, with a view to develop a basis of realizing the constructive potentialities of contemporary technological developments.

## PHIL 281 GE: Philosophy of Mind (3:3:0)

Am I a material brain, an immaterial consciousness, or both? This course begins with modern criticisms of Descartes' classic dualism and examines contemporary efforts to understand how purely physical objects such as human brains (and perhaps computers) may nevertheless be said to have mental traits, e.g., thoughts and beliefs. Explored are behaviorist, functionalist, and informationrepresentation approaches. Despite the progress made by these, we will articulate what aspects of consciousness still elude our efforts to understand the mind in naturalistic, scientific terms. Prerequisite: PHIL 110.

## PHIL 290 Special Topics (Semester hours arranged)

These courses are designed to meet specific needs of groups of students or are offered on a trial basis in order to determine the demand for and value of introducing them as a part of the university curriculum.

## PHIL 315 American Philosophy (3:3:0)

This course explores the American experience as expressed and developed in the words of the classic American philosophers; analysis of selections from Pierce, James, Dewey, Royce, Santayana, and Whitehead; the impact of American philosophy on education, religion, ethics, and social and legal theory. Prerequisite: PHIL 110.

## PHIL 318 Schopenhauer, Kierkegaard, and Nietzsche (3:3:0)

This course will study the three major 19th century continental philosophers who rebelled against the exaltation of reason. Their thinking led to existentialism and to radical reappraisals of ethics, religion, aesthetics, epistemology, and metaphysics. Prerequisite: PHIL 110, or 231, or 251.

## PHIL 321: Logic II (3:3:0)

This is a course on quantificational predicate logic. This twentieth century advancement unifies the methods presented in Logic I into a single system of greater power. The course focuses on techniques of symbolization and derivation and includes proving some meta-theoretical facts about logical systems in general. Prerequisite: PHIL 221.

## PHIL 337 Contemporary Ethics (3:3:0)

This course is an in-depth study of contemporary theories of ethics-emotivism, prescriptivism, existentialism, pragmatism, etc.-as expressed by philosophers such as Ayer, Stevenson, Hare, DeBeauvoir, and Dewey. Prerequisites: PHIL 110, 231.

## PHIL 340 GE: Social Philosophy (3:3:0)

This course will concentrate, from various philosophical perspectives, on current social issues such as society and the relation of the individual to it, social justice, social equality and affirmative action, health care, moral standards and the law, children and society, drugs, and problems in engineering a good society. Prerequisite: PHIL 110.

## PHIL 341 GE: Political Philosophy (3:3:0)

This course offers a discussion, from various philosophical points of view, of such historical concepts as city-state, universal community, and of contemporary issues pertaining to national, state, and Third World political developments. Perspectives will be presented on these issues from the writings of both classical and contemporary philosophers. Prerequisite: PHIL 110.

## PHIL 353 Medieval Philosophy (3:3:0)

This course presents the ideas of philosophers who lived between the third and the fifteenth centuries, e.g., Augustine, Abelard, Anselm, Aquinas, and William of Ockham. Prerequisites: PHIL 110, 251.

## PHIL 356 Rationalists of the 17th and 18th Centuries (3:3:0)

This course undertakes a close examination of four major Rationalist philosophers, Descartes, Malebranche, Spinoza, and Leibniz. Each of these thinkers made extravagant claims for reason and produced systems of metaphysics that claimed certainty on issues such as the existence of God, the concept of substance, the immortality of the soul, and the nature of the world. Prerequisite: PHIL 110.

## PHIL 357 Empiricists of the 17th and 18th Centuries (3:3:0)

This course studies the epistemological and metaphysical theories of the major British Empiricists and other related thinkers. Included will be Hobbes, Locke, Berkeley, and Hume. Prerequisite: PHIL 110.

## PHIL 417 20 ${ }^{\text {th }}$ Century Analytic Philosophy (3:3:0)

This course is a study of Anglo-American philosophy in the 20th Century, a tradition that has come to be known as Analytic Philosophy. The course begins with an examination of three central figures, Frege, Russell, and Wittgenstein. Together they promoted the study of logical forms, language and linguistic meaning as primary tools to effectively re-examine traditional philosophical problems. The course examines how these founding figures contributed to the development of Logical Positivism. Prerequisites: PHIL 110, and 221 or 357.

## PHIL 418 Phenomenology and Existentialism (3:3:0)

This course is a study of European phenomenology and existentialism and will include philosophers such as Husserl, Heidegger, Buber, and Sartre. Prerequisites: PHIL 110, one other philosophy course.

## PHIL 419 20 $^{\text {th }}$ Century French Philosophy (3:3:0)

This course studies major developments in twentieth century French philosophy. The course has two main units: Existentialism and Structuralism, and Postmodernism. Sartre, Foucault and Derrida will be covered. Prerequisites: PHIL 110 and one other philosophy course.

## PHIL 457 Kant and German Idealism (3:3:0)

This course is a study of Kant's major work on metaphysics and epistemology: the Critique of Pure Reason. The basis for Kant's justification of science and his rejection of speculative metaphysics will be examined. The course will also examine how the German Idealists attempted to surmount the limitations that Kant put on knowledge through their attempts to achieve absolute knowledge. This attempt to re-establish speculative metaphysics will be studied through a close reading of one of Hegel's works. Prerequisites: PHIL 110 and 356 or 357.

## PHIL 485 Independent Study (Semester hours arranged)

This course consists of directed research and study on an individual basis.

## Physical Education Teacher Education

School of Health Sciences and Human Performance The Faculty of Health Sciences and Human Performance Zimbar-Liljenstein Hall<br>570-422-3293<br>Department faculty<br>Professor: Associate Professors:<br>Assistant Professors:<br>Suzanne Mueller (smueller@po-box.esu.edu)<br>Caroline Kuchinski (ckuchinski@po-box.esu.edu)<br>Robert Smith, chair (bsmith@po-box.esu.edu)<br>Gene White (gwhite@po-box.esu.edu)<br>Christine Brett (cbrett@po-box.esu.edu)<br>Gary Neist (gneist@po-box.esu.edu)<br>Monica Thomas (mthomas@po-box.esu.edu)

## Bachelor of Science in Physical Education

Bachelor of Science in Health Education
The Physical Education and Health Teacher certification program is a unique and dynamic curriculum for prospective teachers. A student in this area will be prepared to become a teacher of physical education and health in the public schools.
This 130-credit degree program leads to Commonwealth teaching certificates in Health Education (K-12), and, Health and Physical Education (K-12). Students interested in this program must complete the degree requirements for both a Bachelor of Science in Health Education (See the Health Education section), and, a Bachelor of Science in Physical Education. Both the Bachelor of Science in Health Education and in Physical Education are 120-credit degree programs. Only those students who satisfactorily complete all requirements in both the physical education and health education degree programs will be endorsed for certification to teach Health and Physical Education in Pennsylvania. The course requirements for the 130 -credit program are listed below as is a plan for completing the two degrees in eight semesters.

- Required courses: PETE 100, 111, 120, 143, 153 or 453, 300, 302, 305, 306, 341, 343, 344, 400, 440, 441, 442, 445 (446) EXSC 203, 310 and one team and one individual sport activity course.
- Required courses: HLTH 210, 220, 230, 240, 310, 341, 350, 356, 365, 370, 431, 461.
- Required courses: PSED 161 and 242
- General Education courses that are required: ENGL 103, English Literature, CMST 111, BIOL 111, 2 MATH courses, PSY 100, and SOC 111.


## Notes:

- A minimum cumulative quality point average (QPA) as identified by PA law, chapter 354 is required for all teacher education students. These minimum standards are required for admission, continuation, student teaching, and graduation from this program. Students should see the Department Chairperson for the overall and major QPA standards.
- Eligibility for Pennsylvania teacher Certification in Physical Education and health requires the student to pass the Praxis I and II Exams.
- The Commonwealth of Pennsylvania has established new requirements for all candidates in teacher preparation programs. Please refer to the section Teacher Certification Requirements in this catalog for specific requirements for admission into teacher education programs.


## Course Descriptions

(Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title.)

## PETE 100 Introduction to Movement Studies and Exercise Science (3:2:2)

This course is designed to enable the student to understand movement studies and exercise science as fields of academic study, programs, and professional applications and to discriminate among these contexts and relate them by applying relevant knowledge and appropriate theoretical perspectives. Students will demonstrate the intrapersonal and interpersonal skills important for becoming a professional.

## PETE 110 Concepts of Motion (1:0:3)

This course is designed to introduce the student to the study of motion in dance as the basis for all forms of activity. Through the course the student will explore fundamental motion concepts including energy flow, spatial organization, and rhythm and will explore application of process skills to creative activity (improvisation, composition). Three aspects of dance (kinesiological and anatomical, historical and theoretical, and aesthetic) will be emphasized.

## PETE 111 Social Forms of Dance (1:0:3)

This course is a study of the social forms of dance and their ethnic sources. Social mixers, couple, groups, contra, and quadrille dancers, widely different in types and geographic origin, are included as well as standard ballroom dance rhythms, step patterns, and variations.

## $\ddagger$ PETE 114 GE: Modern Dance Theory (3:2:2)

This course is designed to introduce the student to the study of dance as the most fundamental of the arts, involving a direct expression of oneself through the body. The student will explore fundamental movement concepts including time, weight, space, and flow. Contextualization of historical, theoretical, and aesthetic principles will be emphasized.

## PETE 115 Introduction to Dance (3:3:0)

This course examines the universal human need to celebrate life through dance. It is a survey of dance style forms designed to introduce the student to the energies and mysteries of dance throughout the ages and cultures of the world. Emphasis is on the role of dance as an expression of cultural mores, social order, religious worship, cultural identity, and individuality.

## PETE 120 Physical Conditioning (1:0:3)

This course provides for development of programs of exercise and activity and individual assessment of status, needs, and goals and is designed to enable each individual to determine realistic goals for his/her development and the use of activity throughout his/her life.

## PETE 121 Aerobic Fitness Activities (1:0:3)

This course is designed to introduce the student to the various aerobic fitness activities for adult populations. Techniques of fitness assessment, aerobic dance, jogging and aquacizing will be emphasized.

## PETE 122 Strength Training (1:0:3)

This course is designed to give the student a broad background in the area of strength training. Various strength training programs, techniques, and trends will be examined. Students will have the opportunity to set up and become involved in various strength-training methods. Recommended prerequisite: PETE 120.

## PETE 123 Yoga (1:0:3)

Yoga is a system of exercise and mindful movement which improves the health and physiological function of the entire body. The major emphasis in this course is on the asanas (postures) of yoga. Minor emphasis is on techniques to quiet and focus the mind, breath control and relaxation.
PETE 140 PED I: Personal Awareness Concepts and the Teaching of Physical Education (2:1:2) This is the first course in a sequence of four courses focusing on teaching physical education. This course emphasizes the positive intrapersonal and interpersonal skills necessary to become a professional in physical education. Prerequisite or concurrent: PETE 100.

## PETE 141 Movement Experiences for the Pre-School Child (1:0:3)

This course is an introduction to movement experiences appropriate for the pre-school child and his/ her total integrated development; attention is focused upon the elements of movement, non-locomotor, and manipulative activities that promote development of perceptual-motor abilities, physical and motor fitness, and motor abilities. The proper selection and organization of activities that promote instructional objectives based upon student needs is stressed.

## PETE 143 Educational Gymnastics (1:0:3)

This course provides for the integrated study of the bodily, dynamic, spatial, and action aspects of gymnastics. Students will be expected to increase and expand their skills and spotting abilities in the gymnastic environment by solving movement problems and performing tasks on the mats and single pieces, and combinations of equipment.

## PETE 150 Backpacking, Orienteering, and Mountaineering (1:0:3)

This course includes basic skills of backpacking, land navigation, sport orienteering, and introductory experiences in rope handling, climbing, and rappelling. After successful completion of the course, the student will be able to plan and carry out a short backpacking trip, read a map and compass, follow a simple orienteering course, travel safely in the wilderness, and practice low impact camping skills.

## PETE 153 Aquatics I (1:0:3)

This course includes development of skill proficiency and an increased understanding in basic aquatic adjustment skills, survival techniques, stroke mechanics, and elementary diving skills. Emphasis is placed on rhythmic breathing, drownproofing, treading, and the ability to perform elementary backstroke, sidestroke, front crawl, back crawl, and breaststroke in acceptable form. Principles of hydrodynamics are presented. Prerequisites: Deep-water entry, 50 yard swim.

## PETE 157 Outdoor Adventure Workshop (1:0:3)

This course provides an introduction to outdoor adventure activities including: group games or initiatives, high and low ropes course elements, camping, canoeing, backpacking, map and compass, angling and casting, and outdoor cooking. The course is offered in a concentrated time block. Students are housed at Stony Acres. An additional course fee is assessed for meals and canoe rental.

## PETE 165 Golf I ( $\mathbf{1 : 0 : 3}$ )

This course provides instruction in the basic strokes for the game: driving, approaching (long and short), and putting. It also covers the history of the sport, rules, courtesy, and fundamental strategy. Play on a golf course is required.

## PETE 167 Track and Field Events I (1:0:3)

This course focuses upon the basic techniques involved in sprinting, hurdling, distance running, relays, and the throwing and jumping events. Instruction emphasizes skill acquisition through sequential learning steps.

## PETE 170 Basketball I (1:0:3)

The course is designed to analyze the game of basketball, to develop the basic skills necessary to play the game, to develop an understanding and the use of basic offensive and defensive strategy, and to demonstrate a knowledge of the rules and their interpretation.

## PETE 171 Field Hockey I (1:0:3)

Field Hockey I will acquaint the student with the fundamental nature of the sport, enable the student to understand offensive and defensive play, and provide the student with the basic performance skills necessary for play.

## PETE 172 Football I (1:0:3)

This is a basic course designed to teach the fundamentals of football techniques including blocking, tackling, pass catching, throwing the ball, offensive and defensive line play, linebacker skills, defensive and offensive backfield play, and kicking the ball (punts, extra points and field goals).

## PETE 173 Lacrosse I (1:0:3)

Emphasis on this course is placed on understanding, by performance and verbalization, the fundamental aspects of play skills, basic offensive and defense strategy and the relationships between these elements as they contribute to effective play. (USWLA Rules, 12 players, natural boundaries, and no contact.)

## PETE 174 Soccer I (1:0:3)

This course is designed to acquaint the student with the fundamental skills of the game of soccer and to provide an understanding of the application of the skills for classroom situations.

## PETE 177 Wrestling I (1:0:3)

Wrestling I is designed to give the student knowledge and understanding of the basic rules, skills, and strategies involved in wrestling, so that the student can demonstrate these factors in both instructional and competitive situations.

## PETE 180 Baseball I (1:0:3)

This is a basic course to develop an understanding of baseball techniques, the performance of its basic skills, and the methods used in the teaching of these skills.

## PETE 181 Softball I (1:0:3)

Softball I is designed to enable the student to recognize the nature and scope of softball and to understand softball rules and apply these rules in softball games. The student will develop ability in the execution of basic softball skills and application of game strategy.

## PETE 182 Badminton (1:0:3)

This course is designed to provide the student with experiences relevant to the execution and analysis of the basic skills of badminton (serves, clear, smash, drop, drive, and net shots). The student should be able to apply the rules and basic strategy of singles and doubles in a recreational tournament situation.

## PETE 183 Racquetball (1:0:3)

Racquetball is designed to teach the fundamentals of the game. Included are stroking techniques, game tactics, and practice in singles, threes, and doubles play in competitive situations. Supplementary information concerning the history and rules of the game is also presented.

## PETE 184 Tennis I (1:0:3)

The focus of this course is effectiveness in the performance of the serve, the serve return, and forehand and backhand drives, approaches, and volleys. The course includes knowledge of stroke production and selection in relation to placement and speed of the ball, knowledge of rules, scoring, terminology, as well as basic strategy for singles and doubles play and awareness of the social and cultural conduct and functions of tennis in the United States.

## PETE 185 Volleyball I (1:0:3)

This course is designed to analyze the game of volleyball, to develop the basic skills necessary to play the game, to develop an understanding and use of basic offensive and defensive strategy, and to demonstrate a knowledge of the rules and their interpretations.

## PETE 200 Movement and the Learning Process (3:2:2)

This course is designed to acquaint the student with research findings, empirical evidence, and theoretical constructs regarding movement and learning; emphasis is placed upon the state of the learner, the learning process, and the conditions for learning.
$\ddagger$ PETE 210 GE: Elementary Ballet (2:1:3)
This course will include technique in elementary ballet including alignment, barre, center work, basic enchainements, and room and body directions, with emphasis on developing the physical and expressive potential of the human body. The class will enable students to understand and synthesize the kinesiological and anatomical, historical and theoretical, and aesthetic aspects of dance. Prerequisites: FIT 140 or PETE 110 or equivalent dance training.

## \#PETE 215 GE: Elementary Lyrical Modern Dance (2:1:3)

This is an elementary level modern dance technique course. It explores a variety of axial and locomotor techniques and simple combinations characteristic of contemporary dance. The ability to apply skills in the art form is implied in any study of technique; this ability will be realized through improvisational and compositional experiences. Prerequisite: FIT 140 or PETE 110 or equivalent dance training.

## PETE 216 Creative Dance for Children (2:1:3)

This course is designed to introduce students to the fundamentals of teaching creative dance for children including a conceptual approach to dance and fostering children's growth through a creative, child-centered dance curriculum. It will include information on the nature of dance for children, choosing age-appropriate topics, strategies for facilitation of dance experience, and group discussions as well as guided practical experiences. Prerequisite: PETE 110.
PETE 242 Movement Experiences in Early Childhood Education (3:2:2)
Course content covers growth characteristics, motor development, physical and perceptual motor abilities, self-concept, and play behaviors of the early childhood population. The student will be expected to apply these concepts by using various assessment tools to determine children's developmental levels and by designing and teaching developmentally appropriate lessons to children. Prerequisite: ECED 162.

## PETE 245 Adapted Physical Education (3:2:2)

This course provides the student with the competencies necessary to screen and evaluate the needs of mentally and physically challenged students. Developing goals and learning objectives in the areas of motor fitness as well as adapting activities based on the needs of the individual are emphasized.
PETE 286 Early Internship (1 to 3 credits)
This experience enables a student to explore the role of a professional in a sport fitness or rehabilitation setting under the close supervision of a work-site supervisor. Prerequisites: 30 semester hours; 2.0 QPA; department approval.

## MSES 290 Special Topics (Semester hours arranged.)

These courses are designed to meet specific needs of groups of students or are offered on a trial basis in order to determine the demand for and value of introducing them as a part of the university curriculum.

## PETE 300 New Games and Adventure Activities (1:0:3)

This course involves nontraditional games and exercises, group initiative problems, low and high ropes course elements. Spotting, belaying, and new games leadership skills will be developed. The student will have the opportunity to meet new challenges, take risks, and overcome obstacles through individual and group effort. Extensive use will be made of the Stony Acres ropes course. All students must show evidence of health/accident insurance coverage.

## PETE 302 Psychosocial Aspects of Activity (3:3:0)

This course analyzes movement activities as psychosocial phenomena, including consideration of the symbolic and cultural nature of movement forms within a framework of human personality, motivation, and social values and organization. Prerequisite: PETE 100.
PETE 305 A Tactical Approach to Games (1:0:3)
This course emphasizes the conceptual similarities among net/wall sports and among invasion sports. Performances of basic strategies as well as a knowledge of teaching the concepts that cross the sport categories will be emphasized. Students will analyze strategies and draw inferences from the relationships among net/wall and invasion team games. Prerequisite: PETE 100, and admission to HP-CTPE Program.
PETE 306 Movement Experiences for the Primary Grade Child (1:0:3)
This course is a study of movement experiences appropriate for the primary grade child. Attention is focused on developmentally appropriate activities designed to integrate movement skill themes and concepts. Appropriate teaching practices are emphasized. Included is a practical teaching experience. Prerequisites: PETE 100 and admission to HP-CTPE Program.

## PETE 310 Movement for the Performing Artist (3:2:2)

This course examines experientially the special qualities of movement as a performing art and the application of movement in the delineation of situation, character, mood. The attainment of control, kinesthetic sensitivity, and the ability to move with clarity and expression are important goals of the course. Prerequisite: PETE 110 or equivalent.

## $\ddagger$ PETE 314 GE: Creative Experiences in Dance (1:0:3)

This course provides the student with intermediate to advanced dance experience (minimum 3 years of study) guidance in individual and group experiences in dance. Using a related arts approach, it examines the expressive quality of movement in the use of time, space, and energy factors. Improvisation and choreography are included. Fulfills GE requirement for Performing Arts. Prerequisites: PETE 110 or FIT 140; PETE or DANC 114; PETE or DANC or FIT 210; PETE or DANC or FIT 215.

## $\ddagger$ PETE 315 GE: Dance Performance and Production (1:0:3)

This course consists of performance, choreography, and production work involved with dance as a performing art. Work in performance and technical areas is included, and participation in production is required. This course may be elected more than once for credit (maximum of 3 times). Prerequisite: FIT 140 or PETE 110 or equivalent dance instruction.

## PETE 316 Dance Teaching Practicum (1:0:2)

This course is designed to develop insight and develop further competency during laboratory experiences by providing students with guided practical experiences in teaching dance for children and adults. Prerequisite: PETE 111 or FIT 141 and 142, and PETE 216 or DANC 216.

## PETE 341 Movement Experiences for the Intermediate Grade Child (1:0:3)

This course is a study of movement experiences appropriate for intermediate grade children. Attention is focused upon selecting and designing appropriate teaching practices. Included is a practice teaching experience with emphasis on lead-up activities to team and individual sports, leisure time, and conditioning activities. Prerequisite: Admission to HP-CTPE program.
PETE 342 Seminar in Dance Education: (2:2:0)
This course is designed to provide a cohesive overview of the field of dance education. Emphasis is placed on discussions of readings concerning the philosophical and practical approaches to teaching children and adults, aesthetic theory of the major genres of dance, and application of scientific theory of movement to the field of dance. Concepts and issues raised by students are reviewed and/or further discussed by the professor. Integration of courses in motor learning, kinesiology, and pedagogy is a major course objective of this seminar. This course is required for the dance focus. Prerequisites: PETE 200, 202, 203, 340.

## PETE 343 Analysis of Teaching Physical Education (2:1:2)

This course emphasizes the study of teaching and learning in physical education settings. The student will learn and apply specific observational systems and will analyze data to determine its relationship to existing concepts in teaching and learning. Prerequisite: Admission to HP-CTPE program.

## PETE 344 Motor Learning and Development (3:2:2)

This course is designed to acquaint the student with research findings, empirical evidence, and theoretical constructs regarding movement and learning; emphasis is placed upon the state of the learner, the learning process, and the conditions for learning. In addition, this course acquaints the student with the motor development of preschool through adolescent children. It prepares the student to derive implications for the teaching of physical education from motor development research in the psychomotor and cognitive domains and gives the student practical experiences in assessing motor development through laboratory experiences. Prerequisites: PETE 100 and admission to HP-CTPE.

## PETE 353 Lifeguard Training (1:0:3)

Successful completion of this course leads to acquisition of the American Red Cross Lifeguard Training Certificate. This course replaces the Advanced Lifesaving course. The Lifeguard Training course will provide participants with the skills and knowledge required to be a lifeguard at a swimming pool or a protected (non-surf) open-water beach. Prerequisites: 500 yards continuous swim consisting of front crawl, breaststroke and sidestroke; retrieval of 10 pounds from 8 feet of water and treading water for 2 minutes using the legs only.

## PETE 360 Gymnastics Certification (3:3:0)

An in-depth analysis of the major areas affecting mechanical analysis of gymnastic movement, trends and innovations of gymnastics, and teaching methodology for basic to advanced level skills. Additional emphasis centers around a critical review of the research relevant to safety and spotting in the gymnastics discipline. Prerequisites: PETE 160 or 161 or equivalent.

## PETE 400 Physical Education Teaching Strategies (2:1:2)

This course emphasizes the application of instructional theories to the teaching of Physical education. The student will develop knowledge and skill in teaching styles, strategies and skills. Students are required to participate in a concurrent field experiences. Prerequisites: PETE 341 and 343, completion of Early Field Experience and admission to HP-CTPE Program.

## PETE 410 Meeting Children's Needs Through Movement Activities (3:2:2)

This course is an opportunity for elementary classroom teachers, physical educators, occupational, recreational, physical and play therapist, school counselors, parents and others who work with children to gather new ideas and activities to use in meeting children's social, emotional, cognitive, as well as physical needs. Emphasis will be placed on activities that can be done within the classroom or other limited space as well as those which can be done in the gymnasium or on the playground or field. These activities are inclusive of all participants. Prerequisites: PETE 306 and 341.

## PETE 440 Physical Education Student Teaching (6:0:3)

Physical Education student teaching provides a rigorous integration and application of all the knowledge and skills previously developed. This is a full-time experience teaching physical education in a school setting and also includes six seminars. Prerequisites: Admission to HP-CTPE, Passed Praxis: Fundamental Subjects-Content Knowledge; All required PETE 300-400 level courses, PSED 161, 242: minimum 96 credits, minimum 2.8 QPA overall \& PE.

## PETE 441 Movement Activities for Special Populations (1:0:3)

This course is a study and presentation of movement experiences appropriate for individuals with various physical and/or mental disabilities. Understanding the nature of sensory, cognitive, behavioral, and physical disabilities will facilitate strategies for instructing and modifying activities for individuals with disabilities is emphasized. Additionally, information regarding recent federal public law will be disseminated as well as the development of an individualized education program (IEP) for an individual with a disability. Lastly, students will gain hands-on experience teaching individuals with disabilities in a physical education environment. Prerequisites: PETE 306, 341, and admission to HP-CTPE.

## PETE 442 Movement Experiences for Secondary Education (1:0:3)

The purpose of the course is to advocate the promotion of a healthy lifestyle and improved quality of life for all ages. In this course, learners will build upon skills and knowledge that were previously taught in the primary and intermediate grade courses. The learner will understand the maturity level of high school students and the importance of providing learning experiences so students can take more responsibility in designing, measuring, and evaluating their own lifelong fitness and physical activity programs. Prerequisites: PETE 306, 341, and admission to HP-CTPE.
PETE 445 Organization and Administration of Physical Education (2:2:0)
This course is designed to enable the student to demonstrate ability to utilize accepted practices of administering physical education programs as well as intramurals, clubs, and interscholastic sport. It includes in-depth analysis of administrative concepts as they relate to practice. Prerequisites: PETE 100; for teacher certification students: PETE 100 and 400 (or concurrent registration in 400) and admission to HP-CTPE.

## PETE 446 Curriculum and Evaluation (2:2:0)

This course provides an opportunity for the student to demonstrate knowledge of the principles and procedures of standards-based education curriculum construction, of the procedures whereby observable learned behavior can be evaluated, and of the techniques for organizing and treating data. Prerequisites: PETE 341, 400 (or concurrent registration in 400) and admission to HP-CTPE.
$\neq$ Courses with the $\ddagger$ symbol fulfill the requirements for Performing Arts.

## PETE 453 Water Safety Instructor (1:0:3)

Satisfactory completion of this course leads to certification as a Red Cross Water Safety Instructor. The course focuses on the development of skill proficiency and teaching proficiency of swimming and lifesaving skills. The Red Cross Introduction to Health Services Education course (IHSE) is incorporated into the Water Safety course. Prerequisites: Current lifeguard training card and successful completion of Red Cross swimming prerequisite.

## PETE 454 Lifeguard Instructor (1:0:3)

Satisfactory completion of this course leads to certification as an American Red Cross Lifeguard Instructor. This course prepares instructor candidates to teach Lifeguard Training, Basic Water Safety, Emergency Water Safety, and the Lifeguard Review course. Prerequisites: Lifeguard Training Certificate (FIT/PETE 353); Current CPR Certificate/standard First Aid Certificate.

## PETE 485 Independent Study (Semester hours arranged)

This course deals with independent research and study under the direction of a faculty member and is designed to deepen the student's interest in a particular area of an academic field. The directing faculty member will be available exclusively to the student for a minimum of five hours per credit. Approval for enrollment must be obtained from the faculty member and from the department chair. Approval and granting of credit must be in accordance with procedures and standards established by departmental faculty. The student must present a study prospectus prior to approval. Prerequisites: PETE 100, 15 credits in PETE.

## PETE 486 Field Experiences and Internships (Semester hours arranged)

Requirements for Approval:
All internship sites must be approved by the department faculty. Each application for an internship must be approved by the faculty member in charge of the experience, the director/supervisor of the site where the internship will be done, and the department chair. Before application is made, students must meet the following requirements:

1. Have faculty recommendation based on qualities essential for success in the assigned environment.
2. Have successfully completed at least 96 semester hours of credit.
3. Have no incomplete grades in required courses.
4. Have a minimum average of 2.0 GPA overall and in the major.
5. Application deadlines are:
a. October 15 for spring semester internships;
b. March 15 for fall and summer internships

## B.S. in Physical Education and B.S. in Health Education

With Eligibility for PA Teacher Certification in Health and Physical Education Sample Program Curriculum Plan

| Semester 1 Seshman Year |  |  |  |
| :--- | ---: | :--- | ---: |
| ENGL 103 English Composition 3 ENGL 1 English Literature 3 <br> BIOL 111 Human Anatomy \& Physiology I 4 MATH 1... 3 <br> PETE 100 Intro to MSES 3 General Education 3 <br> 2 PETE Activity Courses (choice) 2 2 PETE Activity Courses (choice) 2 <br> HLTH 210 Foundations of Health Science 3 HLTH 220 Personal \& Consumer Health 3 <br>   PSED 161 Foundations of Education 3 <br> Subtotal $\mathbf{1 5}$ Subtotal $\mathbf{1 7}$ |  |  |  |

Semester 3 Sophomore Year

| MATH 1... | 3 | 3 General Education Courses | 9 |
| :--- | ---: | :--- | ---: |
| 2 General Education Courses | 6 | 2 PETE Activity Courses (choice) | 2 |
| EXSC 203 Kinesiology - Mechanical Analysis | 3 | HLTH 240 Health Emergencies | 3 |
| 2 PETE Activity Courses (choice) | 2 | PSED 242 Educational Psychology | 3 |
| HLTH 230 Community Health | 3 |  |  |
| Subtotal | $\mathbf{1 7}$ | Subtotal | $\mathbf{1 7}$ |


| Semester 5 | Junior Year | Semester 6 |  |
| :---: | :---: | :---: | :---: |
| 2 General Education Courses | 6 | 2 General Education Courses | 6 |
| EXSC 301 Exercise Physiology | 3 | PETE 302 Psycho-Social Aspects | 3 |
| PETE 344 Motor Learning \& Development | 3 | PETE 343 Analysis of Teaching PE | 2 |
| PETE 306 Mvmt for Primary Grades | 1 | PETE 441 Mvmt for Special Pops | 1 |
| PETE 341 Mvmt for Intermediate Grades | 1 | HLTH 310 Family Health | 3 |
| HLTH 341 Nutrition Education | 1.5 | HLTH 350 Mental Health | 3 |
| HLTH 356 Drug \& Alcohol Teacher Prep | 1.5 |  |  |
| Subtotal | 17 | Subtotal | 18 |
| Semester 7 | Senior Year | Semester 8 |  |
| 1 General Education Course | 3 | PETE 440 PE Student Teaching | 6 |
| PETE 400 PE Teaching Strategies | 2 | HLTH 431 Health Student Teaching | 6 |
| PETE 442 Mvmt for Secondary Grades | 1 |  |  |
| PETE 4450 \& $A$ of PE | 2 |  |  |
| HLTH 365 School Health Administration | 3 |  |  |
| HLTH 461 Methodology in Health Ed. | 3 |  |  |
| HLTH 370 Planning \& Eval in Health Ed | 3 |  |  |
| Subtotal | 17 | Subtotal | 12 |
| TOTAL CREDITS |  |  | 130 |

## Physical Science

School of Arts and Sciences-The Faculty of Sciences
Gessner Science Hall, Room 107
570-422-3341
www.esu.edu/physics

## Bachelor of Arts with a Physical Science major- $\mathbf{3 8}$ semester hours

- Required major courses: CHEM 121, 123, 124, 126, 8 semester hours of courses numbered 200 or higher; GEOG 120, 121; PHYS 131, 132, 8 semester hours of courses numbered 200 or higher.
- Corequisite courses: MATH 140, 141.
- Please see the university requirements in this catalog.

Coordinator: Professor Robert Cohen, Physics Department.
This is an interdisciplinary degree program which emphasizes a broad study of several disciplines rather than a study of a single discipline.

## Physics

School of Arts and Sciences

The Faculty of Science
Gessner Science Hall, Room 107
570-422-3341
www.esu.edu/physics

Department faculty
Professors:
Professors: David Buckley (dbuckley@po-box.esu.edu) Robert Cohen, chair (rcohen@po-box.esu.edu)
Paul Houle (phoule@po-box.esu.edu) David Larrabee (dlarrabee@po-box.esu.edu)
Associate Professors: John Elwood (jelwood@po-box.esu.edu)
Mary Anne Moore (mamoore@po-box.esu.edu)

## Bachelor of Arts with a Physics major-27 semester hours

- Required major courses: PHYS 161, 162, 261, 262,333, 495; and 9 additional credits in Physics 300 level or above
- Corequisite courses: MATH 140, 141, 240.
- Recommended courses: CHEM 121, 123, 124, 126.
- Additional requirements: At least 9 credits of required courses (not corequisites), $300-l e v e l$ or above, must be completed at ESU. A minimum of a "C" must be obtained in each of the required courses.
- Please see the university requirements in this catalog.

Bachelor of Science with a Physics major- $\mathbf{4 3}$ semester hours

- Required major courses: PHYS 161, 162, 261, 328, 361, 401, 431, 441, 495; 333 or $334 ; 411$ or 421 ; two or more of $404,415,428,432,433$ and $471 ; 3$ credits, 300 -level or above in PHYS, as approved by advisor.
- Corequisite courses: MATH 140, 141, 240.
- Recommended courses: CHEM 121, 123, 124, 126; MATH 311, 341.
- Additional requirements: At least 9 credits of major courses (not corequisites), 300level or above, must be completed at ESU. A minimum of a " C " must be obtained in each of the required courses.
- Please see the university requirements in this catalog.


## Bachelor of Science with a Physics major (Secondary Education)- $\mathbf{2 7}$ semester hours

- Required major courses: PHYS 161, 162, 261, 262, 333, 495; and 9 additional credits in physics, 300 level or above. PHYS 405 is recommended.
- Corequisite courses: BIOL 114; CHEM 121, 123, 124, 126; MATH 140, 141, 240; also one CPSC course or its equivalent chosen with the consent of the adviser.
- Required professional education courses: MCOM 262; PSED 161, 242, 346, 426, 430, 495; REED 321, PHYS 499.
- Recommended courses: MATH 341; CMST 111; and either GEOG 120 or 121.
- Coordinator: Professor Robert Cohen, Department of Physics.

The Commonwealth of Pennsylvania has established new requirements for all candidates in teacher preparation programs. Please refer to the section The College of Education in this catalog for specific requirements for admission into teacher education programs.

- Additional requirements: At least 9 credits of required courses (not corequisites), $300-l e v e l$ or above, must be completed at ESU. A minimum of a "C" must be obtained in each of the required courses.
- Please see the university requirements in this catalog.


## Course Descriptions

(Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title.)

## PHYS 101 GE: Physical Science-Force, Matter and Energy (3:3:0)

This course examines selected fundamental concepts necessary to the understanding of physical phenomena. Topics included are motion, atomic structure, waves, heat and thermodynamics, and nuclear science. Science as a process-its attributes, strengths, and limitations-is also examined. Demonstrations dealing with physical principles characterize much of the course.

## PHYS 102 GE: Physics as a Liberal Art (3:3:0)

This course acquaints students with what physics is and how it is important. It provides an introduction to physics and its development, examines the physical world in which we live, and explores issues and technologies with which physicists and engineers are involved. This course does not involve problem solving and is available to non-science majors with a non-mathematical background.

## PHYS 103 Science for Involvement (3:3:0)

This course is offered primarily for non-science majors, to help students attain the science literacy and science competencies which are the foundation for acceptable performance in their own chosen fields. The course is group interaction-and activity-oriented, based upon students' selections from a list of the suggested topics.

## PHYS 105 GE: Physics for the Inquiring Mind (3:3:0)

This is a descriptive course designed to raise the level of scientific literacy, particularly in the basic tenets of physics. Topics include Newtonian mechanics, satellite trajectories, and several areas of current interest.

## PHYS 106 GE: Modern Physics (3:3:0)

The course covers the developments in physics of the 20th century that have influenced human thought and values. The universal symmetries, relativity, and quantum mechanics will be examined in depth by exploring the processes of reasoning and investigation that led to the discoveries and a connection sought between modern physical thinking and events of the current scene. Prerequisite: PHYS 102 or 105.

## PHYS 107 GE: Physics and Forensic Science (3:3:0)

The course considers forensic evidence and the reliability of the data analyzed in the laboratory. It looks at basic physics principles found in optics, statics and kinesmatics and shows how forensic scientists apply them to court room evidence.

## PHYS 110 GE: Sound, Waves, and Light (3:3:0)

This course is designed to inform the students of the wave nature of the physical world. It is a qualitative presentation of the phenomena of sound, light, electricity, and magnetism.

## PHYS 111 Engineering Graphics (2:0:4)

This course includes multiview projections, pictorial drawings, dimensioning, engineering standards and working drawings. It involves an introduction to creative design, space analysis, graphs, graphical mathematics, vector analysis, and design implementation (CAD and manual). Prerequisite: MATH 120 or 121.

## PHYS 116 Energy Conservation in the Home (3:3:0)

In order to provide a comfortable lifestyle for future generations as well as the present one, intelligent well-informed decisions are necessary. The material presented in this course will help the student understand the problems, options, and costs involved in such decisions so that the student may take informed actions in the use of energy.

## PHYS 117 GE: Energy (3:3:0)

This course introduces the concept of energy in all its forms and discusses its role in modern society. Discussions include sources of energy, along with their social and environmental impact.

## PHYS 118 GE: Solar Energy (3:3:0)

This is a course designed to inform the student of the source of solar energy, what's being done to harness this energy, and how students may benefit from solar devices the may build themselves. The course requires very simple calculations and includes the construction of one solar device. Also included are several detailed analyses of the economics of home solar systems.

## PHYS 121 GE: Astronomy I: The Sky and Solar System (3:3:0)

This course in descriptive astronomy deals with the scientific principles essential to the understanding of astronomy. Topics covered include basic observational astronomy, the historical development of astronomy, spectroscopy and telescopes, planetary science, the origin and evolution of the solar system, and the sun as a star.

## PHYS 122 GE: Astronomy II: Stars and Galaxies (3:3:0)

This course in descriptive astronomy is a continuation of Astronomy I. The topics covered include observational properties of stars, stellar life cycles, pulsars and black holes, the Milky Way Galaxy, extragalactic astronomy, quasars, and cosmology. Prerequisite: PHYS 121.

## PHYS 123 GE: Introduction to Physical Cosmology (3:3:0)

This is a descriptive course which introduces current theories on the origin and evolution of the universe. Particular emphasis is placed on how ideas from such diverse areas of study as extragalactic astronomy, relativity, and particle physics have combined to provide a reasonably coherent theory of the beginning of time and the cosmos. Prerequisite: Honors Program.

## PHYS 124 Observational Astronomy Lab (1:0:3)

This course is intended to give the student experience in the observational techniques of modern astronomy. The course is designed to complement Physics 122 Astronomy 2, but may be taken with Physics 121 Astronomy I. Corequisite: PHYS 121 or 122.

## PHYS 131 GE: Fundamental Physics I (4:3:3)

Together with Fundamental Physics II, this course covers basic principles and methods of all branches of classical physics at an introductory level. Topics include Newtonian mechanics, gravitation, waves, optics, heat, electricity, and magnetism. Prerequisite: MATH 135.

## PHYS 132 GE: Fundamental Physics II (4:3:3)

Physics 132 is a continuation of Physics 131. Topics covered include electricity, magnetism, electromagnetic radiation and optics. Some brief material on atomic and nuclear physics as well as quantum mechanics is introduced where possible. Prerequisites: PHYS 131; MATH 135.

## PHYS 151 Physics of Flight (3:3:0)

This course is intended to give its students knowledge of the forces acting on aircraft in flight maneuvers, the mechanisms of each flight and engine instrument, aircraft electronics, reference frames used in flight navigation, very high frequency omni range navigation techniques, non-directional beacon navigation techniques, the physical background for federal aviation regulations, and necessary weather consideration.

## PHYS 152 Physics of Flight Lab (1:0:2)

This course is intended to give the student practical applications of the theoretical aspects of the topics covered in PHYS 151. Included in this lab are 10 hours of flight instruction with an FAA certified flight instructor or a student's solo license, whichever comes first. An additional fee is required. Contact the Department of Physics for details.

## PHYS 161 GE: Physics I (4:3:3)

Together with Physics II, this course covers basic principles and methods of all branches of classical physics at an introductory level. Topics include Newtonian mechanics, gravitation, waves, optics, heat electricity and magnetism. Prerequisite: MATH 140.

## PHYS 162 GE: Physics II (4:3:3)

Continuation of Physics I. Prerequisites: MATH 140, PHYS 161. Corequisite: MATH 141
PHYS 201 Statics (3:3.0)
This course examines the composition and resolution of forces, equilibrium of particles and rigid bodies, centroids, moments and products of inertia, distributed forces, analysis of structures, analysis of beams, friction, and virtual work. Prerequisites: PHYS 161, MATH 140, 141 concurrently.
PHYS 202 Dynamics (3:3:0)
This course considers dynamics of particles and rigid bodies, relative motion, dynamic equilibrium, D'Alembert's principle, work, energy, impulse, and momentum. Prerequisites: PHYS 161, 201; MATH 141.

## PHYS 240 Basic Electronics (4:3:3)

This course is an introduction to basic electronics and instrumentation for scientists. The goal is to introduce the student to modern electronic circuit building blocks-integrated circuits and electronic sensors along with electronic instrumentation. Special emphasis will be placed on the application of the personal computer ( PC ) as a virtual electronic instrument. The students will receive hands on experience in the use of LabView software that provides a graphical programming environment to use the computer plug-in cards and a PC for analysis and display. This new technology will be used in the study of basic electronic and DC circuits, semiconductor circuit devices (transistors) and analog and digital integrated circuits. Prerequisites: Completion of an introductory physics course and/or permission of the instructor.

## PHYS 241 Linear and Digital Electronics (3:2:2)

This course is designed for students in the sciences or computer sciences who wish to review basic electricity and how electronic components are combined to form linear (e.g. amplifier) and digital functions.

## PHYS 251 CJA: Traffic Accident Investigation (3:3:0)

The course considers the physical aspects of traffic accident investigation and reconstruction. Included are such topics as recording information, photography, dynamics of vehicles, and speed determination. It is offered in cooperation with the Institute of Criminal Justice Administration.

## PHYS 252 CJA: Advanced Criminalistics (3:3:0)

This course considers forensic evidence and data disclosed in the laboratory and its reliability. An understanding of the scope of expert examinations is achieved. The nature of the results expected from laboratory inquiries conducted by trained specialists is realized.

## PHYS 253 CJA: Fire and Arson Investigation (3:3:0)

This course considers the physical aspects of fire and arson investigation. Included are such topics as properties of materials, physical aspects of fires, physical examination of the fire scene to determine origin, ignition sources and their physical aspects, and characteristic physical features indicating incendiarism.

## PHYS 261 Physics III (3:3:0)

This course extends the concepts of PHYS 161 and PHYS 162 to an exploration of wave phenomena, thermodynamics, and special relativity. Prerequisites: PHYS 161, 162, MATH 140, 141 and 240 or concurrent enrollment.

## PHYS 290 Special Topics (Semester hours arranged)

These courses are designed to meet specific needs of groups of students or are offered on a trial basis in order to determine the demand for and value of introducing them as part of the university curriculum.

## PHYS 301 Strength of Materials ( $\mathbf{3 : 3 : 0}$ )

This course explores strength and elasticity of materials, theory of stresses and strains, deflection of beams and shafts, torsion, and buckling of structures. Prerequisites: PHYS 201, MATH 140.
PHYS 304 Modern Physical Astronomy (3:3:0)
This course is a quantitative treatment of modern astronomy stressing the application of basic physics for investigating the properties of celestial bodies and systems. Topics will include basic celestial mechanics, radiation and matter, stellar structure and evolution, the structure and motions of galaxies, and cosmology. Prerequisites: PHYS 131 or 161, 121, 122, MATH 140. Corequisite: PHYS 132 or 162.

## PHYS 305 Physics of the Atmosphere (3:3:0)

This course provides an introduction to the physical process of the atmosphere. Mechanisms affecting heat, moisture and air motion are investigated and related to atmospheric phenomena. Prerequisites: MATH 140, PHYS 131 or 161, GEOG 220, CHEM 121.

## PHYS 328 Mathematical Physics (3:3:0)

This course introduces the student to common problem-solving techniques used in solving advanced physics problems. Many typical mathematical tools that are essential to solving physics problems are introduced and practiced in this course. Prerequisites: PHYS 162, MATH 240.

## PHYS 333 Advanced Physics Lab I (3:0:0)

This course is an open-ended but directed laboratory activity in both classical and modern physics. Prerequisites: PHYS 161, 162. Prerequisite or corequisite: PHYS 261.

## PHYS 334 Advanced Physics Lab II (3:0:0)

This course has the same description as PHYS 333, but different experiments are performed. These two courses can be taken in either order. Prerequisite or corequisite: PHYS 261.

## PHYS 350 Cognitive Science (3:3:0)

This interdisciplinary course is a study of a topic of common interest in computer science, linguistics, physical science, neuroscience, philosophy and psychology, namely the acquisition, organization, and expression of knowledge. Prerequisite: Honors Program.
PHYS 361 Physics IV (3:3:0)
This course introduces the student to the physics of atoms, molecules, nuclei and elementary particles. The course includes early quantum theory, relativistic mechanics, and the wave and quantum properties of photons and electrons; Schrodinger's equation, and its application to the structure of atoms, molecules, and solids; nuclear physics, elementary particles. Prerequisite: PHYS 261, MATH 240, and PHYS 328 or concurrent enrollment.

## PHYS 370 The Rise of Modern Science and Technology (3:3:0)

The Rise of Modern Science and Technology is an in-depth study of the development of modern physical science and its connection to technology. The models that are considered training points for scientific theory are examined in detail. The mutual interaction of science and technology is presented within the context of scientific development. Prerequisites: Introductory science course at the college level and junior standing; Honors Program.
PHYS 380 Radioisotopes (3:2:3)
This course is a study of the origin and characteristics of nuclear radiations emitted from radioisotopes and their attenuation in matter. Laboratory emphasis is placed upon detection and measurement of nuclear radiations and the use of radioisotopes in scientific studies and research. Prerequisite: PHYS 105 or 117 or 131 or 161.

## PHYS 401 Quantum Physics (3:3:0)

This course introduces ideas of wave mechanics and matrix mechanics. Schrodinger's equation is applied to simple problems. Approximation techniques for the more difficult problems of nuclear and atomic physics are studied. Prerequisites: PHYS 262, MATH 341.

## PHYS 402 Contemporary Topics in Science (3:3:0)

This course deals with the nature and theoretical basis of recent noteworthy advances in science. Interdisciplinary in design, the course draws its content from the various disciplines of the natural sciences. Emphasis is placed upon topics being reported upon in professional journals. This course also listed as BIOL 402, and CHEM 402. Prerequisite: PHYS 105 or 117 or 121 or 131 or 161.

## PHYS 403 Optics (4:3:3)

This lecture/laboratory course will cover both geometrical and wave optics. Geometrical optics will include a study of the property of lenses and mirrors and the ray tracing techniques used to design optical components. Wave optics will include superposition and interference of single and multiple light beams. The lab will focus on hands-on applications such as optical instrument design and analysis, fiber optics and laser technology. Prerequisite: PHYS 161 and 162 or PHYS 131 and 132, MATH 140 and 141.

## PHYS 404 Introductory Astrophysics (3:3:0)

This is a course in modern astrophysics stressing the application of physical concepts to the study of the heavens. Topics will include radiative transfer, astrophysical radiative processes, stellar structure and evolution, compact stars and black holes, galactic and extragalactic astrophysics, and cosmology. Prerequisites: PHYS 121, 262, MATH 141.

## PHYS 405 The Development of Modern Physical Science (3:3:0)

This course examines past works and philosophical thought of noted physical scientists. Emphasis is placed on the nature of scientific discovery and the processes of science. This course is also listed as CHEM 405. Prerequisite: PHYS 105 or 117 or 121 or 131 or 161.

## PHYS 411 Thermal Physics (3:3:0)

This course deals with heat and thermodynamics and applications to special systems, kinetic theory of gases, and statistical mechanics. Prerequisites: PHYS 162; MATH 141.

## PHYS 415 Computational Physics (3:3:0)

This course will introduce students to the new and expanding field of Computational Physics. They will learn how to use the computer to solve equations that cannot be solved analytically ("by hand"). Besides reading and learning about the techniques, students will be expected to actually write software to implement some of the techniques learned in class (as homework). This course is meant to extend CPSC 211 Scientific Computing with FORTRAN to more advanced physics problems. Prerequisites: PHYS 162, CPSC 111 (or 211). Corequisite: MATH 341.

## PHYS 421 Statistical Physics (3:3:0)

Students study large-scale systems consisting of many atoms or molecules. Subjects of statistical mechanics, kinetic theory, thermodynamics, and heat are introduced. Prerequisites: PHYS 162, MATH 240.

## PHYS 423 Advanced Electronics (3:3:0)

This course will develop the theory of precision operational amplifier circuits, analog to digital converters, digital to analog converters and analog switches. The course will introduce the student to digital design using discrete circuits, PAL's and Field Programmable Gate arrays. The student will learn about the control and interfacing of these circuits to microcontrollers as well as understanding the implications of hardware vs. software control and processing of signals. Prerequisites: PHYS 240, MATH 140, 141 and either PHYS 162 or 132.

## PHYS 428 Theoretical Physics (3:3:0)

The main thrust of this course will be the application of various standard mathematical techniques to the solution of upper level problems in Mechanics, Electromagnetism, Wave Theory, Fluid Dynamics, Statistical Mechanics, Quantum Physics, and Relativity. Students considering advanced study or employment in the field of Physics or Engineering are highly encouraged to enroll. Prerequisites: PHYS 261, MATH 240.

## PHYS 431 Electromagnetic Theory (4:3:3)

This course starts with an introduction to electrostatic problems. The student is then introduced to special relativity and the Lorentz transformation. Special relativity is then used to transform the electrostatic problem to understand magnetic fields, Maxwell's equations, and electrodynamics. Finally, an introduction to electromagnetic waves and their propagation is developed. Prerequisites: PHYS 161, 162. Corequisite: MATH 341.

## PHYS 432 Applied Electromagnetic Theory: Radio Waves and High Frequency Circuits (4:3:3)

This course will apply Maxwell's equations to the propagation of electromagnetic waves in free space, wave guides and coaxial cables. The transmission line equation will be developed and analyzed for the case of real practicable transmission line. Maxwell's equations will be used to analyze antennas. Prerequisites: PHYS 161, 162, 431 and Math 341.

## PHYS 433 Atomic and Nuclear Physics (3:3:0)

This course examines the quantum-mechanical basis of atomic and nuclear structure and studies the phenomena of atomic and nuclear transitions. Prerequisite: PHYS 262.

## PHYS 441 Theoretical Mechanics (3:3:0)

This course discusses the application of Newtonian mechanics to more complicated systems than those studied in Physics I. Prerequisites: PHYS 261, 328, MATH 240.

## PHYS 471 Special Problems in Physics (3:3:0)

This course introduces the student to detailed and complete treatments of problems which require expertise from several areas. Prerequisites: PHYS 161, 162, 261, 262.

## PHYS 485 Independent Study (Semester hours arranged)

This experience is taken upon the initiative of a student who seeks to study with a knowledgeable faculty member in order to deepen a specific interest in a particular academic discipline. Independent study is a process through which a student either sharply increases his/her already advanced knowledge of a subject matter or increases his/her appreciation about an academic discipline that is related to a student's advanced knowledge of a subject. The proposed independent study must be submitted to the department for approval. The faculty member supervising the independent study must provide a minimum of five (5) hours of time per credit hour upon request of the student. Prerequisite: PHYS 105 or 131 or 161.

## PHYS 486 Field Experience and Internships (Semester hours arranged)

Prerequisite: PHYS 105 or 110 or 117 or 121 or 131 or 161.

## PHYS 493 Research in Physics (3:0:0)

This course is an experimental investigation selected by the student in consultation with a member of the faculty and carried out under the faculty's supervision. Approximately twelve hours of research per week is required for three credits. Prerequisites: Junior or senior standing as a physics major or by permission of the department.

## PHYS 495 Seminar (1:1:0)

Participants perform self-guided, in-depth examinations of relatively common phenomena, contemporary issues and/or recent research in physical and related fields. Supporting evidence and theory is documented in formal written and/or oral reports by participants. Attendance in departmental colloquia is required. Prerequisites: PHYS 131 and 132, or 161 and 162.

## PHYS 499 Student Teaching Internship (1:0:TBA)

## Bachelor of Science in Physics (Secondary Education)

Suggested Program Curriculum Plan
First Semester

| PSED 161 Foundations of Education |  |
| :--- | :--- |
| ${ }^{*}$ General Education (C) |  |
| ${ }^{* *}$ MATH 140 Calculus I |  |
| ${ }^{* * *}$ General Education (A) |  |
| ENGL 103 English Composition |  |
| Subtotal |  |

Third Semester

| PHYS 162 Physics II | 4 | PHYS 261 Physics III | 3 |
| :--- | ---: | :--- | ---: |
| ${ }^{* *}$ MATH 240 Multivariate Calculus | 4 | **General Education (C) | 3 |
| PSED 242 Educational Psychology | 3 | MCOM 262 Educational Communications <br> and Technology | 3 |
| General Education (A; 2 ${ }^{\text {nd }}$ English) | 3 | General Education (A) | 3 |
| FIT elective | 1 | General Education (C) | 3 |
| Subtotal | 15 | Subtotal | $\mathbf{1 5}$ |

Fifth Semester

| REED 321 Teaching of Reading <br> in Secondary Schools | 3 | PSED 420 Seminar in Secondary Education I | 3 |
| :--- | ---: | :--- | ---: |
| PHYS 333 Advanced Physics Lab I | 3 | Physics elective | 3 |
| PHYS 361 Physics IV | 3 | CHEM 124 General Chemistry II | 3 |
| General Education (C) | 3 | CHEM 126 General Chemistry II Lab | 1 |
| CHEM 121 General Chemistry I | 3 | General Education (A) | 3 |
| CHEM 123 General Chemistry I Lab | 1 | Physics Elective | 3 |
| Subtotal | 16 | Subtotal | 16 |

Seventh Semester

| PSED 421 Seminar in Secondary Education II | 2 | PSED 430 Student Teaching in Secondary <br> Education/Middle School/Junior High School | 6 |
| :--- | ---: | :--- | ---: |
| PSED 446 Teaching of Science <br> in the Secondary Schools | 3 | PSED 431 Student Teaching in Secondary <br> Education/Senior High School | 6 |
| BIOL 114 Introductory Biology I | 4 | PHYS 499 Student Teaching Internship | 1 |
| Physics elective | 3 |  |  |
| General Education (A) | 3 |  |  |
| PHYS 495 Seminar | 1 |  | $\mathbf{1 3}$ |
| Subtotal | 16 | Subtotal |  |

TOTAL CREDITS
*GEOG 120 (Physical Geography) or GEOG 121 (Physical Geology) are recommended.
**If MATH 135 (Pre-Calculus) is needed, it should be taken the first semester, with MATH 140 (Calculus I), MATH 141 (Calculus II), and MATH 240 (Multivariate Calculus) taken in the following semesters, replacing the General Education course in semester four. An extra General Education course would then be needed, usually scheduled during the summer.
${ }^{* *}$ CMST 111 (Speech Communications) is recommended.

## Political Science

School of Arts and Sciences<br>The Faculty of Social Sciences<br>Stroud Hall, Room 409

570-422-3286
www.esu.edu/pols

## Department faculty Professors:

## Associate Professor:

Assistant Professors:

> Patricia Crotty, chair (pcrotty@po-box.esu.edu) Kenneth Mash (kmash@po-box.esu.edu)
> Samuel Quainoo (squainoo@po-box.esu.edu)
> Kimberly Adams (ksadams@po-box.esu.edu)
> Johan Eliasson (jeliasson@po-box.esu.edu)
> JeffreyWeber (jweber@po-box.esu.edu)

The Political Science curriculum comprises the systematic study of the theory and practice of politics at various levels - domestic, foreign, and international. Depending on their interests, undergraduates can focus on questions of a theoretical nature, the role and performance of political institutions and political systems, or the behavior of individuals and groups. Our Political Science degree prepares students to work in both the public and private sectors. Many majors also use this preparation as a basis for further study in graduate school or law school.

## Bachelor of Arts with a Political Science major

Students may choose between four major tracks: The Politics and Government track is the traditional liberal arts political science major. The Public Advocacy and Policy Analysis track is a cross-disciplinary program that focuses on political communication. There are also two pre-law tracks. Students may also choose to do a dual major in Social Science and Education with a Political Science Emphasis. See the "Social Studies" Section of the catalog.

Students must also be aware of the University-wide requirements in this catalog.
Note: Students majoring in Political Science may not accumulate more than 15 credit hours, total, of internship credit toward graduation. The department does not accept transfer credit in upper division coursework (i.e., 300 or 400 level courses) for political science courses completed at community colleges, junior colleges, trade schools, etc.

Track I—Politics and Government ( $\mathbf{3 3}$ to $\mathbf{4 8}$ semester hours). Students must maintain a 2.00 QPA for courses in this track.

- Required courses: POLS 111, 211, 317, 495; one or more courses from each of the following groups:
- American Government and Public Administration: POLS 293, 295, 312 413, 435, 454, 466, 467, 486, 487.
- International Relations and World Affairs: POLS 222, 322, 331, 422, 438, 441, 442, 445, 450.
- Comparative Government and Area Studies: POLS 223, 230, 231, 233, 263, 332, 333, 343, 355, 424, 426, 470, 471.
- Political Theory: POLS 225, 243, 352, 452, 453, 462, 468.
- Please see the university requirements in this catalog.

Track II—Public Administration ( $\mathbf{3 9}$ to $\mathbf{4 5}$ semester hours). Students must maintain a 2.00 QPA for courses in this track.

- Required POLS courses: POLS 201, 211, 293, 314, 416, 466, 467, 468, 486 (27 credits); choose one: POLS 313, 435, 454 (3 credits); choose one: POLS 223, 230, 231, 332, 333, 343, 424 ( 3 credits); choose one: POLS 315, 317, 413, 414, 445 (3 credits). Total POLS credits 39-45
- Please see the university requirements in this catalog.

Track III-Pre-Law (57 semester hours). Students must maintain a 2.50 QPA for in this track to graduate.

- Required POLS courses: POLS 111, 211, 317, 495 (12 credits); choose one: POLS 222, 352, 452, 453, 468 (3 credits); choose three: POLS 313, 315, 413, 414, 416, 445 ( 9 credits); twelve additional POLS credits at the 300 or 400 level with at least one course in comparative politics ( 12 credits). Total POLS credits 36 .
- Corequisites: ENGL 162 (3 credits); PHIL 221 ( 3 credits); choose one: MATH 100, 101, 110, 130, (3 credits); choose one: FLFR 116, FLGR 116, FLLN 116, FLSP 116 ( 3 credits); choose one: CMST 253 or THTR 102 ( 3 credits); choose one: PHIL 235, PHIL 238, EMGT 225 (3 credits); choose one: HIST 141, 142, 143, 144 ( 3 credits). Total corequisite credits: 21.
- Please see the university requirements in this catalog.

Track IV—Accelerated Law Program with Widener University (27-48 semester hours). Students must complete all the requirements for Track I - Politics and Government.

This is a six-year cooperative program with Widener University School of Law in Harrisburg that allows students to complete their Undergraduate and Law School Degrees in six years. Students who successfully complete the program will spend three academic years at East Stroudsburg University leading to a bachelor's degree in Political Science. Before or during the first semester of their junior year students must take the Law School Admission Test (LSAT). Students must score at or above the $50^{\text {th }}$ percentile on the LSAT and have attained a cumulative GPA of 3.3 or higher by their first semester junior year. Students must also submit a completed application and meet all other Widener University School of Law admission requirements. The first year at Widener will fulfill students' remaining requirements to earn the appropriate bachelor's degree. Students must also meet the following requirements:

## Declare Participation

Students wishing to participate in this program must have the approval of their adviser and declare their intention to participate in the program with the Pre-Law Adviser prior to the start of their sophomore year. Students must complete a plan of study in conjunction with their academic adviser and the University Pre-Law Adviser.

## University Requirements

Students must complete all university requirements, except for the following:
a) Students will reach the 120 -credit requirement by transferring credits earned during the first year at Widener University School of Law. However, students must obtain prior approval for the transfer of these credits.
b) Students must apply for a waiver of the university requirement that their last 32 credits be taken at East Stroudsburg University.

## Summer at Widener

Students must complete some pre-law summer courses at Widener University School of Law in Harrisburg. Students should plan to enroll in these courses in the summer preceding their junior year. Students may be responsible for paying tuition for the summer courses and the costs of room and board to Widener University.

First year at Widener: Students must attend on a full-time basis for the first year or until they receive their bachelor's degree.

## Political Science Minor

Politics and Government Concentration-18 semester hours

- Required courses: POLS 111, 211. Twelve additional credits of POLS 200 level and above classes. At least six of these credits must be 300 and/or 400 level courses.

Pre-Law Concentration-18 semester hours.

- Required courses: POLS 111, 211; Choose two: POLS 313, 413, 416, 445; Six additional credits of POLS 200 level or above.
- Corequisites: ENGL 162 (3 credits); Choose one: PHIL 221, MATH 100, 101, 110, 130, EMGT 211 ( 3 credits); Choose one: CMST 253 or THTR 102 ( 3 credits).


## European Studies Concentration-18 semester hours.

- Required courses: One of the following, HIST 270, 271, 272; three of the following: POLS 332, 424, 427, 445, 453; two of the following: HIST 282, 335, 350, 371, 381, $382,471,473,474$, GEOG 234, PHIL 318, 353, 356, 357, 418, 447, FLSP 444, FLFR 343, MUS 211, 311, or any of the courses in the POLS section not taken for the Political Science requirement for the minor. Nine (9) credits must be at the 300/400 level.


## Pre-Law Advising

In conjunction with the student's academic adviser, ESU's Pre-law Adviser helps students in all majors to develop a personalized program. The Pre-law Adviser helps students select courses that will cultivate the skills that the American Bar Association recommends for students interested in attending law school. Students are provided with up-to-date information about law school requirements, the Law School Admissions Test (LSAT), and the Express Admissions Program with Widener University School of Law in Harrisburg. The Pre-law Adviser also explains how to choose an appropriate law school and how to prepare a successful application. For information call the Pre-law Adviser, Professor Kenneth Mash, in the Political Science Department at 570-422-3273.

## Course Descriptions

(Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title.)

## POLS 101 GE: Basic Issues of Politics (3:3:0)

This course explores the major social and political questions that confront the American people. It discusses the conflict that every voter in the nation faces as American democracy strives to bridge the gap between promise and performance, between the ideal and the real in the American political experience.

## POLS 111 GE: Principles of Political Science (3:3:0)

This course is an inquiry into such fundamental concepts as state, sovereignty, law, rights, citizenship, liberty, and constitution; included are a study of the functions of government and an identification of the standard institutions for implementing those functions.

## POLS 201 GE: Elements of Public Administration (3:3:0)

Elements of Public Administration is an introductory course into public service. It is concerned with American government planning, organizing, and operation necessary for governance on the national, state, and local levels. This course provides the student with an overview of the concepts and frameworks necessary for public service, such as bureaucracy; promulgation of regulations; public management; public budgeting and financial management; public personnel management; public policy analysis; and planning.

## POLS 211 GE: American Government (3:3:0)

This course analyzes the basic principles of our federal, state, and local governments with emphasis on the Constitution of the United States and its interpretation as well as the machinery through which it is implemented. Students examine the structure, organization, power, procedures, methods, and functions of executive, legislative, and judicial branches.

## POLS 222 GE: Contemporary Political Ideologies (3:3:0)

This course will give the student an understanding and appreciation of important contemporary ideologies such as Conservatism, Liberalism, Marxism, Fascism, Nationalism, and such movements as Feminism, Environmentalism, and Fundamentalism.

## POLS 223 GE: Developing Countries (3:3:0)

This course examines the features common to all developing countries of Africa, Asia, and the Middle East, assesses the efforts to raise the levels of social, economic, and political development of these areas, and includes a detailed study of the goals and capabilities of the political systems of a few selected countries.

## POLS 225 GE: Politics through Literature (3:3:0)

This course is an examination of selected fictional works which deal with basic political themes and concepts, e.g., social justice, the political process, ideology, power, various issue areas, etc. It is an analysis of literature and the writer as instruments of political action and change.

## POLS 230 GE: Asia (3:3:0)

The course examines the history, culture and political developments of selected countries in Asia. Students will focus on their economic strategies and concepts of government. They will also examine the differences and commonalities within Asia and outside the subregion Prerequisite: Any One of POLS 111, 211, 223 or 231.

## POLS 231 Introduction to Comparative Government (3:3:0)

This course introduces students to a cross section of governments outside the American political environment. It analyzes the structure and history of selected governments from Asia, Africa, South and Central America, Australia and Europe. The course provides a theoretical and analytical platform to compare governments and societies of different geographic and cultural background.

## POLS 243 GE: Women and Politics (3:3:0)

The course will analyze the role and status of women in past and contemporary societies. Students examine the meaning and significance of current feminist movements and their impact on politics and society. The lives of outstanding women are also examined. Prerequisite: Any one of POLS 111, 211, 222.

## POLS 290 Special Topics (Semester hours arranged.)

These courses are designed to meet specific needs of groups of students or are offered on a trial basis in order to determine the demand for and value of introducing them as part of the university curriculum.

## POLS 293 GE: Public Policy and Administration (3:3:0)

This course examines the role and scope of public administrators and the challenges that confront them. It also analyzes the stages of the public policy process as well as the internal and external factors that impact public policy. Administration and public policy making both within and outside America will be surveyed. Prerequisite: POLS 211.

## POLS 312 GE: Political Parties and Politics (3:3:0)

This course traces the development of political parties, their functions, organization and effectiveness, with a view toward establishing greater party responsibility in the body politic. Prerequisite: Either POLS 111 or 211.

## POLS 313 GE: Courts and the Judicial Process (3:3:0)

This course examines the various connections between politics and courts. Attention is focused on the role of law in American society and how courts and the people affiliated with courts both implement and make public policy. Prerequisite: Either one of POLS 111 or 211.

## POLS 314 GE: State and Local Government (3:3:0)

This course is an introduction to state and local governmental institutions and processes, and the way they are interrelated with the federal system, with special emphasis on the contemporary needs of the local community. Prerequisite: Any one of POLS 111, 211, or 222.

## POLS 315 Introduction to Legal Research (3:3:0)

This course introduces the primary skills necessary for legal research and writing. Emphasis will be placed on the essential steps necessary for proper legal research and on the use of various legal resources. Prerequisite: Either POLS 111 or 211.

## POLS 317 Exploring Politics: Methods and Techniques (3:3:0)

The course deals with the principles and assumptions of political inquiry, and specific techniques for analyzing political data. Emphasis is placed on empirical techniques. It teaches students how to utilize the research products of political inquiry. Research projects are based on each student's specific area of interest. POLS 111, 211.

## POLS 322 GE: International Relations (3:3:0)

This course examines the major theories, processes, and units that comprise the study of politics and the international system. Areas of particular emphasis include sovereignty, nationalism, and warfare. Prerequisite: Any one of POLS 111, 211 or 222.

## POLS 332 GE: Comparative European Government (3:3:0)

This course is a study of major types of government with emphasis on European democracies; comparison is used as a detector of problems and as a method for developing better solutions; differences in character, traditions, and conditions are examined to develop an understanding of problems facing people of the respective countries. Prerequisite: Any one of POLS 111, 211, 223 or 231.

## POLS 333 GE: Africa (3:3:0)

This course aims at a general understanding of the main historical and political developments that led to independence. Emphasis will be on the growth of nationalism, the end of colonialism, and the search for African identity, unity, and development. This course is also listed as HIST 333. Prerequisite: Any one of POLS 111, 211, 223, or 231.

## POLS 343 The Middle East (3:3:0)

This course surveys the history and politics of the Middle East, background studies in the revolutionary nationalism of the modern period, analyses of contemporary problems and events, and prognoses within the framework of international diplomacy. This course is also listed as HIST 343. Prerequisite: Any one of POLS 111, 211, 222, 223 or 231.

## POLS 352 GE: History of Political Theory (3:3:0)

This course traces the evolution of major political concepts in Western Civilization from the ancient Greeks to the 17 th century. The focus is on the origins of democracy and authoritarianism. Prerequisite: Any One of POLS 111, 211, or 222.

## POLS 355 China: History and Politics (3:3:0)

This course is a study of China since traditional times, examining political, cultural, and economic aspects of her society up to the present and her influence on East Asia and the world. Prerequisite: Advanced standing of 60 credits.

## POLS 363 GE: Latin America (3:3:0)

This course is a study of the development of the Latin American republics since independence and an examination of their present-day social, economic, and political problems as well as their relations with the United States. This course is also listed as HIST 363.

## POLS 413 American Constitutional Law (3:3:0)

This course is a study of the context within which our Constitution emerged, the major themes implicit in its development, and its significance in the contemporary political setting. Attention is focused upon the interplay of political forces that have shaped the development of constitutional law with special emphasis upon the Supreme Court as a political and judicial institution. Prerequisites: Advanced standing of 90 credits; any one of POLS 111, 211, or 222.

## POLS 414 Constitutional Civil Liberties (3:3:0)

This course is a study of the protection of civil liberties in the United States. The focus is on how the United States Supreme Court has decided cases involving, among other things, freedom of speech, freedom of religion, freedom of the press and individual privacy. The course is also an examination of how politics, history, personalities, governmental structures, and political theories affect the protection of individual rights. Prerequisites: Any two of the following: POLS 111, 211, 313, 315 or 413.

## POLS 416 Administrative Law (3:3:0)

This course is a study of the law of public administration including administrative powers and limitations, adjudication and rule-making, discretion, checks on administrators, notice and hearing, administrative penalties, judicial control and administrative liability. Prerequisites: Any two of POLS 111, 211, 222; ECON 111, 112; HLTH 220, 230.

## POLS 422 United Nations (3:3:0)

This course examines the historic background of the establishment of the United Nations and the purposes and principles of the United Nations as well as its basic structure. The strength and weaknesses of the Charter are analyzed with special stress on the veto power and on accomplishments of this world body since its conception. Particular emphasis is placed on the role of the United States in the United Nations. Prerequisites: Advanced standing of 90 credits; any one of POLS 111, 211, or 222.

POLS 424 Russia and Eurasia (3:3:0)
This course focuses on the emerging political units created as a result of the break up of the Soviet Union. Students will examine the causes, nature, and course of the Soviet collapse, the challenges of Russia and the other successor states, and the implications of this major historical development for the 21st Century. This course is also listed as HIST 424. Prerequisites: Advanced standing of 90 credits; any one of POLS 111, 211, 222 or 231.

## POLS 426 Modern Germany (3:3:0)

This course is a study of the Napoleonic impact, the Prussian Reform Movement, romanticism, liberalism, and nationalism in Germany, the Revolutions of 1848, the age of Bismark, Wilhelmian period, World War I, the Weimer Republic, the Nazi revolution, World War II, and the post-war era. Emphasis is on political, cultural, and economic changes, 1806-1890. Prerequisites: Advanced standing of 90 credits; any one of POLS 111, 211, 222 or 231.

## POLS 427 European Union and External Relations (3:3:0)

The European Union, the world's largest free trade area and the most successful regional integration project in history, affects every part of the globe economically, politically and militarily. As such it is critically important to understand its internal workings and relations with other powerful international actors, such as the United States, China or other major states. After examining the EU's evolution and structure, the second half of the course examines transatlantic relations - economically and politically the world's largest and most important relationship - and the relationship with other powerful states, focusing on how they affect the EU and the U.S. Prerequisites: POLS 111 or POLS 211 and POLS 232 or POLS 332.

## POLS 435 The Presidency (3:3:0)

This course is an analysis of the presidency, its nature and growth of the office, and the politics and problems of seeking the office of the presidency. It includes a functional analysis of the President's roles as chief executive, party leader, and leader in the international political system. Prerequisites: Advanced standing of 90 credits; any one of POLS 111, 211 or 222.

## POLS 438 United States Foreign Policy (3:3:0)

This course examines the constitutional basis of U.S. foreign affairs: foreign policy, separation of powers, the mechanics of foreign relations, significant principles, tenets and trends as revealed in United States diplomatic history, treaties and executive agreement, traditional and new diplomatic practice, foreign policy and international organization, and the extent of democratic control of foreign affairs. Prerequisite: Advanced standing of 90 credits.

## POLS 441 Diplomatic History of the United States I (3:3:0)

This course examines American diplomacy and foreign policies from the Revolution to the end of the Spanish-American War. Particular attention is given to the evolution of basic concepts such as isolation, neutrality, and manifest destiny. This course is also listed as HIST 441. Prerequisite: Advanced standing of 90 credits.

## POLS 442 Diplomatic History of the United States II (3:3:0)

This course emphasizes the United States' emergence from a tradition of isolationism into a position of international responsibility by examining its progressively deeper involvement in the world's diplomatic and military arenas. This course is also listed as HIST 442. Prerequisites: Advanced standing of 90 credits.

## POLS 445 International Law and Organization (3:3:0)

This course examines the historic development and current status of the law of nations; key cases are studied to illustrate rules. It includes a survey of the development of international institutions from the nineteenth century public unions to more recent international agencies and organizations. Prerequisites: Advanced standing of 90 credits; any one of POLS 111, 211 or 222.

## POLS 452 American Political Ideas (3:3:0)

The course will examine and analyze the theoretical foundations and evolution of the American political tradition from the colonial, revolutionary and constitutional periods to the end of the 20th century. Students will read and discuss the writings and thinking of political leaders and important commentators on American politics. Prerequisite: Advanced standing of 90 credits.

## POLS 453 European Political Ideas (3:3:0)

This course examines the origins and development of the major intellectual traditions of the Western world and their rule in shaping the course of history. Emphasis is placed on the scientific and intellectual revolutions of the 17th and 18th centuries and the rise of ideologies in the 19th and 20th centuries. Prerequisites: Advanced standing of 90 credits; and any one of POLS 111, 211, or 222.

## POLS 454 The Legislative Process (3:3:0)

This course concentrates on the United States Congress: its role in the evolution of the American political process, the internal workings of the Congress, the environment in which Congress functions, and an assessment of Congressional effectiveness. Prerequisite: Advanced standing of 90 credits, and any one of POLS 111,211 or 222.

## POLS 462 Political Behavior (3:3:0)

This course examines citizen behavior in the American polity. Voting behavior, political activism, and partisanship are examined within the framework of socialization theory, stratification theory, and the psychology of politics. Advanced standing of 90 credits; any one of POLS 111, 211 or 222.

## POLS 466 Public Budgeting and Finance (3:3:0)

This course treats the budget as a policy instrument that sets priorities for government. Students study the politics of the budget process as well as its procedures. Attention is also given to fiscal and monetary policies and to using computer simulations in budgeting. Prerequisites: Advanced standing of 90 credits; Political Science majors: either POLS 111 or 211 plus POLS 293, non Political Science majors, any two of POLS 211, 293, ECON 111,112, HLTH 220 or 230.

## POLS 467 Public Personnel Administration (3:3:0)

Examine career systems, classification and salary administration, staffing, training, evaluation, rights and duties of employees, equal employment, and labor relations. Prerequisites: Advanced standing of 90 credits; Political Science majors: either POLS 111 or 211 plus POLS 293; non Political Science majors, any two of POLS 211, 293, ECON 111, 112, HLTH 220 or 230.
POLS 468 Strategies for Policy Analysis (3:3:0)
Public Policy Analysis is designed to acquaint students with the background, content, purposes, and impacts of public policy decisions. It introduces the qualitative and quantitative techniques that are used to analyze these governmental outputs. Students in the class will be taught to use computerized statistical packages to analyze data relating to one specific policy area. Prerequisites: Advanced standing of 60 credits; any one of POLS 111, 211, or 293.

## POLS 485 Independent Study (Semester hours arranged)

A student wishing to take independent study should discuss the plan with a member of the department. If the faculty member agrees to sponsor the project, the proposal should be submitted to the chair of the department. The chair, after approving the independent study project, shall bring it to a departmental meeting for confirmation. The dean of the school gives final approval after receiving the minutes of the departmental meetings which identify the students who were approved by the department to do independent study.

## POLS 486 Field Experiences and Internships (Semester hours arranged)

The course is designed to provide the student with practical experience in a governmental agency or other organization with local, state, or national/international governmental or political concerns. Prerequisite: Completion of General Education requirements; advanced standing of at least 90 credits; 12 credits in Political Science, including POLS 111 and 211.

## POLS 487 Problems and Projects in Political Science (Semester hours arranged)

Investigation of a specific problem or project in Political Science that requires individualized study and treatment. The process includes compilation of data relevant to the topic. The student will report his/her findings to the instructor who supervises the project. The student is expected to write a formal report that deals with the subject comprehensively and offers conclusions. Periodic conferences are arranged. Prerequisites: Any three courses in Political Science or advanced standing in the department.

## POLS 495 Seminar (3:3:0)

This course examines major theories and problems in the study of politics. A paper will also be written on the basis of independent political research. Prerequisite: Advanced standing of 90 credits.

## Pre-Pharmacy Program

School of Arts and Sciences

The Faculty of Sciences
See Chemistry, Page 115

## Professional and Secondary Education

College of Education
Stroud Hall Room 209
Department faculty
Professors:

Professors:
Associate Professors:

Assistant Professors:

570-422-3363
www.esu.edu/psed

Professional and Secondary Education offers a Bachelor of Science Degree in Secondary Education leading to a teacher certification in the areas of: English, French, Spanish, German (certificate only), Mathematics, Biology, Chemistry, Earth and Space Science, General Science, Physics, or Social Studies. The curriculum is designed to develop a community of learners who are competent and reflective professionals able to teach any child in any setting. The courses and extensive field-based component develops beginning educator's knowledge, skills, and dispositions relevant to content, the learner and the learning environment, teaching and learning process, and professionalism. A personalized program will be developed for all students as they work with two advisors, one in education and one in the academic discipline they plan to teach. Students who complete the required courses in one of the certification areas, the professional education courses, the university requirements, and the state requirements will be certified to teach in their major in the middle, junior high, and senior high schools within the Commonwealth of Pennsylvania.

## Secondary Education Certification Program Requirements

## Suggested sequence of required courses:

- First year: PSED 161 Foundations of Education
- Sophomore year: PSED 242 Educational Psychology and MCOM 262 Educational Communications
- Junior year: REED 321 Teaching of Reading in the Secondary School, PSED 420 Seminar in Secondary Education I (2.8 QPA required), and one content methods course from the list below:
- PSED 406 Teaching of English in Secondary Schools
- PSED 416 Teaching of Foreign Languages in Secondary Schools
- PSED 436 Teaching of Mathematics in Secondary Schools
- PSED 446 Teaching of Science in Secondary Schools
- PSED 458 Teaching of Social Studies in Secondary Schools
- Senior year (first semester): PSED 421 Seminar in Secondary Education II (2.8 QPA and department screening required)
- Senior year (second semester): PSED 430 Student Teaching in Secondary Education/ Middle School/Junior High School, PSED 431 Student Teaching in Secondary Education/Senior High School and XXX 499 Student Teaching Internship (This course must be taken while student teaching). It is taken with the appropriate rubric related to the content area of the certification program: BIOL, CHEM, MATH, PHYS, FLNG, ENGL, HIST).

A Professional Development School option is available: see secondary education advisor for details. The programs for certification in secondary education are planned and supervised by the Department of Professional and Secondary Education and by the department responsible for the academic major. Students must achieve and maintain the minimum requirements for admission to and retention in the certification programs as specified by the departments and the Teacher Education Council. Specific requirements are listed in the academic subject areas. The state of Pennsylvania is currently making changes in certification requirements which may impact program requirements.

Certification areas:

- Biology
- Chemistry
- Earth and Space Science
- English
- French
- General Science
- Mathematics
- Physics
- Social Studies
- Spanish


## Dual Certification

Consult with your advisor if you are interested in obtaining dual certification (certification in any two of the above areas).

## Teacher Education Program Requirements

The Commonwealth of Pennsylvania has established requirements for all candidates in teacher preparation programs. Students are required to have a 2.8 QPA, pass the PRAXIS I academic skills assessments, and complete 6 credits of Mathematics and 6 credits of English (English composition and literature) for admission into the initial teacher certification program. A 3.0 QPA is required for Pennsylvania teacher certification. Please refer to the section The College of Education in this catalog for specific requirements for admission into teacher education.

## Course Descriptions

(Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title.)

## PSED 161 Foundations of Education (3:3:0)

This course presents education as a unique field of academic study and also as a professional vocation with varied career opportunities. Consideration is given to the American educational enterprise in terms of the social, historical, and philosophical context, with the persistent issues being treated as they relate to the contemporary scene.

## PSED 242 Educational Psychology (3:3:0)

This course is a study of the nature of the learning process particularly in the areas of growth and development, attitudes and values, personality perception, motivation, and cognition, diagnoses of pupil progress through the use of measurement and evaluation, and development of the abilities to obtain, use, and evaluate research in the areas of psychology and education. A ten-hour tutoring experience is required. Prerequisites: PSED 161 and a 2.5 QPA.

## PSED 244 Adolescent Psychology (3:3:0)

This course examines cognitive, social, and personality development in adolescence, the biological, environmental, and cultural factors which contribute to adolescent behavior, and problems in adolescence-identity, vocation, education, the family, the peer group, and delinquent behavior.

## PSED 290 Special Topics (Semester hours arranged)

These courses are designed to meet specific needs of groups of students or are offered on a trial basis in order to determine the demand for and value of introducing them as a part of the university curriculum.

## PSED 332 Measurement and Evaluation of Education (3:3:0)

This course deals with problems in the construction, use, and interpretation of test items, the development of objective standardized tests of achievement, aptitude, and personality, the development of norms, and the problems of validity and reliability. Prerequisite: PSED 242.

## PSED 364 Middle School Organization (3:3:0)

This course is an introduction to the educational ideas, concepts, and possibilities inherent in both the junior high and the middle school. A thorough study of the organization and operation of each type of school is the major concept of the course. Prerequisites: PSED 161, 242.

## PSED 405 Classroom Management and Discipline (3:3:0)

The course will emphasize classroom management from the viewpoint of effective teaching. Specific discipline models will be analyzed and evaluated. Students will assess their philosophies in regard to classroom management practices and discipline models. Prerequisites: PSED 161, 242.
PSED 406 Teaching of English in the Secondary Schools (3:3:0)
This course deals with teaching methods and techniques and the organization and presentation of material through the various media of communication by planning units, evaluating instruction, collecting materials and observing teaching. Prerequisites: PSED 161, 242.
PSED 412 Teaching of Writing in the Secondary Schools (3:3:0)
This course will briefly survey the history of the teaching of writing in American secondary schools, intensively review writing process theory and research of the past two decades, and critically consider the implications of writing process theory and research for classroom practice. Prerequisites: ENGL 103; PSED 406.

## PSED 416 Teaching of Foreign Language (3:3:0)

This course is designed for persons who wish to teach foreign languages in the schools, grades K-12. Students are provided a theoretical foundation for teaching techniques and opportunities are provided for lesson presentation, preparation of teaching materials, planning units, evaluating instruction, and observing teaching. Prerequisites: PSED 161, 242, Junior Standing, 6 hours of 300 and 400 level courses in target language area and FLSP or FLFR 315 Grammar and Composition.

## PSED 420 Seminar in Secondary Education I (3:2:2)

The seminar includes the study and application of lesson planning, teaching strategies and styles, assessment, and questioning skills. Seminar I includes a required field experience of 30 hours. Students must sign up one semester in advance. Prerequisites: PSED 161, 242, and permission of instructor.

## PSED 421 Seminar in Secondary Education II (2:2:0)

This course includes the study and application of effective strategies using technology, communication techniques, classroom management theories, and the elements of an inclusive classroom. Seminar II includes a required 30-hour field experience in a multicultural setting. Students taking this course must sign up one semester in advance. Prerequisites: Seminar in Secondary Education I and permission of instructor.
PSED 430 Student Teaching in Secondary Education/Middle School/Junior High School (6:0:15)
This course is part of a guided teaching experience in the secondary schools which typically consists of PSED 430 and 431 for a full semester. This field experience is designed to provide the opportunity to demonstrate the competencies and understandings of the teaching/learning process in the middle/ junior high school. Prerequisites: 1) students must meet all requirements described under the Student Teaching section, 2) students must have approval of the adviser and department chair in the major field, 3) students must have the approval of the Department of Professional and Secondary Education, and 4) students must have completed at least 24 semester hours of credit in the major field.

## PSED 431 Student Teaching in Secondary Education/Senior High School (6:0:15)

This course is part of a guided teaching experience in the secondary schools which typically consists of PSED 430 and 431 for a full semester. This field experience is designed to provide the opportunity to demonstrate the competencies and understandings of the teaching/learning process in the senior high school. Prerequisites: 1) students must meet all requirements described under the Student Teaching section, 2) students must have approval of the adviser and department chair in the major field, 3) students must have the approval of the Department of Professional and Secondary Education, and, 4) students must have completed at least 24 semester hours of credit in the major field.

## PSED 436 Teaching of Mathematics in the Secondary Schools (3:3:0)

This course deals with new mathematics programs and evaluation, trends, and research in the teaching of mathematics, routine procedures in the mathematics classroom, lesson plans and teaching units, and effective techniques applied to selected topics in mathematics. Prerequisites: PSED 161, 242 , and 12 credit hours in mathematics courses required for the BS degree.
*PSED 441 Introduction to Schools without Failure (Semester hours arranged)
This program is built on involvement, relevance, and thinking. Much time is devoted to attitudinal change, communication skills, group processes, and problem solving. The focus is on meeting the needs of the individual school. Its purpose is to assist principals and teachers to develop a positive, personal philosophy of education, to present a process for developing classroom skills, and procedures, to implement a success-oriented curriculum, and to provide ways for building constructive communication within school and between the school and the community. Since this course is also offered for graduate credit, a differentiation of requirements will be made. Prerequisites: PSED 161, 242.
*PSED 442 Discipline in the Classroom (Semester hours arranged)
This program is designed for participants to take part in learning activities that will enable them to develop positive techniques for handling student behavior problems. This course is aimed at training teachers to use Reality Therapy as a tool in the classroom. It addresses one of the major concerns of the public school's classroom control and behavior change. Since this course is also offered for graduate credit, a differentiation of requirements will be made. Prerequisites: PSED 161, 242.
*PSED 443 Theory and Practice of Schools without Failure I (Excellence in Teaching) (Semester hours arranged)

This course offers participants an opportunity to investigate the effects of school success and failure on the life of a child. Study of these concepts will be taken from the points of view of William Glasser, M.D., in his books Schools Without Failure, Identity Society, and Reality Therapy. Participants will be introduced to a hybrid teaching style designed to elevate teaching to maximize learning in the classroom. Since this course is also offered for graduate credit, a differentiation of requirements will be made. Prerequisites: PSED 441, 442.

## *PSED 444 Theory and Practice of Schools without Failure II (Perception Psychology) (Semester hours arranged)

Educators will gain experience in conducting diagnostic class meetings and in providing the educational climate necessary for self-discipline. Curriculum planning related to self-directed learning will be explored. Recent advancements in brain research, psychology, and learning theory will be presented. Since this course is also offered for graduate credit, a differentiation of requirements will be made. Prerequisites: PSED 441,442.
*PSED 445 Planning for Change (Semester hours arranged)
The goals of quality education will be analyzed as a basis for curriculum change. The relationship between affective education and cognition will be reviewed, and assessment statements will be produced through a group process. Systems for change will be developed. Since this course is also offered for graduate credit, a differentiation of requirements will be made. Prerequisites: PSED 161, 242.

[^8]
## PSED 446 Teaching of Science in the Secondary Schools (3:3:0)

The course includes the study and appraisal of objective, programs, materials, and techniques; emphasis is upon those aspects that are aimed toward development of confidence as well as competence on the part of the teacher, relevancy, and student involvement in the science program. Prerequisites: PSED 161, 242, and at least 3 hours of 300 level work or above.
*PSED 447 Success-Oriented Reading: Whole Language Development (Semester hours arranged)
This course focuses on whole language development, integrating the teaching and learning of reading and writing, and increasing the use of literature in early reading programs. The course emphasis is on comprehension strategies, high quality reading materials, independent reading and opportunities for combining reading and writing activities. Prerequisites: PSED 161, 242.
*PSED 448 Reality Therapy in the Classroom (Semester hours arranged)
This workshop is designed as an advanced course for educators who desire to become increasingly proficient in the use of Reality Therapy in the classroom. It presumes an understanding of the philosophy and basic steps of Reality Therapy and some experience in trying to use it in the schools. Emphasis will be placed on acquiring additional skill in the implementation of the Reality Therapy approach in the educational environment. Since this course is also offered for graduate credit, a differentiation in requirements will be made. Prerequisites: PSED 242, 441, 442.
*PSED 449 Reducing Classroom Conflict (Semester hours arranged)
This workshop is designed to provide participants with skills in developing pathways to build strength and success in themselves and their students. It focuses on specific classroom activities that will help develop a climate for effective self-discipline and positive classroom interaction. Since this course is also offered for graduate credit, a differentiation of requirements will be made. Prerequisites: PSED 242, 442.
*PSED 452 Together: Mainstreaming in the Schools (3:3:0)
The purpose of the workshop is to cause meaningful interaction of special and regular education teachers. The interaction will enable them to review and to develop positive models for their particular schools that allow exceptional and non-exceptional students to learn together and respect and know each other. A major emphasis will be devising through group interaction, a plan for implementation of mainstreaming in the particular schools. Since this course is also offered for graduate credit, a differentiation of requirements will be made. The course is crosslisted with ELED 452 and SPED 452. Prerequisites: PSED 161, 242, upper division standing or permission of instructor.
*PSED 453 Teaching and Motivating (3:3:0)
The course provides educators with the theory and skills to motivate students to learn and to accelerate their academic achievement. Brain function and dominance will be reviewed in light of how these processes result in different student learning styles. Participants will build teaching strategies to deal with varied learning styles. Prerequisites: PSED 242; ELED 232.

## PSED 456 Cooperative Learning-Learning Teams in Action (3:3:0)

The course is designed to provide skills to implement learning teams in the classroom. The course content develops a basic understanding of control theory as it applies to co-operative learning. Class experiences produce new teaching plans based on control theory and demonstrate that learning teams can provide top achievement and methodology for critical thinking and problem solving.
PSED 457 Reducing Stress in the Classroom (3:3:0)
This course explores ways to manage stress, establish realistic goals, and develop relaxation techniques so that stress is minimized in creative thinking and effective classroom management. The course will identify symptoms of job stress and worker burnout in the educational setting and present ways to effectively manage stress, establish realistic goals, and understand effective teaching styles.

## PSED 458 Teaching of Social Studies in the Secondary Schools (3:3:0)

This course deals with the analysis and evaluation of current trends in curriculum, teaching methods, techniques, resources, and materials in teaching social studies in secondary schools. Stress is placed on new developments in the field and on experience in applying concepts and methods learned. Prerequisites: PSED 161, 242, and at least 6 hours of 300 level work or above.

* Workshop Courses


## PSED 459 Enhancing Self-Esteem (3:3:0)

This course will introduce educators to elements of self-esteem and how those elements can be used to establish an atmosphere where high self-esteem and motivation can flourish. This course takes a theory of self-esteem and translates it into practice. It also emphasizes basic human relations and interpersonal skills necessary to create a classroom environment conducive to the teaching/learning process.
PSED 472 Seminar in Secondary Education III (1:1:0)
This course is designed to provide teacher education certification candidates with the opportunity to design and conduct an action research project or an appropriate alternative research activity to enhance the required field experience in PSED 421. This experience will provide students with the opportunity to select an appropriate research model and design a research project that will enhance pedagogical practice. Prerequisites: Must be taken concurrently with Seminar II.
PSED 485 Independent Study (Semester hours arranged)
This course consists of directed research and study on an individual basis.

## Psychology

School of Arts and Letters
The Faculty of Sciences
Stroud Hall, Room 114A
570-422-3355
http://www3.esu.edu/academics/psychology.asp

Department faculty
Professors:

| Professors: | Anthony Drago, chair (tdrago@po-box.esu.edu) |
| :--- | :--- |
|  | Donna Hodge (dhodge@po-box.esu.edu) |
| Associate Professors: | Richard Wesp (rkwesp@po-box.esu.edu) |
|  | Paul Bartoli (pbartoli@po-box.esu.edu) |
|  | Sussie Eshun (seshun@po-box.esu.edu) |
| Assistant Professors: | Joseph Miele (jmiele@po-box.esu.edu) |
|  | Renee Boburka (rboburka@po-box.esu.edu) |
|  | Jyh-Hann (John) Chang (jchang@po-box.esu.edu) |
|  | Bonnie Green (bgreen@po-box.esu.edu) |
|  | Irina Khusid-Bromgard (ikhusid@po-box.esu.edu) |

## Bachelor of Arts with a Psychology major - 34-35 semester hours

- Required major courses: PSY 101*, 201, 202, 311, 321, 410; one of 203, 204, 301, 302,401 or 402 ; and nine additional semester hours.
- Corequisite course: one of BIOL 105, 111, 114, or CHEM 115
- Please see the Foreign Language Competency Requirement in this catalog.
- Also, please read university requirements found in this catalog.

This degree program is generalized and flexible. In addition to providing a good foundation of basic knowledge about psychological processes, it allows students the flexibility to explore several of the diverse topics in Psychology or concentrate several courses in one specific area.

Bachelor of Science with a Psychology major: 39-41 semester hours; concentration-Counseling

- Required major courses: PSY 101*, 201, 202, 241, 321, 351, 441, 451, 452, 484; one of $290,294,320$, or 326 ; and one of $204,301,302,311,312,401$ or 402
- Corequisite course: one of BIOL 105, 111, 114, or CHEM 115
- Also, please read university requirements found in this catalog.

This degree program prepares paraprofessionals in psychometric, casework, co-therapy, or administrative assistance occupations that are under the supervision of clinical psychologists, psychiatrists, psychiatric social workers, or administrators of mental health facilities. Application to the B.S. program may be submitted to the Counseling Committee of the Department of Psychology after the completion of PSY 101, 201, 202 and one additional course.

Bachelor of Science with a Psychology major: 45-48 semester hours; concentration-Research and Application

- Required major courses: PSY 101*, 201, 202, 241, 321, 401, 409, 410; two of 225, $231,271,291,292$, or 294 ; two of $312,320,326,351$, or 451 ; and two of 204,212 , $301,302,311$, or 402
- Corequisite course: one of BIOL 105, 111, 114, or CHEM 115
- Also, please read university requirements found in this catalog.

This degree program allows students to focus on the methods of the discipline. Students prepare for careers in behavioral research conducted by universities, businesses, and government. Students work with their adviser when deciding which courses best serve their professional goals.

Notes: *The department will consider accepting PSY 100 in lieu of PSY 101. In order to receive a degree (B.A. or B.S.) in Psychology, a student must receive a grade of A, B, or C in all Psychology and corequisite courses which count as part of the major. All degree programs prepare students for graduate study in Psychology.
The department will accept a maximum of 15 transfer credits in the major only if the credits were earned within eight years prior to admission to ESU. No credits can be transferred into the major as equivalents of junior-senior level courses.

## Psychology minor-18 semester hours

- Required courses - PSY 101 or 100, 321; either 222 or 351 ; one of $302,311,402$; two of 203, 220, 225, 271, 291, 294, 320.
This program is designed for majors in related disciplines who desire to complement their academic studies and/or career preparation with extended study of psychology. Course selections shall be made in conjunction with a psychology faculty member's consultation and approval.

At least one half of the credit hours required for this program must be completed at East Stroudsburg University. In order to receive a minor in psychology, a student must receive a grade of "A," "B," or "C" in all courses which count as part of the minor.

## Course Descriptions

(Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title.)

## PSY 100 GE: General Psychology (3:3:0)

This course includes an introduction to the science of behavior and mental life, a bio-social view of man and other animals, and a survey of its methods, theories, history, and knowledge of the role of organismic, environmental, and social factors in behavioral and psychological processes.

## PSY 101 GE: Introduction to Psychology (3:3.0)

This course provides the student with an understanding of contemporary psychological concepts, theories, methods, issues, and problems in the context of the classic questions of psychology. This course is designed primarily for students majoring in Psychology and closely related fields of study.

## PSY 201 Experimental Design in Psychology (3:3:0)

This course is an introduction to commonly used procedures of analysis, interpretation, and application in the Behavioral Sciences. Prerequisite: PSY 101.

## PSY 202 Experimental Psychology (3:2:2)

This course is an introduction to the philosophy and research methods of behavioral science with particular emphasis upon the experimental method, experimental analysis, and research of traditional and contemporary issues. Prerequisites: PSY 101, 201.

## PSY 203 Psychology of Motivation (3:3:0)

This course is an introduction to the psychological literature concerning motivation as viewed through major theoretical systems. There will be an examination of the motivational forces underlying human and animal behavior. Basic motivational concepts will be surveyed with an attempt to represent various areas of motivational research. Prerequisite: PSY 100 or 101.

## PSY 204 Empirical Foundations of Learning (4:3:2)

The course offers analysis, discussion, and laboratory experiences concerning classical and contemporary issues and topics in learning and behavior control. Operant vs. respondent conditioning biofeedback, verbal learning, motor skills learning, learning vs. performances, trial and error vs. insight, reinforcement vs. feedback, punishment and aversive control, memory, and knowledge are considered. Prerequisite: PSY 101.

PSY 212 Comparative Psychology (4:3:2)
Comparative psychology attempts to place the behavior of humans in phylogentic perspective; the behavior of various organisms is studied with emphasis on the behavioral similarities and differences among animals and with respect to humans to gain a fuller appreciation of human behavioral roots and capacities. A series of laboratory exercises is employed to aid the student in developing a more thorough understanding of the field. Prerequisite: PSY 101.
PSY 220 GE: Social Psychology I: Interpersonal Relationships (3:3:0)
This is the first half of a 2-course sequence ( 220 and 320 ), an introductory survey of the field of social psychology, but either course can stand alone. PSY 220 focuses on scientific principles about the initiation, maintenance, and dissolution of close interpersonal relationships. Learning theory, role theory, and exchange theory are emphasized. Prerequisites: PSY 100 or 101.

## PSY 222 GE: Psychology of Adjustment (3:3.0)

This course is a functional approach to the problem of how humans acquire their distinctive ways of adjusting, favorably or unfavorably, to the total environment. It includes adjustment as a biosocial process, varieties of adjustive behavior, personality, and types of therapy and applications. Prerequisite: PSY 100 or 101.

## PSY 225 GE: Lifespan Developmental Psychology (3:3:0)

Lifespan developmental psychology is the study of how and why people change over time as well as how and why they remain the same from conception through old age. More specifically this course takes an interdisciplinary look at development from the social science fields of anthropology, sociology, and psychology and from the natural science discipline of biology. This broader approach provides insights into three areas of development: the physical domain, the cognitive domain, and the psychosocial domain. Prerequisite: PSY 100 or 101.
PSY 231 Industrial Psychology (3:3:0)
This course deals with psychological information and theories applied to business and industrial settings. Focus is upon leadership, motivation, training, and personnel selection and placement. Prerequisite: PSY 100 or 101 and PSY 201.

## PSY 241 Measurement and Evaluation in Psychology (3:3:0)

This course covers a brief history of testing and assessment. The focus is on basic procedures necessary for the quantification of measured characteristics and includes a study of norms reliability and validity in the development of standardized tests. Prerequisites: PSY 101, 201.
PSY 271 CJA: Forensic Psychology (3:3:0)
This course introduces the student to the relationship between the field of psychology and the criminal justice system in the U.S. The approach is interdisciplinary in nature and intended for those interested in social science, behavioral science, law, and criminal justice, as well as practitioners in the criminal justice system. Prerequisite: PSY 100 or 101.

## PSY 290 Special Topics (Semester hours arranged)

These courses are designed to meet the specific needs of groups of students and are offered on a trial basis in order to determine the demand for and value of introducing them as part of the university curriculum.

## PSY 291 Human Sexual Behavior (3:3:0)

This course examines the role of sexual behavior and attitudes in interpersonal relations, and individual psychodynamics in the attainment of full human potential. It includes an analysis of atypical sexual behavior from psychoanalytic, humanistic, social, cognitive and behavioristic viewpoints; Psychotherapy of/and human sexual dysfunction. Prerequisite: PSY 100 or 101.

## PSY 292 Psychology of Women (3:3:0)

This course will focus on critical research issues concerning the female experience from birth to old age. It will examine the changing roles of women in contemporary society in addition to myths and stereotypes concerning women. Prerequisite: PSY 100 or 101.

## PSY 293 Assertiveness Training (3:3:0)

This course emphasizes the acquisition of skills involved in assertive behaviors. It helps students to understand the differences among aggressive, assertive, and non-assertive behaviors through
active methods of group participation. It enables students to identify their own rights and the rights of others and assists students in discovering ways to implement these skills in daily situations. Theories of assertiveness training will be discussed. Prerequisite: PSY 100 or 101.
PSY 294 Psychology of Minority Groups (3:3:0)
A study of the historical, developmental, cultural, and environmental influences on the attitudes, behavior and psychological processes of major minority groups in America. Specific groups to be highlighted in this course include: Native Americans, African Americans, Asian Americans, Latin Americans, Women, and Individuals With Disabilities. Specific topics to be discussed are: sexual preferences, the nature of prejudice, discrimination, and oppression. Prerequisite: PSY 100 or 101.
PSY 301 Sensation and Perception (3:3:0)
This course is a study of the structure and function of receptor systems, their role in phenomenological experience and perception, and how such systems contribute to human's orientation in and knowledge of the environment. Prerequisite: PSY 101.

## PSY 302 Theories of Learning (3:3:0)

This course is a survey and critical analysis of theoretical formulations of learning processes, and their implications in child rearing, education and the mental health setting. Prerequisite: PSY 101.
PSY 305 Cross-Cultural Psychology (3:3:0)
This course focuses on cross-cultural applicability of psychological principles. Emphasis will be made on identifying similarities and differences in human behavior across cultures around the world. Approaches to cross-cultural research in psychology and psychological effects of acculturation, ethnocentricism, culture shock, and cultural-relativism will be explored. Prerequisites: PSY 100 or 101 and any 200 level psychology course.
PSY 306 A Cross-Cultural Comparison of Behavioral Therapy (3:3:0)
This course is designed to examine the influences of culture on psychological problems, interpretation of the problems, and therapy used to address the problems. Students will learn basic principles of behavior therapy, and then observe and apply these principles. Students will study major theories of cross-cultural psychology and consider the impact of culture on behavior and use those frameworks to actively compare the differences in cultures as they relate to attitudes and practices related to therapy. Prerequisites: PSY 321 and completion of at least 12 credit hours in Psychology.
PSY 311 Physiological Psychology (4:3:2)
This course is a study of the relations of behavior of organisms to their physiological processes. In addition to the characteristic modes of functioning and the complexity of the human nervous system, it includes a study of how such diverse events as ontogenetic development, brain lesions, stress, and sensory deprivation or enrichment affect behavior. A series of laboratory exercises is employed in order to aid the student in developing a more thorough understanding of the field. Prerequisite: PSY 101.
PSY 312 Clinical Psychopharamacology (3:3:0)
This course is designed to provide fundamental knowledge of how medications are used to treat a variety of psychological disorders and some neurodegenerative diseases. Emphasis is placed on how therapeutic drugs act within the nervous system, clinical studies examining the efficacy of these drugs, how these drugs are used in combination with psychotherapy, and the potential side effects of these drugs. Prerequisites: PSY 100 or 101, 321, 351; BIOL 111.

## PSY 320 Social Psychology II: Group Dynamics and Attitudes (3:3:0)

This is the second half of a 2-course sequence (220 and 320), an introductory survey of the field of social psychology, but either course can stand alone. PSY 320 focuses on scientific principles about the effects of social leadership, prejudice, and intergroup conflict. Attitude change via persuasion and propaganda, and human responses to population stress are also covered. Prerequisite: PSY 100 or 101 or 220 or SOC 111 .

## PSY 321 Theories of Personality (3:3:0)

This course focuses on a discussion of theories that have contributed significantly to current concepts of personality with emphasis on the diversity of views and techniques (from psychoanalysis to cognitive behaviorism) that characterize the field. The relationship of personality theory to assumptions about the nature of man will be noted. Prerequisite: PSY 100 or 101.

PSY 326 Health Psychology and Behavioral Medicine (3:3:0)
This course focuses on the relationship between psychology and the field of Behavioral Medicine. It involves an in-depth study of how psychological factors influence physical illness, and how to prevent these illnesses from a psychological perspective. Specifically, the course considers the process of lessening the course of certain physical illnesses by applying behavioral, cognitive, and social psychological principles. Seeking health care and adhering to medical advice will also be discussed. Prerequisites: PSY 100 or 101, and PSY 321.

## PSY 351 Abnormal Psychology (3:3:0)

This course reviews basic principles of motivation, learning, and development as they are related to disorganized behavior, physiological, sociological, and psychological factors in the development of disorganized personalities, the etiology and symptomatology of the major categories of neurosis, psychosis, personality disorders, and organic brain disorders, and methods of treatment and prevention. Prerequisites: PSY 101, 321.
PSY 361 Child Psychopathology (3:3:0)
The purpose of this course is to introduce the student to the basic concepts of Child Psychopathology, the scientific and scholarly study of child and adolescent emotional and behavioral disorders. The course will include a discussion of the etiology, symptomotology, treatment, and prevention of childhood disorders. The distinctions between child and adult pathology and current research trends will also be emphasized. Prerequisites: PSY 100 or 101, 321, and 351.
PSY 401 History of Psychology (3:3:0)
This course considers the trends and controversial issues in psychology related to forces in a general culture and examines the philosophical and theoretical views of eminent psychologists and the influence of physical science on methodology in behavioral science. Prerequisites: PSY 101, 9 additional major credits.

## PSY 402 Cognitive Processes (3:3:0)

This course is a study of complex mental processes and explanatory models of these processes, the relation between affective and associative processes, thinking, problem solving, decision-making, and creativity. Prerequisites: PSY 101, 201, 202.

## PSY 409 Research in Psychology (Semester hours arranged)

This course is designed to broaden a student's background in psychological topics through in-depth reading or research in a particular area. It is open to qualified students who wish to contribute an individual research project or theoretical paper under the supervision of a staff member. Subject matter varies depending upon student and faculty interest. May be repeated to a total maximum of six credits. Prerequisites: PSY 101, 201, 202, 9 additional credits in psychology ( 18 total).

## PSY 410 Perspectives in Psychology (3:3:0)

This course presents the Psychology major with an opportunity to synthesize the knowledge acquired during the undergraduate course of study. Prerequisites: PSY 100 or 101, 201, 202, permission of instructor.

## PSY 441 Individual Testing (3:3:0)

This is an advanced course in psychological testing. It includes learning the administration and interpretation of individual intelligence tests (e.g. Wechsler Tests), objective personality tests (e.g., Minnesota Muliphasic Personality Inventory, Sixteen Personality Factors), vocational tests (e.g., Strong-Campbell Interest Inventory), introduction to projective techniques, and other clinical tests. Prerequisites: PSY 101, 241, 321, 351, 451. Advanced standing of 90 credits required.

## PSY 451 Introduction to Counseling (3:3:0)

An overview of the field of counseling; counseling theory, techniques, and issues are discussed. Emphasis is placed on individuals and groups whose problems of choice, decision, and adjustment fall within the normal range. Educational and emotional and social counseling are examined in relation to the role of the counselor in the community. Prerequisites: PSY 101, 321, 351.

## PSY 452 Group Processes in Counseling (3:3:0)

This course presents the principles and techniques of groups used in counseling. The student will survey the various group models applicable to a variety of populations and settings as well as the most recent, relevant research on group processes. The course includes didactic and experiential components. Prerequisites: Advanced standing of 90 credits, PSY 451.

## PSY 484 Mental Health Worker Practice \& Skills (3:0:6)

This course is required of, and restricted to, students who are enrolled in the Mental Health Worker concentration (BS in psychology). Students are assigned to an agency appropriate to the program and their specific interests and spend a minimum of 120 hours of supervised experience in addition to meeting in a group seminar. The seminar will concentrate on day-to-day problems with which students deal in their placement and current issues and ethics in the mental health professions. (May be repeated for maximum of 12 credits.) Prerequisites: PSY 451, 452.

## PSY 485 Independent Study (Semester hours arranged)

This experience is taken upon the initiative of a student who seeks to study with a knowledgeable faculty member in order to deepen a specific interest in a particular academic discipline. Independent study is a process through which a student either sharply increases his/her already advanced knowledge of a subject matter or increases his/her appreciation about an academic discipline that is correlative with the student's advanced knowledge of a subject. The proposed independent study must be submitted to the department for approval. The faculty member supervising the independent study must provide a minimum of five (5) hours of time per credit hour upon request of the student. Prerequisites: PSY 101, 60 credits, permission of instructor.

## PSY 486 Field Experiences and Internship (Semester hours arranged)

This course consists of field experience and working knowledge developed in one-to-one relationships with clients under direct professional supervision. Placement will be in agencies involved in the delivery of services related to mental health or mental retardation. A maximum of twelve credits over two years' time may be earned through the program. Prerequisites: PSY 101, 321, permission of instructor.
PSY 498 WS: Seminar in Women's Studies (3:3:0)
This seminar is designed to enable students from various disciplines to analyze and synthesize data, ideas, and academic perspectives as they focus on the personal and societal dimensions of gender and roles as these differentiate and affect female experience and activities. This course is not accepted for major credit. Prerequisites: Completion of 9 credits of Women's Studies credit, including CMST/ENGL 150.

# Bachelor of Science with a Major in Psychology Concentration: Counseling 

Suggested Program Curriculum Plan

| Fall |  |  |  |
| :--- | ---: | :--- | ---: |
| PSY 101 Introduction to Psychology 3 PSY 201 Experimental Design 3 <br> ENGL 103 English Composition 3 PSY 321 Theories of Personality 3 <br> General Education 3 General Education 3 <br> General Education 3 General Education 3 <br> General Education 3 General Education 3 <br> Subtotal $\mathbf{1 5}$ Subtotal $\mathbf{1 5}$ |  |  |  |


| Fall Sophomore Year |  |  |
| :--- | ---: | :--- | ---: |
| PSY 202 Experimental Psychology 3 PSY 241 Measurement \& Evaluation 3 <br> PSY 351 Abnormal Psychology 3 Psychology - Theoretical Course 3 <br> General Education 3 General Education 3 <br> General Education 3 General Education 3 <br> General Education 3 General Education 3 <br>   FIT Activity 1 <br> Subtotal $\mathbf{1 5}$ Subtotal $\mathbf{1 6}$ |  |  |


| Fall |  |  |
| :--- | ---: | :--- | ---: |
| PSY 451 Introduction to Counseling 3 PSY 452 Group Processes 3 <br> Psychology - Applied Course 3 Psychology - Theoretical Course 4 <br> CO - REQ 3 Psychology-Applied Course 3 <br> General Education 3 Psychology or Upper Division Elective 3 <br> General Education 3 Psychology or Upper Division Elective 3 <br> FIT Activity 1   <br> Subtotal 16 Subtotal $\mathbf{1 6}$ |  |  |


| Fall |  |  |  |
| :--- | ---: | :--- | ---: |
| PSY 441 Individual Testing 3 PSY 484 Mental Health Practice 3 <br> Psychology or Upper Division Elective 3 Psychology or Upper Division Elective 3 <br> Psychology or Upper Division Elective 3 Psychology or Upper Division Elective 3 <br> Psychology or Upper Division Elective 3 Psychology or Upper Division Elective 3 <br> Psychology or Upper Division Elective 3   <br> Subtotal $\mathbf{1 5}$ Subtotal $\mathbf{1 2}$ |  |  |  |

## Bachelor of Arts with a Major in Psychology

## Suggested Program Curriculum Plan



Fall Senior Year Spring

| PSY 311 Physiological Psychology | 4 | PSY 410 Perspectives in Psychology | 3 |
| :--- | ---: | :--- | ---: |
| Psychology or Upper Division Elective | 3 | Psychology or Upper Division Elective | 3 |
| Psychology or Upper Division Elective | 3 | Psychology or Upper Division Elective | 3 |
| Psychology or Upper Division Elective | 3 | Psychology or Upper Division Elective | 3 |
| Psychology or Upper Division Elective | 3 |  |  |
| Subtotal | $\mathbf{1 6}$ | Subtotal | $\mathbf{1 2}$ |

## Bachelor of Science with a Major in Psychology Concentration: Research and Application <br> Suggested Program Curriculum Plan

| Fall |  |  |  |
| :--- | ---: | :--- | ---: |
| \begin{tabular}{\|l|rr|r|}
\hline
\end{tabular} Spring |  |  |  |
| PSY 101 Introduction to Psychology | 3 | PSY 201 Experimental Design | 3 |
| ENGL 103 English Composition | 3 | PSY 321 Theories of Personality | 3 |
| General Education | 3 | General Education | 3 |
| General Education | 3 | General Education | 3 |
| General Education | 3 | General Education | 3 |
| Subtotal | 15 | Subtotal | $\mathbf{1 5}$ |

Fall
Sophomore Year
Spring

| PSY 202 Experimental Psychology | 3 | PSY 241 Measurement and Evaluation | 3 |
| :--- | ---: | :--- | ---: |
| Psychology - Applied Course 200 Level | 3 | Psychology - Applied Course 200 Level | 3 |
| General Education | 3 | General Education | 3 |
| General Education | 3 | General Education | 3 |
| General Education | 3 | General Education | 3 |
| FIT Activity | 1 | FIT Activity | 1 |
| Subtotal | 16 | Subtotal | $\mathbf{1 6}$ |


| Junior Year |  |  |  |
| :--- | :---: | :---: | :---: |
| Psychology - Applied Course 300 Level 3 Psychology -Lab Course 4 <br> Psychology - Applied Course 300 Level 3 Psychology or Upper Division Elective 3 <br> CO - REQ 1 Psychology or Upper Division Elective 3 <br> General Education 3 Psychology or Upper Division Elective 3 <br> General Education 3 Psychology or Upper Division Elective 3 <br> Subtotal $\mathbf{1 3}$ Subtotal $\mathbf{1 6}$ |  |  |  |


| Fall | Senior Year |  |  |
| :---: | :---: | :---: | :---: |
| Psychology -Lab Course | 3 | PSY 409 Research in Psychology | 3 |
| Psychology -Integrative Course | 3 | Psychology or Upper Division Elective | 3 |
| Psychology or Upper Division Elective | 3 | Psychology or Upper Division Elective | 3 |
| Psychology or Upper Division Elective | 3 | Psychology or Upper Division Elective | 3 |
| Psychology or Upper Division Elective | 3 | Psychology or Upper Division Elective | 3 |
| Subtotal | 15 | Subtotal | 15 |
| TOTAL CREDITS |  |  | 121 |

## Reading

College of Education
Stroud Hall Room 112

Department faculty
Professors:
Professors:

Associate Professor:

Assistant Professor:

570-422-3416
www.esu.edu/reading

The Reading Department offers courses in reading education that are required by the departments of Early Childhood and Elementary Education, Professional and Secondary Education, and Special Education.
All students are required to maintain a cumulative and major average as specified in PA law to take teacher education classes. Please refer to the section The College of Education in this catalog for specific requirements.

## Course Descriptions

(Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title.)

## REED 090 Reading Skills (3:3:0)

This course will diagnose and correct student deficiencies in the basic reading and study skills which are essential for successful completion of academic course work. Student deficiencies will be diagnosed through standardized and informal testing and will be corrected by using a variety of group and individualized teaching techniques.

## REED 191 Developmental Reading (3:3:0)

The needs and progress of college students are evaluated in the development of their reading ability. Comprehension skills, especially understanding reasoning processes expressed in written language and study skills, are emphasized. Open to all students.

## REED 211 Teaching of Reading in the Elementary School (3:3:0)

This course is a study of principles and procedures underlying the teaching of fundamental skills basic to a developmental reading program in the elementary school. It includes a survey of reading materials and techniques and demonstrations of classroom teaching. Not open to Elementary Education majors.

## REED 212 Emergent Literacy (3:3:0)

The development of the reading and writing behaviors of young children is observed and examined. The emphasis of this course reflects the current knowledge base for children's emerging literacy development into conventional literacy, from birth through the early primary school years.

## REED 290 Special Topics (Semester hours arranged)

These courses are designed to meet specific needs of groups of students or are courses offered on a trial basis in order to determine the demand for and value of introducing them as part of the university curriculum.

## REED 313 Foundations of Reading Instruction (6:4:4)

A basic course to develop the competency of Elementary Education students to teach reading. The major approaches to reading instruction, with an emphasis on skill instructional techniques, are stressed. Lectures, videotapes, films, and demonstrations cover classroom teaching and appraisal of reading achievement. Weekly field experiences in a Professional Development School will emphasize the course content and relate instructional theories to teaching. Student participation in discussion of selected topics, in small groups under the guidance of one of the professors, is an important aspect of the course. Prerequisite: ELED 264.

REED 315 Teaching Reading to Students with Special Needs (3:3:0)
This course will prepare prospective teachers to provide effective reading instruction to students with special needs which are categorized into four broad areas. The areas are 1) the needs of handicapped readers including the learning disabled, mentally retarded, visually and hearing impaired, speech and language impaired, physically handicapped, and emotionally disturbed, 2) the needs associated with cultural differences, 3) the needs represented by language differences, and 4) the needs of gifted readers. The emphasis of this course will be on instructional procedures which reflect the current knowledge base for helping students acquire literacy. Prerequisites: REED 211 or SPPA 101. Required for Special Education and Speech Pathology majors.

## REED 321 Teaching of Reading in the Secondary School (3:3:0)

Students demonstrate competency in utilizing secondary content area reading material to assist young people in developing comprehension and study skills. Prerequisite: PSED 161.
REED 331 The Selection and Evaluation of Reading Materials (3:3:0)
This course focuses on the examination and rationale for current techniques and materials for teaching reading to students capable of utilizing different modalities. Both developmental and corrective classroom reading programs for the elementary and middle school will be considered. Prerequisites: REED 211, or 313, or 321.
REED 332 Content Reading in the Elementary School (3:3:0)
Students learn and practice the teaching of those reading skills which elementary school children need for successful reading in subject matter areas. Prerequisites: REED 211, or 313, or 321.

## REED 430 Teaching Reading through Young Adult Literature (3:3:0)

Participants in the course will examine the engagement of young adults in the reading process. Among the literature-based topics to be addressed will be teaching reading through thematic units, the shared stages of reading and writing, literature-response methods, and developing reading strategies through a variety of literary genres. Prerequisites: REED 211, or 313 or 321; ELED 232.

## REED 433 Literacy: Techniques for Assessment (3:3:0)

The emphasis of this course reflects the current knowledge base for the ongoing process of formative and summative evaluations. Data gathering, data analysis, and data display are surveyed and demonstrated. Prerequisites: REED 211, or 313 or 321; ELED 232.

## REED 434 Field Experience in Reading (3:1:4)

This course is a three-week field experience under the guidance of a Reading Specialist in the public schools. The student will 1) observe him/her in all phases of his/her work, 2) following observation, assist the Reading Specialist, and 3) gradually assume teaching responsibilities for the various instructional groups as the Reading Specialist may deem feasible. The program will be supervised by a member of the Reading Department. The course is accepted to fulfill an area of concentration (Reading) requirement. Prerequisites: REED 211 or 313; ELED 232.

## REED 447 Success-Oriented Reading: Ideas into Action (Semester hours arranged)

The course provides opportunities for teachers to explore the reading process from a variety of current viewpoints and to help the participants develop their own personal classroom teaching programs to put these ideas into practice. The course is designed to stimulate new thinking, to have participants experience activities that can be used with students, and to give participants confidence in creating personalized reading activities and materials for their own students. Prerequisites: ELED/PSED 490 or ELED/PSED 491. Since this course is also offered for graduate credit, a differentiation of requirements may be made. This course is also listed as ELED/PSED 447.

## REED 485 Independent Study (Semester hours arranged)

This course consists of directed research and study on an individual basis.
REED 486 Field Experiences and Internship (Semester hours arranged)

# Recreation and Leisure Services <br> Management 

College of Business, Management and Economics<br>The Faculty of Hospitality, Leisure, and Sport Management<br>DeNike Hall Room 231 570-422-3305<br>www.esu.edu/recr

## Department faculty Professors:

Associate Professor:
S. Elaine Rogers, chair (erogers@po-box.esu.edu)

Bradford Seid (bseid@po-box.esu.edu)
Angela Vauter (avauter@po-box.esu.edu)

The mission of the degree program in Recreation and Leisure Services Management is to provide students with knowledge and skills necessary for successful careers in the field of parks, recreation, and leisure services. The program's mission is consistent with the university's mission to provide a positive environment to enhance the student's intellectual, social, and professional growth.

The career possibilities for a person with this major include a wide variety of settings, including municipal, state, and federal government agencies; community organizations; environmental education centers; youth camps; resorts; ski areas; theme parks; rehabilitation centers; hospitals; and long-term care facilities. More detailed career information is available from the department.

## Bachelor of Science with a Recreation and Leisure Services Management major - 48 semester hours

- Required major courses: RECR 150, 250, 260, 270, 281, 350, 351, 450, 452, 486; 3 of the 4 practicum courses-390, 391, 392, 393; 6 additional semester hours in recreation.
- Corequisite courses: CMST 111 or 253; ENGL 203; HLTH 240; CPSC 100.
- Required quality point average: 2.25 or greater for juniors and seniors.
- Note: The required internship (RECR 486) may be completed during the summer sessions following the junior or senior year of study or during fall or spring of the senior year, upon approval by the department
- Please see the university requirements in this catalog.


## Suggested sequence of required courses:

(See chart following department course descriptions)
Freshman Year: RECR 150; 260
Sophomore Year: RECR 250; 270; 281
Junior Year: RECR 350; 351; Practicums (2); RECR Electives (2); RECR 452
Senior Year: RECR 450; Practicum (1); 486
The Recreation degree program is accredited by the National Recreation and Park Association/ American Association for Physical Activity and Recreation (NRPA/AAPAR), a specialized accrediting agency recognized by the Commission on Recognition of Postsecondary Accreditation.

Students graduating from this program are immediately eligible to sit for the examination to become a Certified Park and Recreation Professional (CPRP).

## Course Descriptions

(Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title.)

## RECR 150 Introduction to Recreation and Leisure Services (3:3:0)

This course provides an introduction to the study of recreation and leisure as a phenomenon of human social experience. The course presents an overview of the delivery of recreation and leisure services in a variety of settings for all populations.

## RECR 241 WS: Leisure and Gender (3:3:0)

This course is an introduction to issues and questions about women and men and their leisure. The student will examine the differences and similarities between women and men concerning their leisure interests, needs, and perceptions. Topics will include a comparison of women's and men's leisure historically, gender-role socialization during lifespan development, participation in leisure pursuits by gender, gender-based constraints on leisure, and problems and issues faced by leisure professionals because of gender. Prerequisite: Sophomore standing.

## RECR 250 Recreation Leadership (3:2:2)

This course analyzes the leadership role in group settings, group process, group dynamics, leadership styles, and interpersonal communication. Incorporated into this course is a lab which enables students to gain practical experience leading group activities for different age groups and skill levels.

## RECR 260 Introduction to Therapeutic Recreation (3:3:0)

This course is an introduction to the delivery of therapeutic recreation services in both community and clinical settings. Societal attitudes, history of therapeutic recreation, legislation, and models of service are analyzed. Specific disabilities are evaluated.
RECR 261 Leisure and Aging (3:3:0)
This course analyzes the delivery of leisure services to individuals over 60. Psychosocial, physical, and cognitive changes as they relate to the aging process and one's leisure are investigated. The implications of changes in demographics, lifespan, healthcare delivery, and public policy are explored. Therapeutic recreation practice in long term care is examined.

## RECR 270 Recreation in Commercial Settings (3:2:2)

This course is an analysis of tourist-related industries with particular attention focused on managerial tasks and business skills required in delivering commercial leisure services to the consumer. This course will also focus upon different types of commercial recreation enterprises such as health clubs, ski areas, and theme parks. Trends and issues pertinent to the operation and management of these firms will also be examined.

## RECR 280 Outdoor/Environmental Education (3:1:4)

This course provides a survey of the history, philosophy, current status, and future trends in the outdoor education and environmental education movements. The student will acquire skills in leadership of a variety of outdoor/environmental education activities and will visit environmental education centers and programs in the regional area. Prerequisite: BIOL 104

## RECR 281 Outdoor Recreation and Park Management (3:3:0)

This course surveys the history, current status, and management of outdoor recreation opportunities and resources. It examines the relationship of outdoor recreation and natural resources, especially the environmental impact of recreational pursuits on the resource base.

## RECR 290 Special Topics (Semester hours arranged.)

These courses are designed to meet specific needs of groups of students or are offered on a trial basis in order to determine the demand for and value of introducing them as a part of the university curriculum.

## RECR 350 Special Event and Program Planning (3:3:0)

This class is designed to enable the student to plan and implement a variety of recreation programs and special events. Particular attention will be focused on the process of program planning, marketing, risk management, and pricing as they relate to the offering of leisure services and special events. Prerequisites: RECR 150 and 250.

## RECR 351 Leisure Services Management (3:3:0)

This is a survey course of organizational theories and concepts, procedures, and practices utilized in the delivery of leisure services. Emphasis is on the management role, legal issues, human resources, supervision, and fiscal responsibility. Prerequisites: RECR 150 and 250 and junior standing.

## RECR 361 Clinical Aspects of Therapeutic Recreation (3:2:2)

The focus of this course is to prepare future practitioners to deliver therapeutic recreation services in clinical settings. Medical terminology, assessment, documentation, the helping relationship, and the process of therapy are systematically analyzed. The lab experience incorporated into this course is to emphasize activity skill development. This course is for majors only. Prerequisite: RECR 260.

## RECR 362 Therapeutic Recreation Interventions (3:3:0)

This course is an in-depth examination of therapeutic recreation interventions and modalities used to assist individuals with illnesses and disabilities to improve and/or maintain their maximum functioning. Examples include but are not limited to social skills training, leisure education, remotivation, reality orientation, community re-integration, and adventure therapy. This course is for majors only. Prerequisite: RECR 260.

## RECR 371 Marketing for Commercial Recreation Enterprises (3:3:0)

This course is designed to acquaint the student with the importance of marketing to the commercial recreation industry. Particular attention will be placed upon the implementation of the marketing concept as well as an in-depth look into the development and implementation of a marketing plan. Consumer decision processes with their marketing implications will also be considered. Prerequisite: RECR 270.

## RECR 380 Coastal and Marine Recreation (3:3:0)

This course will provide an overview of the types and extent of recreational pursuits in coastal and marine environments. Historical aspects and trends in participation will be surveyed. Emphasis is on management of coastal and marine resources and issues associated with the use of these resources for recreation. Pre-requisite: RECR 281.

## RECR 381 Issues in Outdoor Recreation Management (3:3:0)

This course provides advanced study in the area of outdoor recreation and natural resources management. Students will explore current issues faced by federal, state, and local government agencies and private and commercial enterprises responsible for resource management. Students will learn a problem-solving approach to the resolution of issues. Prerequisite: RECR 281.
RECR 390 Therapeutic Practicum (1:0:2)
This course involves analysis of the administration of a local agency offering therapeutic recreation services. Majors will gain practical field experience through participation in programming and interaction with agency personnel. Preparation of an agency profile and critique of field experience are required assignments. Prerequisite: RECR 150.

## RECR 391 Outdoor Practicum (1:0:2)

This course involves analysis of the administration of a local agency offering outdoor recreation or environmental education services. Majors will gain practical field experience through participation in programming and interaction with agency personnel. Preparation of an agency profile and critique of field experience are required assignments. Prerequisite: RECR 150.

## RECR 392 Commercial Practicum (1:0:2)

This course involves analysis of the administration of a local agency offering commercial recreation services. Majors will gain practical field experience through participation in programming and interaction with agency personnel. Preparation of an agency and critique of field experience are required assignments. Prerequisite: RECR 150.

## RECR 393 Community Practicum (1:0:2)

This course analyzes the administration of a local agency offering community recreation services. Majors will gain practical field experience through participation in programming and interaction with agency personnel. Preparation of an agency profile and critique of field experience are required assignments. Prerequisite: RECR 150.

RECR 450 Planning and Designing Recreation Areas and Facilities (3:2:2)
This course will enable students to develop an understanding of the planning, design, operation, and maintenance of indoor and outdoor recreation areas and facilities. Students will study existing facilities and be required to complete projects related to facility development. Prerequisites: RECR 150, 351, senior standing, approval of instructor; recreation majors only.

## RECR 451 Seminar (3:3:0)

This course involves discussion and intensive study of selected issues, problems, and topics with which seniors should be familiar as they prepare to enter the world of work/graduate school. Prerequisite: Senior status, approval of instructor, recreation majors only.

## RECR 452 Research Methods (3:3:0)

This course is designed to develop an understanding of the principles of scientific investigation and analysis. Methods of data collection, sampling, research designs, qualitative and quantitative paradigms are reviewed. Students will interpret and apply research principles to leisure services. Prerequisites: RECR 150, 351, senior status, approval of instructor, recreation majors only.

## RECR 460 Concepts and Issues in Therapeutic Recreation (3:3:0)

This course is a continuation of RECR 361, which concentrates on the preparation of Recreation Therapy practitioners. Human development, leisure education, therapeutic techniques and approaches, treatment protocols, and the inter-disciplinary approach to treatment are examined. Other contemporary issues and trends are analyzed. Prerequisite: RECR 361. Recreation majors only.
RECR 470 Ski Area Management (3:3:0)
This course is designed to give the student an overview of ski area management with emphasis on design principles, financial practices, and operating procedures necessary for the successful operation of a ski area. Prerequisites: RECR 150, 270.
RECR 471 Seminar in Commercial Recreation (3:3:0)
This course will provide discussion and intensive study of issues, topics, trends, and problems within the field of commercial recreation. Prerequisites: RECR 150, 270; EMGT 211.

## RECR 480 Environmental Interpretation (3:1:4)

This course prepares the student to develop and to supervise interpretive services and public outdoor education programs. The lab concentrates on interpretive skills including displays and exhibits, interpretive walks, slide presentations, and interpretive trails. Prerequisites: RECR 280.

## RECR 485 Independent Study (Semester hours arranged)

This course is available for one, two, or three credits with five hours faculty involvement per credit on topics approved by the department and not regularly listed in the catalog.
RECR 486 Internship (Semester hours arranged)
Prerequisite: Recreation majors only.

# Bachelor of Science Degree <br> With a Recreation and Leisure Services Management Major Scheduling Sequence 

| Fall Freshman Year |
| :--- |
| RECR 150: Introduction to Recreation <br> and Leisure Services 3 RECR 260: Introduction to <br> Therapeutic Recreation 3 <br> General Education 12 General Education 12 <br>    15 <br> Subtotal 15 Subtotal  <br> Fall    <br> RECR 250: Recreation Leadership 3 RECR 281: Outdoor Recreation <br> and Park Management 3 <br> RECR 270: Recreation in <br> Commercial Settings 3 General Education 13 <br> General Education 10  16 <br> Subtotal 16 Subtotal  |


| Fall |  |  | Junior Year |
| :--- | ---: | :--- | ---: |
| RECR 351: Leisure Services Management | 3 | RECR 350: Special Event and <br> Program Planning | 3 |
| RECR Elective | 3 | RECR 452: Research Methods | 3 |
| RECR Practicum | 1 | RECR Elective | 3 |
| General Education | 3 | RECR Practicum | 1 |
| Health Emergencies | 3 | Free Electives | 6 |
| Free Elective | 3 |  |  |
| Subtotal | $\mathbf{1 6}$ | Subtotal | $\mathbf{1 6}$ |


| Fall | Senior Year |  |  |
| :--- | ---: | :--- | ---: |
| RECR 450: Planning and Designing <br> Recreation Facilities | 3 | RECR 486: Internship | 12 |
| RECR Practicum | 1 |  |  |
| Free Electives | 10 |  |  |
|  |  |  | 12 |
| Subtotal | 14 | Subtotal |  |

TOTAL CREDITS ..... 120

## Rehabilitative Services

College of Education
Stroud Hall Room 105
570-422-3558
www.esu.edu/sped

## Department faculty

| Professors: | Teri Burcroff (tburcroff@po-box.esu.edu) <br> Diane Cavanagh (dcavanagh@po-box.esu.edu) <br>  <br>  <br> Gina Scala, chair (gscala@po-box.esu.edu) |
| :--- | :--- |
| Associate Professor: | Daniel Steere (dsteere@po-box.esu.edu) <br> Domenico Cavaiuolo (dcavaiuolo@po-box.esu.edu) <br> Assistant Professors: <br>  <br> Joyce Burgener (jburgener@po-box.esu.edu) <br> Heather Garrison (hgarrison@po-box.esu.edu) |
| Bachelor of Science with a Rehabilitative Services major—70 semester hours |  |


#### Abstract

The undergraduate Rehabilitative Services program prepares students to work in a broad range of rehabilitation settings with students through adults with various areas and degrees of exceptionalities. These settings may include day service or employment settings, supported living, residential settings, and rehabilitation facilities. Although students may obtain employment in such settings upon completion of their degree, many students elect to pursue graduate study in fields such as occupational therapy, physical therapy, and vocational rehabilitation counseling. The Rehabilitative Services program provides an excellent foundation for graduate study in these areas. The Rehabilitative Services program is part of the Department of Special Education and Rehabilitation.


Rehabilitative Services core requirements are SPRE 100, 200, 201, 214, 300, 301, 315, 486 and 487; SPED 105, 311; PSY 100, 222; HLTH 240, 432. Plus 18 adviser-approved electives. A minimum overall QPA of 2.5 is required for admission into and graduation from the program. Falling below a QPA of 2.5 will result in a Departmental Probationary Status for one semester, and may mean dismissal from Rehabilitative Services Studies if the QPA is not brought up to 2.5 at the end of the probationary semester.

## Course Descriptions

(Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title.)

## SPRE 100 Foundations of Human Services (3:3:0)

This course is an orientation to the rehabilitation and normalization process, including a survey of historical development, principles, philosophy, disability, needs of people with disabilities, legal aspects of rehabilitation, and related programs of services to individuals with disabilities.

## SPRE 200 Individuals with Exceptionalities in Community Life (3:3:0)

This course places an emphasis on the role of individuals with disabilities in society.
SPRE 201 Community Rehabilitative Services (3:3:0)
This course covers the traditional, current, and emerging roles of the community in the rehabilitative process. Emphasis is placed on shared responsibilities of federal, state, regional, and local agencies. Students explore pertinent legislation and implications for integrated and cooperative services. Prerequisite: SPRE 100.

## SPRE 214 Behavior Management with Individuals with Exceptionalities (3:3:0)

This course addresses all elements of effective classroom management which emphasizes behavior reduction strategies that are consistent with a positive behavioral support approach. All ele-
ments of conducting a functional assessment in developing a behavioral support plan for school and /or employment settings are addressed. Prerequisite: SPRE 100, SPED 105.
SPRE 300 Developing Integrated Employment Opportunities (3:3:0)
This course is designed to help students majoring in rehabilitative services to become knowledgeable of modern designs of vocational education and career planning for individuals with disabilities, and knowledgeable of federal, state, and local regulations concerning vocational training and to develop an awareness of problems of integrating persons with disabling conditions into the general work force. Prerequisite: SPRE 100.
SPRE 301 The Vocational Rehabilitation Process (3:3:0)
This course assists students in Rehabilitative Services to develop an understanding of the vocational rehabilitative process. The roles and duties of rehabilitation counselors will be discussed, including case management, assessment and interviewing functions. Prerequisites: SPRE 100, 200, 201; SPED 105.
SPRE 315 Transition from School to Adulthood (3:3:0)
This course provides students with a proactive approach to transition planning for the provision of services that result in positive adult outcomes for students leaving the school system. Prerequisites: SPRE 100, 200, 201; SPED 105.

## SPRE 486 Field Experience and Internship (12 credits)

This course consists of at least one field experience placement with populations having physical or mental disabilities in various agencies, developmental centers, rehabilitation facilities, and the like that serve the needs of that population throughout the tri-county area. Assignments in other geographical areas may be utilized when deemed appropriate and approved by the Department Chairperson. Intern supervision will be provided by the faculty of Special Education and Rehabilitation.
SPRE 487 Internship Practicum (1:0:0)
The Internship Practicum meets on a regular basis to provide current interns in the Rehabilitative Services major with an opportunity to discuss current issues in their internship experiences and to further explore topics of interest. The topics within each practicum session represent immediate intern needs regarding professional growth and development. corequisite: SPRE 486

The Rehabilitative Program is being redesigned in order to continue to meet the needs of the students and adults in the field. Additional areas of training and changes in course selections and requirements may occur. Please contact the chair of the department with any questions.

## Bachelor of Science Degree in Rehabilitative Services



## Social Studies

## School of Arts and Sciences <br> The Faculty of Social Studies

Dual Degree/Bachelor of Science in Secondary Education (Social Studies Certification) and Bachelor of Arts in one of the following social sciences: Geography, History, Political Science or Economics.

Geography Emphasis: 134 total credits (including BA in Geography, PSED courses, general education requirements, and required corequisites)

- BA requirements in Geography ( $\mathbf{3 3}$ credits): ECON 111 and 112
- HIST 499
- and two of the following: HIST 111, 112, 113;
- and two of the following: HIST 141, 142, 143, 144, one upper-level HIST elective, POLS 111 and 211, SOC 102 and 111, PSY 100
- Corequisites: CPSC 110 or 111; ENGL 103 and a literature course, MATH 110 and a second course in mathematics (excluding MATH 090), level 2 of a foreign language, MCOM 262, PSED 161, 242, 420, 421, 430, 431, 458, REED 321.

History Emphasis: 134 total credits (including BA in History, PSED courses, general education requirements, and required corequisites)

- BA requirements in History (36 credits): ECON 111 and 112
- GEOG 110 and 120
- HIST 499, POLS 111 and 211, and one upper-level POLS elective
- PSY 100, SOC 102 and 111, any one of the following: ECON 221, EMGT 359, SOC 343, GEOG 230, or GEOG 310
- Corequisite: ENGL 103 and a literature course; two courses in mathematics (excluding MATH 090), MCOM 262; PSED 161, 242, 420, 421, 430, 431, 458, REED 321.

Political Science Emphasis: 134 total credits (including BA in Political Science, PSED courses, general education requirements, and required corequisites)

- BA requirements in Political Science (30 credits): ECON 111 and 112
- GEOG 110 and 120
- HIST 499
- and two of the following: HIST 111, 112, 113
- and two of the following: HIST 141, 142, 143, 144, two history electives (one up-per-level), PSY 100, SOC 102 and 111.
- Corequisites: ENGL 103 and a literature course; two courses in mathematics (excluding MATH 090), MCOM 262, PSED 161, 242, 420, 421, 430, 431 458, REED 321.

Economics Emphasis: 134 total credits (including BA in Economics, PSED courses, general education requirements, and required corequisites)

- BA requirements in Economics ( 39 credits, including two MATH courses): GEOG 110 and 120
- HIST 499
- and two of the following: HIST 111, 112, 113
- and two of the following: HIST 141, 142, 143, 144, one upper level HIST elective, POLS 111 and 211
- PSY 100, Soc 102 and 111.
- Corequisites: ENGL 103 and a literature course; MCOM 262, PSED 161, 242, 420, 421, 430, 431, 458, REED 321.

Social Studies - Social Work
The Commonwealth of Pennsylvania has established new requirements for all candidates in teacher preparation programs. Please refer to the section The College of Education in this cata$\log$ for specific requirements for admission into teacher education programs.
Please see the university requirements in this catalog.

## Social Work

School of Arts and Sciences<br>The Faculty of Social Sciences<br>Stroud Hall, Room 414

www.esu.edu
The goal of the Social Work program is to provide students the educational background necessary for competent generalist social work practice in a range of human service settings and/or to pursue graduate study in social work or related disciplines.
This program is offered by the Sociology Department. Please refer to the Sociology section of the catalog for additional information about the Sociology major.

## Social Work concentration - 24 semester hours

- Required prerequisite courses: SOC 111, 310, 311.
- Required concentration courses: SOSW 483, 484.
- Electives: 12 semester hours from SOC 342, 343, 377, 442, 486; SOSW 321, 322, 325, 326.


## Transfer Policy:

1. No upper level ( 300 or 400 level) courses will be accepted from junior and community colleges for the Social Work concentration.
2. For Social Work concentration-a minimum of 15 credits in Social Work must be taken at ESU, and 300 and 400 level courses from 4 year colleges accepted only with permission of the department.

## Suggested Plan of Study

Second Year

| SOC 310: Intro to Social Welfare | 3 |
| :--- | ---: |
| SOC 311: Intro to Social Work | 3 |
| Social Work elective (SOC 442: Sociology of Aging recommended) | 3 |
| Subtotal | $\mathbf{9}$ |

Third Year

| Social Work (SOSW) electives | $6-9$ |
| :--- | :---: |
| Subtotal | $6-9$ |

Fourth Year

| SOSW 483: Social Work Practice and Skills I | 6 |
| :--- | ---: |
| SOSW 484: Social Work Practice and Skills II | 6 |
| SOC 486: Field Work and Observation | $3-6$ |
| Social Work elective | 3 |
| Subtotals | $\mathbf{1 5 - 1 8}$ |

## Sociology

| School of Arts and Letters |  |
| :---: | :---: |
| The Faculty of Social Sciences |  |
| Stroud Hall, Room 414 | 570-422-3453 |
| www.esu.edu |  |
| Department faculty |  |
| Professor: | Barbara Collins, chair (bcollins@po-box.esu.edu) |
| Assistant Professors: | Marianne Cutler (mcutler@po-box.esu.edu) |
|  | Gloria Gadsden (ggadsden@po-box.esu.edu) |
|  | Chin Hu (chu@po-box.esu.edu) |
|  | John Kraybill-Greggo (jkgreggo@po-box.esu.edu) |
|  | Gerard LaSalle (glasalle@po-box.esu.edu) |
|  | Reto Muller (rmuller@po-box.esu.edu) |
|  | Hooshang Pazaki (shpazaki@po-box.esu.edu) |
| Instructor: | Michael Muth (mmuth@po-box.esu.edu) |

Three baccalaureate degree programs are offered: a bachelor of arts in Sociology; a bachelor of arts in Sociology with a concentration in Criminal Justice; and a bachelor of arts in Sociology with a concentration in Social Work.

The course requirements and course descriptions for these programs are listed below, followed by a suggested plan for completing the Sociology degree and concentrations in eight semesters.

## Bachelor of Arts with a Sociology major- $\mathbf{3 3}$ semester hours

- Required major courses: SOC 111, 251, 252, 312, 370, and 495; 15 additional semester hours (a minimum of 21 semester credits in Sociology must be earned at ESU including SOC 412 and 472).
- Other requirements:
- Minimum Quality point average of 2.5 in major at time of graduation
- Minimum of "C" in all required courses
- 21 semester credits in Sociology must be earned at ESU including SOC 251, $251,312,370$, and 495.
- Please see the university requirements in this catalog.

Concentration in Criminal Justice- $\mathbf{2 4}$ credits
See Criminal Justice, Page 143

## Concentration: Social Work-24 semester hours

See Social Work, Page 320

## Course Descriptions

(Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title.)
SOC 102 GE: Introduction to Cultural Diversity (3:3:0)
This course provides a cross-cultural study of all human behaviors and social arrangements in contemporary cultures. Topics surveyed include race and ethnicity; language; gender and sexuality; age and kinship roles; religion and spiritual life; marriage and the family; political and economic behavior; globalization and cultural change; and the arts. The main focus will be on the application of the anthropological perspective and methods for understanding social and cultural differences and similiarities.

## SOC 111 GE: Introduction to Sociology (3:3:0)

This course examines the nature of social phenomena, fields and methods of sociology, and social processes involved in the evolution of human society.
SOC 231 GE: Marriage and Family (3:3:0)
This course examines the "family" in its various forms. Special attention will be placed on an analysis of the family as an ideological construct that upholds lines of difference according to race, class, gender, and sexual identity. Family change is studied throughout the course, including shifts in patterns of dating and courtship, cohabitation, the division of both paid and unpaid labor, divorce and blended families.

## SOC 241 GE: Contemporary Social Problems (3:3:0)

This course introduces students to the sociological study of social problems facing contemporary American society. It explores the social, political, and cultural causes, consequences, and possible solutions to social problems related to health care, crime, poverty, and inequality based on social class, racial and ethnic background, gender, and sexual orientation. Prerequisite: SOC 111.
SOC 251 Sociological Inquiry (3:3:0)
This course will familiarize students with the sociological perspective, the history of sociology, and major contemporary sociological paradigms and their historical roots. We will examine the role sociology plays in the larger society, consider the theories and research methods used by sociologists, and develop skills needed for a rewarding academic career as a major in our department. The course is also designed to help students sharpen their analytic and critical thinking skills as well as become more effective writers, listeners, and participants in the sociologically examined life. Prerequisite: SOC 111 (with a C or better)
SOC 254 Quantitative Approaches in Sociology (3:3:0)
This course is a survey of the quantitative approaches for students in sociology. This course is designed to introduce the basics of the quantitative approaches in sociology to students majoring in sociology. The main emphasis will be on the applications of the quantitative methods and the interpretation of results in sociological reports and writings. Students will learn the logic and the applications of the quantitative methods of data analysis that are commonly utilized in sociology. Potential strengths and weaknesses of various quantitative methods of data analysis in sociological research will be discussed. Prerequisite: SOC 111 (grade of C or better)
SOC 290 Special Topics (Semester hours arranged)
These courses are designed to meet specific needs of groups of students or are offered on a trial basis in order to determine the demand for and value of introducing them as part of the university curriculum.
SOC 301 GE: The American, British, French, Italian, and German Cultures: Comparison (3:3:0)
The central aim of this course is to introduce students to the basic sociological concepts of personality system, social system, cultural system, and the formation of a national character. This analysis will help students to better understand themselves, the sociocultural environment in which they live, and the sociocultural differences that exist between people coming from different societies. After having developed a theoretical framework and a practical paradigm to understand the notion of "national character" these will be applied to define the national character of Americans, British, French, Italians, and Germans. Prerequisite: SOC 111.

## SOC 310 GE: Introduction to Social Welfare (3:3:0)

This course is designed to help students understand social welfare as a social institution, gain a practical knowledge of the working of various programs, and achieve some insight into the meaning of social welfare to the human beings involved. The student is encouraged to develop critical judgment about the adequacy of social welfare programs. Prerequisite: SOC 111.

## SOC 311 Introduction to Social Work (3:3:2)

This course is intended for students interested in social work and other helping professions to become familiar with theory and practice in the three major social work fields (casework, group work, and community organizations), to gain some insight into social work research, supervision, and social policy making, to study the generic principles common to the major fields of practice (i.e., suitable for a variety of situations calling for intervention with individuals, groups, and communities), and to explore employment opportunities. Prerequisite: SOC 111.

SOC 312 Research Methods (3:3:0)
This course examines procedures for planning, organizing, and conducting qualitative and quantitative sociological research projects. Students will acquire the skills to implement research using a variety of methodologies, including surveys, interviews, and ethnographic field research. Prerequisite: SOC 111, 251, 252.
SOC 331 Sociology of Aging \& the Life Course (3:3:0)
This course examines the aging process across the life course from a sociological perspective. It focuses on providing a framework for understanding aging as a social construct that is influenced by changing social structures and historical, cultural and social forces. This course also highlights sociological research on aging and explores the implications for social policy. Prerequisites: 6 credits in SOC including SOC 111.

## SOC 338 The Sociology of Poverty and Homelessness (3:3:0)

This course focuses on helping students develop an understanding of the dimensions of poverty and homelessness in the United States and explores the implications for distributive justice. Students will assess the effectiveness of the social policies and programs created to combat poverty and homelessness and participate in course-based service-learning and social action projects. Prerequisite: SOC 111 and 310.

## SOC 341 GE: Criminology (3:3:0)

This course is an examination of theories of crime causation, demographic characteristics of criminals, the history of theories of punishment, and modern reformative and rehabilitative methods. Prerequisite: SOC 111.

## SOC 342 GE: Juvenile Delinquency (3:3:0)

This course is a study of the delinquent as a person and juvenile delinquency as a social problem and theories of delinquent causation, methods of correctional treatment and community preventive projects will be systematically studied. Prerequisite: SOC 111.
SOC 343 GE: Racial and Cultural Minorities (3:3:0)
This course examines dominant-minority relations in the U.S. Special emphasis will be placed on how social, economic, and political power and privilege help create and perpetuate prejudice and discrimination. As America becomes more racially and culturally diverse, we need to make a greater effort to understand, respect, and benefit from the diversity around us. This course is intended to help students discover these benefits as well as deal with the challenges that go hand in hand with an increasingly multicultural society. Prerequisite: SOC 111.
SOC 344 Social Deviance (3:3:0)
This course will explore how and why certain acts come to be defined as deviant. Students will examine how deviance is defined, how the "actors" are maintained, and how violators of the definitions are processed and treated. A historical analysis of political processes that inform the evolution, modification, and enforcement of "deviant" categories will be discussed through the lens of various sociological perspectives. Prerequisites: 6 credits in SOC including SOC 111.

## SOC 370 Sociological Theory (3:3:0)

This course is designed to give the student an overview of sociological theory. Students will be introduced to a wide range of theories and theoretical orientations and the major theorists associated with them. The course covers both classical and contemporary sociological theory. Special emphasis is placed on the strengths and weaknesses of each approach and the link between theory and substantive research. Prerequisites: SOC 111, 251.
SOC 372 Sociology of Religion (3:3:0)
This course explores religion in its varied manifestations as a social institution, as a cultural practice, and as a pattern of beliefs and practices that are shaped by and, in turn, shape societal conditions. Emphasis is placed on the role of religion in the public arena (political, the economical, and popular media), religious pluralism and conflict, the impact of race, gender, and social class on religion and the ongoing debate over the appropriate role of religion in social life. Prerequisite: SOC 111 and 102.

SOC 374 Political Sociology (3:3:0)
This course is the study of the social causes and consequences of given power distributions within or between societies and of the conflicts that lead to changes in the allocation of this power. The social backgrounds of extremist movements and of the "True Believers" that join them will be analyzed. Prerequisite: SOC 111.
SOC 377 GE: WS: Sociology of Women (3:3:0)
This course is specially designed to afford the student and/or professional person an open and non-threatening opportunity to examine both societal and personal sex role stereotyping and the attendant societal mechanisms by which these roles are mandated and enforced. A brief survey of women in society will be followed by an in-depth look at the women's movement and institutional change. Prerequisite: SOC 111.
SOC 378 GE: American Community (3:3:0)
This course examines the nature, structure, and functions of the community. It includes a study of the inter-relations of major institutions in the community; attention is directed to the city, the small town, and the rural community. Prerequisite: SOC 111.
SOC 390 Field Work and Observation (3:3:0)
This course is designed to provide the student with the opportunity to obtain practical experience with an agency in the community. Supervision will be given by both the community agency and the instructor. Periodic meetings will be held to discuss the experience. Prerequisites: SOC 111, consent of instructor.
SOC 485 Independent Study (Semester hours arranged)
This course consists of directed research and study on an individual basis. The student wishing independent study must contact a member of the Department of Sociology who is willing to supervise the study. The student's request for independent study must then be approved by the members of the Department. A minimum of five (5) hours per credit of exclusive time with the supervising faculty member will be made available to the student. Prerequisite: Advanced standing of 90 credits.

## SOC 486 Field Work and Observation (Semester hours arranged)

This course is designed to provide the student with the opportunity to obtain practical experience with an agency in the community. Supervision will be given by both the community agency and the instructor. A weekly seminar class will be held with the instructor to discuss the experience. Prerequisites: Advanced standing of 90 credits, arrangements with and consent of instructor before registration.
SOC 487 \& 488 Foreign Travel I \& II (3:3:0), (3:3:0)
This course consists of a study trip to observe at first hand the metamorphosis of postwar Europe, a study of the history and governmental systems of Western European countries, their economic growth and integration through the common market, investigation of the social environment on a formal and informal basis, and a general study of Western Europe in the post-war world. Prerequisites: Advanced standing of 90 credits, consent of the chair of the department.
SOC 490 Social Implications of Computers (3:3:0)
This course presents concepts on how computers impact our lives and our society. It provides a framework for professional activity that involves explicit consideration of the social impacts of computers and presents tools and techniques which are applicable to the problems posed by the social implications of computers. Prerequisites: CPSC 111, 112, 231, 251.

## SOC 495 Seminar (3:3:0)

This course consists of discussion and intensive study of selected topics, issues, problems, sociological writings, and investigations. Prerequisites: Advanced standing in Sociology, consent of instructor, SOC 111, 21 additional SOC credits including SOC 412 and 472.

## SOC 498 WS: Seminar in Women's Studies (3:3:0)

This seminar is designed to enable students from various disciplines to analyze and synthesize data, ideas, and academic perspectives as they focus on the personal and societal dimensions of gender and roles as these differentiate and affect female experience and activities. Prerequisite: Completion of 9 credits of Women's Studies courses, including SOC 377.

## Sociology - Criminal Justice Courses

For more information, see Criminal Justice Administration, Page 143

## SOCJ 150 Introduction to Criminal Justice (3:3:0)

This course is an overview of the role of police, prosecution, court, and correctional processes in the administration of criminal justice in the United States. This course is offered in cooperation with the Criminal Justice Administration Program. It will not count toward the Sociology major.

## SOCJ 151 Introduction to Security (3:3:0)

This course discusses the history, nature, and scope of private security in modern society, the basic principles of physical security, internal loss prevention, defensive systems, fire prevention and safety, and the security function in the corporate structure. This course is offered in cooperation with the Criminal Justice Administration Program. It will not count toward the Sociology major.

## SOCJ 250 Corrections (3:3:0)

The correctional process (sentencing, incarceration, and release) will be examined. Prison classification, treatment systems, life "inside," discipline, inmates' rights, and parole prediction are studied. The course is offered in cooperation with the Criminal Justice Administration program. It will not count toward the Sociology major.

## SOCJ 251 Police Organization and Administration (3:3:0)

This course is an examination of the historical development and present organization and administration of police departments and a consideration of the principles of organization best adapted to ensure effective service to the community. This course is offered in cooperation with the Criminal Justice Administration Program. The course will not apply toward the Sociology major.

## SOCJ 252 Organized Crime (3:3:0)

The history, growth, structure, philosophy, and scope of Organized Crime will be studied. Effective methods of prosecuting this type of crime will be reviewed. The course is offered in cooperation with the Criminal Justice Administration program. It will not count toward the Sociology major.
SOCJ 253 Violence in Society (3:3:0)
This course is an in-depth study of violence, with topics such as riots, campus and civil disorders, violent crime, terrorism, and assassinations discussed in detail to give the student an insight into this deviant behavior. The course is offered in cooperation with the Criminal Justice Administration Program. It will not count toward the Sociology major.

## SOCJ 350 The Criminal Process (3:3:0)

This course provides an overview of the criminal process from arrest through trial and sentencing. It includes discussions of the law and procedures applicable at each stage, including classification of crimes, warrants, searches and seizures, confessions, evidence, preservation, preliminary hearings, motions, pleas, and trials. Particular crimes are treated substantively as necessary to supply examples. Practical exercises are contemplated. This course is offered in cooperation with the Criminal Justice Administration Program. The course will not apply toward the Sociology major. Prerequisite: SOC 150.
SOCJ 351 Police Investigation (3:3:0)
This course considers appropriate conduct at the crime scene, techniques of interview, interrogation of witnesses and suspects, the uses of informants, studies of specific investigative methods for particular kinds of cases, and the presentation of police cases in court. The course is offered in cooperation with the Criminal Justice Administration Program. It will not count toward the Sociology major. Prerequisite: SOC 150.

## SOCJ 352 Police and Community Relations (3:3:0)

This course is a review of the problems confronting the police and the community, a study of minorities to gain an understanding of their particular problems, an in-depth look at ways of achieving trust, understanding, respect, and cooperation from the public that the police serve. This course is offered in cooperation with the Criminal Justice Administration Program. The course will not apply toward the Sociology major. Prerequisite: SOC 150.

SOCJ 353 Crisis Management in Law Enforcement (3:3:0)
This course will introduce students to the current issues of managing critical incidents and hostage situations that occur in law enforcement and corrections. It will focus on those activities necessary to stabilize life and property threatening incidents. It will provide an understanding of commanding high-risk incidents, pre-incident planning, and critical incident stress reactions. This course is offered in cooperation with the Criminal Justice Administration Program. The course will not apply toward the Sociology major. Prerequisite: SOC 111 or SOCJ 150.
SOCJ 354 Drug Use and Abuse in Society (3:3:0)
This course will focus on drug use and abuse as it pertains to today's society. It will offer an indepth look into the various types of drugs and how they affect the body along with the implications that arise through the abuse of these substances. It will explore the concept of addiction to the various controlled substances that are available pharmaceutically and on the black market. Stimulants, depressants, and hallucinogens will be discussed in-depth, along with the various State and Federal Laws that apply to the Controlled Substance Acts. Lastly it will look at alcohol use and abuse, over the counter medications, and the emerging trends of drug use that are ever changing in our society. This course is offered in cooperation with the Criminal Justice Administration Program. The course will not apply toward the Sociology Major. Prerequisite: SOC 111 or SOCJ 150.
SOCJ 460 Schools, Gangs, Violence and Society (3:3:0)
This course will examine the various aspects of violence as they relate to the school setting. It will take an in-depth look at gangs, weapons, and drugs in the school environment. This course will discuss some of the more recent approaches from law enforcement perspective that have worked in combating school violence. This course is offered in cooperation with the Criminal Justice Administration Program. The course will not apply toward the Sociology major. Prerequisite: SOC 111 or SOCJ 150, and a second course in Sociology.

## Sociology - Social Work Offerings

For more information, see Social Work, Page 320

## SOSW 321 Helping Philosophies and Methods for Social Workers (3:3:0)

This course provides an introduction to the main modern therapies that professional social workers can use with their clients or take into consideration in making referrals. The main assumptions, concepts, and methods of dynamic psychotherapy, behavior therapy, and humanistic psychotherapy will be analyzed and illustrated. Prerequisite: SOC 311. Not for the Sociology major.
SOSW 322 Theory and Practice in Groups (3:3:0)
The focus of this course is small group theory and practice as applicable to social work practice. Social work intervention with family groups, problem-centered groups, and social action focused groups will each be examined. Focus will be both on developing understanding of group dynamics and group process, and developing skills in group work practice. This course will not count for the Sociology major. Prerequisite: SOC 311.
SOSW 325 Crisis Intervention (3:3:0)
This course will introduce students to the theoretical knowledge and practice skills necessary to competently intervene as crisis counselors in selected crisis situations. This course does not count for the Sociology major. Prerequisite: SOC 311 or permission of instructor.

## SOSW 326 Child Welfare Services (3:3:0)

This is a social welfare policy course providing a comprehensive study of principal child welfare policy and services. Supportive, supplementary, protective, substitute services will be covered with a special focus on the problem of child abuse and neglect. Emphasis will be on child welfare services as a field of social work practice. This course will not count toward the Sociology major. Prerequisite: SOC 311.

## SOSW 483 Social Work Practice and Skills I (6:2:arranged)

This course is designed to provide in-depth knowledge and skills in the professional practice of social work through an integrated class and agency-based learning experience. Major theories related to professional practice will be examined and skills in assessment, planning change, and evaluation will be developed. Emphasis is placed on the development of an increased understanding of the use of self in the professional social work role. This course will not count toward the sociology major. Prerequisites: SOC $310,311$.

## SOSW 484 Social Work Practice \& Skills II (6:2:arranged)

This course concentrates on the advanced study of social work knowledge, method, and skills through the integration of class and field involvement in a social agency. Students will be assigned, prior to class, to a specific social service agency where they will spend approximately 12 hours per week in addition to a two hour class. Only students enrolled in the Social Work concentration may enroll. This course will not count toward the Sociology major. Prerequisites: Completion of all requirements of the Social Work Concentration including SOC 310, 311, 483.

## Bachelor of Arts with a Major in Sociology Suggested Four-Year Course of Study

First Year

| SOC 111: Intro to Sociology | 3 |
| :--- | ---: |
| SOC 251: Sociological Inquiry | 3 |
| ENGL 103: English Composition | 3 |
| CMST 111: Speech Communication | 3 |
| General Education electives | 18 |
| Subtotal | $\mathbf{3 0}$ |

Second Year

| SOC 252: Quantitative Approaches | 3 |
| :--- | ---: |
| Sociology Electives | $6-12$ |
| General Education electives | $9-15$ |
| Criminal Justice or Social Work Concentration courses of free <br> electives (See concentration's suggested plan of study) | $6-9$ |
| Subtotal | $\mathbf{3 0}$ |

Third Year

| SOC 312: Research Methods | 3 |
| :--- | ---: |
| SOC 370: Sociological Theory | 3 |
| General Education electives | 6 |
| Concentration courses or free electives | 12 |
| Upper-lever Sociology electives | $\mathbf{3 - 6}$ |
| Subtotal | $\mathbf{3 0}$ |

Fourth Year

| SOC 495: Seminar | 3 |
| :--- | ---: |
| Concentration courses or free electives | 27 |
| Subtotal | $\mathbf{3 0}$ |

## Sociology and Spanish

## School of Arts and Sciences <br> The Faculty of Social Sciences

## Bachelor of Arts with Sociology and Spanish majors- $\mathbf{5 4}$ semester hours

- Required Sociology courses: SOC 111, 412, 472, 18 additional semester hours (minimum of 27 semester hours).
- Required Spanish courses: FLSP 315, 336, 444, 18 additional semester hours (minimum of 27 semester hours).
- Please see the university requirements in this catalog.

Coordinating departments: Foreign Languages and Sociology-Anthropology.
This degree program prepares students for careers in social work, criminal justice and related fields in urban areas with large Spanish-speaking populations.

# Special Education and Rehabilitation 

College of Education

Stroud Hall Room 105
570-422-3558
www.esu.edu/sped

Department faculty
Professors:

Associate Professor:

Teri Burcroff (tburcroff@po-box.esu.edu) Diane Cavanagh (dcavanagh@po-box.esu.edu) Gina Scala, chair (gscala@po-box.esu.edu) Daniel Steere (dsteere@po-box.esu.edu) Domenico Cavaiuolo (dcavaiuolo@po-box.esu.edu) Joyce Burgener (jburgener@po-box.esu.edu) Heather Garrison (hgarrison@po-box.esu.edu)

This degree program prepares students for teaching students with mental and/or physical disabilities as well as working with parents, general educators, and related service personnel. The programs in Special Education reflect a curriculum that combine existing and emerging theory and best practices based upon a conceptual framework that develops educators who are reflective and deliberate decision makers. Beginning educators develop knowledge, process, and professionalism. Graduates of the Special Education program will be certified to teach students birth through 21 years of age; and the Special/Elementary Education Integrated major will additionally be certified in elementary education K-6. All students will be required to develop a plan to demonstrate Highly Qualified status as required by federal laws. The Department offers the Integrated Program of studies cooperatively with the Department of Early Childhood and Elementary Education, leading to certification in both Special Education and Elementary Education. The Commonwealth of Pennsylvania is currently proposing changes in certification requirements which may impact program requirements.

## Bachelor of Science with a Special Education major-Instructional I certificate (70 professional

 and major hours).- Required General Education courses: English 103, plus one 3-credit English literature course, and two 3-credit math courses (recommended courses of Math 105 and Math 205).
- Required Professional Education courses: PSED 161, PSED 242, ELED 132, MCOM 262, REED 211 and REED 315.
- Required major courses for Special Education Certification, only, SPED 105, 201, 210, 214, 215, 313 PDS, 314, 351 PDS, 420, 421, 430 and 431.


## Suggested schedule of required Professional or Major courses for Special Education certification only:

Year 1: Fall: SPED 105; PSED 161
Spring: ELED 132; MCOM 262
Year 2: Fall: SPED 201; SPED 210; PSED 242
Spring: SPED 214; REED 211
Year 3: Fall: SPED 314; SPED 215; REED 315
Spring: SPED 313 PDS; SPED 351 PDS
Year 4: Fall: SPED 420; SPED 421
Spring: SPED 430; SPED 431

## Bachelor of Science with an Integrated Special Education and Elementary Education major - 77 credits

- Required General Education Courses: English 103 and an English literature course, Math 105 and another three credits in Math (Recommended course Math 205)
- Required Professional Education courses: PSED 161, PSED 242, MCOM 262, REED 313.
- Required major courses: ELED 132, 264, 311, 342, 343, 344, 345, 346, 351; and SPED 105, 201, 210, 214, 215, 314, 351

Suggested schedule of required courses for the integrated major:

$$
\begin{array}{ll}
\text { Year 1: } & \text { MATH 105, ENG 103, ELED 132, PSED 161, SPED 105 } \\
\text { Year 2: } & \text { ENG Literature, MATH, PSED 242, ELED 264, MCOM 262, } \\
& \text { SPED 201, 210 } \\
\text { Year 3: } & \text { ELED 342, 343, 346, 351, SPED 214, 215, } 314 \\
\text { Year 4: } & \text { Professional Development School semester: ELED 311, 344, 345, } \\
& \text { SPED 351, REED 313; Student teaching semester: ELED 426, 430, } \\
& \text { SPED 420, 421 }
\end{array}
$$

## Department Admissions

The Commonwealth of Pennsylvania has established specific requirements for all candidates in teacher preparation programs. For admission into the initial teacher certification program, students are required to have a 2.8 GPA , pass the three Praxis I academic skills assessments and complete 6 credits of math and 6 credits of English (English composition and English literature) along with various clearances. Please refer to the section The College of Education in this catalog for specific requirements for admission into teacher education. Majors should meet regularly with their academic advisor in order to discuss and monitor major requirements and procedures for admission into each program. Information on requirements and procedures on admittance are available in the Department Student Handbook available in the department office.

## Student Teaching

Two semesters of student teaching are required for certification in SPED. Passing scores for Praxis II Fundamental Subjects Content Knowledge test must be submitted to the department office by the first day of the semester preceding the student teaching semester. Students must have a 3.0 or higher GPA prior to graduation from ESU to be certified in the State of Pennsylvania.

## Course Descriptions

(Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title.)

## SPED 105 Foundations of Special Education (3:3:0)

The purpose of this course is to develop a foundation of knowledge about the nature and needs of learners with exceptionalities and their families, and a recognition of the existing and emerging models of service to these individuals. Emphasis will be placed upon Commonwealth classifications and services options, general administrative operational standards, and the nature and needs of identified individuals and their families. All students are required to complete a 30 -hour field project. Proof of appropriate clearances required.

## SPED 201 Assessment \& Evaluation in Special Education (3:3:0)

This course emphasizes the legal, ethical and procedural issues involved in the assessment process in special education. Basic measurement procedures, the referral to placement process, administration of formal/informal measures, and instructional planning concepts in general and special education will be addressed. Prerequisite: SPED 105.

## SPED 210 Learning Disabilities: Theory into Practice (3:3:0)

This course considers service delivery options, etiologic factors, and characteristics of students with specific learning disabilities. Metacognitive approaches to diagnosis and intervention are explored with emphasis on adapting instruction for diverse learning styles of individuals with learning disabilities in general and special education settings. Prerequisite: SPED 105.

## SPED 214 Behavior Management with Individuals with Exceptionalities (3:3:0)

This course addresses all elements of effective classroom management which emphasizes behavior reduction strategies that are consistent with a positive behavioral support approach. All elements of conducting a functional assessment in developing a behavioral support plan for school and/or employment settings are addressed. (Cross-listed with SPRE 214.) Prerequisite: SPED 105.

## SPED 215 Instructional Strategies for Individuals with Exceptionalities (3:3:0)

This course addresses instructional strategies to meet the unique learning needs of individuals with exceptionalities. Lesson planning, unit planning and I.E.P. development are key elements developed in this course with an emphasis on collaboration with other teaching and non-teaching staff members in all service delivery settings. Prerequisite: SPED 105,201,214
SPED 271 Recreation for Individuals with Exceptionalities (3:3:0)
This course provides the student with an opportunity to participate in an on-site outdoor education program for local school aged children with exceptionalities. Emphasis on special recreational services include the development, supervision and administration of programs for all types of exceptionalities. (Cross-listed with SPRE 271) Prerequisites: SPED 105, SPRE 100 and proof of appropriate clearances.

## SPED 290 Special Topics (Semester hours arranged)

These courses address the needs of groups of students or are offered on a trial basis in order to determine the demand for and the value of introducing them as a part of the university curriculum.
SPED 311 Etiology and Diagnosis of Individuals with Exceptionalities (3:3:0)
This course is a study of the causative factors of high and low incidence atypical cognitive, physical, psychological, medical and psychosocial conditions of children and adults. Emphasis is placed on the development of diagnostic skills and the recognition of diagnostic criteria in the clinical setting. Collaboration and teaming in the clinical, classroom and service agency are examined. Prerequisite: SPED 105.
SPED 313 Curriculum and Materials for Individuals with Mild Disabilities (3:3:0)
This course is a culmination of theory and practice courses that further investigates effective planning and teaching techniques needed for student teaching preparation and beyond. Students choose, evaluate and construct instructional materials. Students are required to participate in a 15 hour on campus tutoring program as well as a 30 -hour field based teaching experience. Prerequisites: SPED 105, 201, 210, 214, 215 Department Screening
SPED 314 Curriculum and Materials for Individuals with Severe Disabilities (3:3:0)
This course addresses curriculum development approaches for students with significant disabilities with an emphasis on age-appropriate functional education in school and community based programs. Students will apply a systematic approach to modification/adaptation planning for instruction and material use which includes person centered planning and general case study instruction. 15 hours of fieldwork is required. Prerequisite: SPED 105,201,214, Department Screening
SPED 351 Inclusionary Practices (3:3:0)
This course examines research-based effective practices that promote successful inclusion for students and adults in school and community settings. Collaboration, co-teaching, adaptations/modifications, differentiated instructional delivery models, and practical/philosophical approaches to inclusion are explored as well as legal and ethical issues related to inclusive practices are explored. Prerequisites: All Sped/Integrated/area of concentration students must complete all required 200 level classes as well as department screening prior to enrollment. Non-major students must have permission of instructor.

## SPED 420 Student Teaching in Special Education-Part I (12:0:30)

This course entails fifteen weeks of guided teaching of individuals with exceptionalities. Prerequisite: Departmental approval which is obtained when all requirements described under the Student Teaching section in this catalog have been completed, a minimum of 2.8 cumulative average in the major.

## SPED 421 Professional Practicum (2:2:0)

The Professional Practicum meets on a regularly scheduled basis. On-site seminars may be conducted by the university supervisor, including the presence of all on-site or neighboring-site student teachers. The topics governing the content of each Practicum session are representative of immediate student teacher needs regarding his/her professional growth and development. corequisite: SPED 420.

## SPED 430 Student Teaching in Special Education-Part II (12:0:30)

This course entails fifteen weeks of guided teaching of individuals with exceptionalities. Prerequisite: Departmental approval which is obtained when all requirements described under the Student Teaching section in this catalog have been completed, a minimum of 2.8 cumulative average in the major.

## SPED 431 Professional Practicum (1:1:0)

The Professional Practicum meets on a regularly needs basis. On-site seminars may be conducted by the university supervisor, including the presence of all on-site or neighboring-site student teachers. The topics governing the content of each Practicum session are representative of immediate student teacher needs regarding his/her professional growth and development. corequisite: SPED 430.

## SPED 452 Together: Mainstreaming in the Schools (3:3:0)

The purpose of the workshop is to cause meaningful interaction of special and regular education teachers. The interaction will enable them to review and to develop positive models for their particular schools that allow for exceptional and non-exceptional children to learn together, to respect each other, to know each other. A major emphasis will be devising through group interaction, a plan for implementation of mainstreaming in the particular schools. Since this course is also offered for graduate credit, a differentiation in requirements may be made. The course is cross-listed with ELED 452 or PSED 452. Prerequisites: Upper division standing, SPED 105.

## SPED 453 Creative Materials and Methods with Exceptional Individuals (3:3:0)

This course is offered for graduate or undergraduate credit. At the undergraduate level this course is designed for pre-professionals and paraprofessionals training to work with individuals with severe and multiple disabilities in the classroom or in a rehabilitative setting. Emphasis is on the construction and use of free and inexpensive household, institutional, and classroom resources for use with regular teaching materials.

## SPED 485 Independent Study (Semester hours arranged)

This course consists of directed research and study on an individual basis.

## SPED 486 Field Experience and Internship (14:0:0) (Semester hours arranged)

This course consists of at least one field experience placement with populations having physical or mental disabilities in various agencies, developmental centers, rehabilitation facilities, and the like that serve the needs of that population throughout the tri-county area. Assignments in other geographical areas will be utilized by the department when deemed appropriate. Field experience supervision will be provided by the faculty of Special Education and Rehabilitation.

## Bachelor of Science in Special Education

| Fall | Freshman Year |  | 3 |
| :---: | :---: | :---: | :---: |
| SPED 105 Foundations of Special Education | 3 | ELED 132 Child Growth and Development |  |
| PSED 161 Foundations of Education | 3 | MCOM 262 Educational Communication and Technology | 3 |
| General Education | 3 | General Education | 3 |
| General Education | 3 | General Education | 3 |
| ENGL 103 English Composition | 3 | FIT | 1 |
|  |  | MATH 105 Mathematical Problem Solving for Elementary Education Majors | 3 |
| Subtotal | 15 | Subtotal | 16 |
| Fall | Sophomore Year Spring |  |  |
| PSED 242 Educational Psychology | 3 | SPED 214 Behavioral Management with Individuals with Exceptionalities | 3 |
| SPED 201 Assessment \& Evaluation in Special Education | 3 | REED 211 Teaching of Reading in the Elementary School | 3 |
| SPED 210 Learning Disabilities: Theory into Practice | 3 | MATH 205 Geometry for Elementary Education Majors | 3 |
| General Education | 3 | General Education | 3 |
| English Literature | 3 | General Education | 3 |
|  |  | FIT | 1 |
| Subtotal | 15 | Subtotal | 16 |

Fall
Junior Year
Spring

| SPED 215 Instructional Strategies <br> for Individuals with Exceptionalities | 3 | SPED 313 Curriculum and Materials <br> for Individuals with Mild Disabilities | 3 |
| :--- | ---: | :--- | ---: |
| REED 315 Teaching Reading to Students <br> with Special Needs | 3 | SPED 314 Curriculum and Materials <br> for Individuals with Severe Disabilities | 3 |
| General Education | 3 | SPED 351 Inclusionary Practices | 3 |
| General Education | 3 | General Education | 3 |
| General Education | 3 | General Education | 3 |
| Subtotal | $\mathbf{1 5}$ | Subtotal | $\mathbf{1 5}$ |


| Fall |  |  |  |
| :--- | ---: | :--- | ---: |
| SPED 420 Student Teaching in Special <br> Education - Part I | 12 | SPED 430 Student Teaching in Special <br> Education - Part II | 12 |
| SPED 421 Professional Practicum | 2 | SPED 431 Professional Practicum | 1 |
|  |  | Elective $^{*}$ | 1 |
| Subtotal | 14 | Subtotal | 14 |

TOTAL CREDITS

# Bachelor of Science <br> Major in Elementary and Special Education Integrated Program 

| Fall | Freshman Year |  | Spring |
| :---: | :---: | :---: | :---: |
| PSED 161 Foundations of Education | 3 | ELED 132 Child Growth and Development | 3 |
| ENGL 103 English Composition | 3 | MATH 105 Problem Solving for El.Ed | 3 |
| General Education | 3 | SPED 105 Foundations of Special Education | 3 |
| General Education | 3 | General Education | 3 |
| General Education | 3 | General Education | 3 |
| PPST Praxis I Tests Taken |  | Fitness | 1 |
| Subtotal | 15 | Subtotal | 16 |
| Fall | Sophomore Year |  |  |
| SPED 201 Assessment and Evaluation in Special Education | 3 | ELED 264 Principles and Practices of Teaching | 3 |
| SPED 214 Behavior Management With Individuals with Exceptionalities | 3 | MCOM 262 Educational Communications and Technology | 3 |
| PSED 242 Educational Psychology | 3 | SPED 210 Learning Disabilities: Theory Into Practice | 3 |
| English Literature | 3 | General Education | 3 |
| Mathematics | 3 | General Education | 3 |
| General Education | 3 | Fitness | 1 |
| Subtotal | 18 | Subtotal | 16 |
| Fall Junior Year Spring <br> Admittance to department between 48-60 credits. Must be admitted to take 300/400 level courses |  |  |  |


| SPED 215 Instructional Strategies <br> for Individuals with Exceptionalities | 3 | SPED 314 Curriculum and Materials for Indi- <br> viduals with Severe Disabilities | 3 |  |  |  |  |
| :--- | ---: | :--- | ---: | :---: | :---: | :---: | :---: |
| ELED 342 Language Arts in Childhood Ed | 3 | ELED 343 Mathematics in Childhood Ed | 3 |  |  |  |  |
| ELED 346 Children's Literature | 3 | ELED 351 Music in Childhood Education | 3 |  |  |  |  |
| General Education | 3 | General Education | 3 |  |  |  |  |
| General Education | 3 | General Education | 3 |  |  |  |  |
| Free Elective | 3 | PRAXIS II Fundamental Subjects Content <br> Knowledge Test |  |  |  |  |  |
| Subtotal | $\mathbf{1 8}$ | Subtotal | 15 |  |  |  |  |
| Fall |  |  |  |  | 3 | Student Teaching in Elementary Education | 6 |
| SPED 351 Inclusionary Practices | 3 | Student Teaching in Special Education | 6 |  |  |  |  |
| ELED 311 Art in Childhood Education | 3 | SPED 421 Professional Practicum | 2 |  |  |  |  |
| ELED 344 Science in Childhood Education | 3 |  |  |  |  |  |  |
| ELED 345 Soc. Studies in Childhood Educ | 6 | Praxis II: ELED and SPED Specialty Tests |  |  |  |  |  |
| REED 313 Foundations in Reading | 0 |  |  |  |  |  |  |
| Apprentice II Semester in a PDS cohort | $\mathbf{1 8}$ | Subtotal | $\mathbf{1 4}$ |  |  |  |  |
| Subtotal |  |  |  |  |  |  |  |

## Speech-Language Pathology

The Faculty of Health Sciences<br>LaRue Hall<br>Department faculty<br>Professors:

School of Health Sciences and Human Performance

570-422-3247
www.esu.edu/spa
Robert Ackerman (rackerman@po-box.esu.edu)
Elaine Shuey (eshuey@po-box.esu.edu)
Joyce Simpson, chair (jsimpson@po-box.esu.edu)
Jane Page (jpage@po-box.esu.edu)
Ann Millett (amillett@po-box.esu.edu)

## Bachelor of Science with a Speech-Language Pathology major- $\mathbf{3 3}$ semester hours

This is a preprofessional degree. Upon its completion, students must pursue a master's degree before gaining employment as a certified speech-language pathologist.

- Required major courses: SPPA 101, 113, 121, 214, 231, 241, 312, 342, 361, 443, 456, 457
- Corequisites: BIOL 111 or 114; CPSC 100 or 101; MATH 100 or 101, and MATH 110; PHYS 101 or 110; ELED 132 or PSY 225; PSY 301 or 311
- Please see the university requirements in this catalog.

To enroll in SPPA 457, students must present evidence that they carry professional liability insurance and have passed the HIPAA confidentiality exam. They must also have a current (within a year) TB test, and Acts 34 (criminal record) and 151 (child abuse) clearances.

## Academic Criteria:

- All incoming students (freshmen, transfers, etc.) must meet with the department chair to set up their education plan leading to admission into the clinical portion of the SPPA program.
- All transfer students, both ESU and other institutions, must have a 3.0 cumulative quality point average to declare SPPA as their major. Transfer students will work with the department chair on an individual basis to set up education plans that can be completed in a timely manner.
- A 3.0 quality point average in the major and a 3.0 cumulative quality point average are required for admission to the clinical portion of the program.
- Admission to the clinical portion of the program is required for approval to enroll in SPPA 342, 443, and 457.
- An information booklet describing specific program requirements can be obtained from the department chair.
- At least 24 of the required 33 credits in SPPA must be taken at ESU, including all courses above the 100 level, unless waived by the department chair.


## Course Descriptions

(Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title.)

## SPPA 101 Speech and Language Development (3:3:0)

This course is a study of normal development of speech and language in the child, the structure of language as it pertains to expression and content, and the psychological and physiological bases of language.

## SPPA 113 Phonetics (3:3:0)

This course is an analytic study of speech sounds, the normal production of speech sounds and the symbols of the International Phonetic Alphabet, and analysis of defective speech sounds and study of articulation testing.

## SPPA 121 Introduction to Communication Disorders (3:3:0)

This course is a survey of etiology, methods of evaluation, and treatment of speech disorders, with emphasis on the understanding of the individual client and remedial procedures for articulation cases.

## SPPA 131 Introduction to Sign Language (3:3:0)

This course is designed to introduce the student to sign language and total communication. Its purpose is to provide practice in learning a core sign language vocabulary and basic sentence structure. This course will cover topics including the history of sign language and how it relates to communication for the hearing impaired, the mentally retarded, and other individuals needing alternate modes of communication. This course does not satisfy any SPPA major or elective requirements.

## SPPA 214 Anatomic and Physiologic Bases of Speech and Hearing (3:3:0)

This course is a study of the anatomy and physiology of the head, neck, and trunk as it relates to speech and hearing; the process of respiration, phonation, resonation, articulation, and feedback are examined.

## SPPA 231 Introduction to Audiology (3:3:0)

This course is a survey of the etiology, symptomatology, and management of peripheral hearing problems in children and adults, a study of audiometric testing, and an investigation of the role of the parent, educator, and specialists in the total rehabilitative effort.
SPPA 241 Introduction to Language Disorders (3:3:0)
This course is a study of neurophysiological bases upon which oral language is built, exploration of learning theories related to language acquisition, analysis of types of language disorders, study of diagnostic procedures, and plans for remediation. Prerequisites: SPPA 101, 113, 121.
SPPA 290 Special Topics (Semester hours arranged)
These courses are designed to meet specific needs of groups of students or are offered on a trial basis in order to determine the demand for and value of introducing them as a part of the university curriculum.

## SPPA 312 Speech Science (3:3:0)

This course will provide an understanding of the principles of speech production and reception. Students will be introduced to the basic principles of sound as they related to theories of voice production, the acoustic theory of speech production, linguistic organization, acoustic characteristics of the speech signal, basic instrumentation and basic research issues. Prerequisites: SPPA 101, 113 or FLNG 361.

## SPPA 321 Communication and Aging (3:3:0)

This course is an introduction to the communication characteristics of older adults. Emphasis is placed on the changes in speech, language, voice, fluency, and hearing that are expected with normal aging, as well as the common disorders encountered in this age group. Students are expected to demonstrate a basic understanding of these characteristics, practical techniques to compensate for resulting communication problems, and when and to whom to make referrals if further testing/therapy is needed. Prerequisites: completion of an SPPA course, or a course in the Gerontology Concentration.

## SPPA 342 Articulation and Fluency Disorders (3:3:0)

This course is a study of the causes, symptoms, evaluation, and management of articulation and fluency disorders. Prerequisites: SPPA 113, 121, and formal admission to the clinical portion of the program.

## SPPA 361 Psycholinguistics (3:3:0)

This course is designed to familiarize students with the structure of language and linguistic phenomena. They will learn how language is processed by the brain and the bases of psycholinguistics, i.e., the acquisition, storage, comprehension and production of language. Prerequisites: SPPA 101, 113, 214.

## SPPA 414 Neurologic Bases of Communication (3:3:0)

This course is a study of the neurologic control of communication, including language, speech, and hearing; and the neurologic control of swallowing. Neuropathologies associated with communication disorders and swallowing disorders are introduced. Prerequisites: SPPA 214, 241, 342, and formal admission to the clinical portion of the program.
SPPA 423 Multicultural Issues in Speech-Language Pathology (3:3:0)
This course will focus on identification, assessment, intervention and prevention of communication disorders in diverse linguistic and cultural populations including all age groups. Prerequisites: SPPA 101 and 113 or 121; SOC 102 or 111.
SPPA 457 Introduction to Clinical Practice (3:3:0)
This course is designed to introduce SPPA majors to the clinical aspects of the profession of a Speech-Language Pathologist. They will learn the requirements for entry into and maintaining membership in this field. They will have clinical experiences in a variety of settings. Prerequisites: SPPA 241, 342, formal admission to SPPA Department, completion of 25 hours of therapy observation.

## SPPA 485 Independent Study (Semester hours arranged)

The student is expected to submit a written request for Independent Study to the individual instructor and to include a prospectus of his/her proposed work. These may be research projects, advanced or specialized clinical methods, or in-depth study of a particular topic. Work may be done for one, two, or three credits as arranged with the instructor. Prerequisites: SPPA 231, 342.
SPPA 486 Field Experiences and Internship (Semester hours arranged)

## Bachelor of Science Speech-Language Pathology

 Sample 4-Year Curriculum Plan| Fall | Freshman Year | an Year Spring | Spring |
| :---: | :---: | :---: | :---: |
| SPPA 113 Phonetics | 3 | SPPA 101 Speech \& Language Dev | 3 |
| SPPA 121 Intro to Comm Disorders | 3 | PSY 100 GE: General Psychology | 3 |
| BIOL 111 GE: Human Anatomy \& Phys I | 4 | CMST 111 GE" Speech Communications | 3 |
| ENGL 103 English Composition | 3 | MATH 100 or 101 General Education | 3 |
| General Education (Group C) | 3 | General Education (Group C) | 3 |
| Subtotal | 16 | Subtotal | 15 |
| Fall | Sophomore Year Spring |  |  |
| SPPA 214 Anatomy \& Physiology Bases | 3 | SPPA 312 Speech Science | 3 |
| SPPA 231 Introduction to Audiology | 3 | SPPA 241 Language Disorders | 3 |
| CPSC 100 or 101 | 3 | PSY 225 or ELED 132 | 3 |
| General Education (Group C) | 3 | General Education (Group C) | 3 |
| General Education (Group C) | 3 | General Education (Group A) | 3 |
| Subtotal | 15 | Subtotal | 15 |
| Fall | Junior Year Spring |  |  |
| SPPA 342 Articulation and Fluency | 3 | SPPA 414 Neurologic Bases of Comm | 3 |
| PHYS 101 or 110 General Education | 3 | SPPA 361 Psycholinguistics | 3 |
| FIT | 1 | SPPA 321 Comm \& Aging | 3 |
| General Education Elective | 3 | General Education Elective | 3 |
| General Education Elective | 3 | General Education (Group C) | 3 |
| General Education (Group A) | 3 |  |  |
| Subtotal | 16 | Subtotal | 15 |


| Fall |  |  |  |
| :--- | ---: | :--- | ---: |
| SPPA 457 Introduction to Clinic Practicum 3 SPPA 423 Multicultural Issues 3 <br> SPPA 458 Introduction to Clinic Lab 2 MATH 110 Statistics 3 <br> PSY 301 or 311 3 or 4 FIT 1 <br> General Education Elective 2 or 3 General Education Elective 3 <br> General Education (Group A) 3 General Education Elective 3 <br>   General Education Elective 3 <br> Subtotal $13-15$ Subtotal $\mathbf{1 6}$ <br> TOTAL CREDITS $\mathbf{1 2 0}$   |  |  |  |

## Bachelor of Science Speech-Language Pathology

 Sample Pre-Entry Plan for Transfer StudentFall
Freshman Year
Spring

| English Composition | 3 | Speech Communications | 3 |
| :--- | ---: | :--- | ---: |
| Human Anatomy \& Physiology w/lab | 4 | Statistics | 3 |
| American History | 3 | General Psychology | 3 |
| Math | 3 | Political Science | 3 |
| Fine Arts | 3 | Philosophy or Foreign Language | 3 |
|  |  | FIT | 1 |
| Subtotal | $\mathbf{1 6}$ | Subtotal | $\mathbf{1 6}$ |


| Fall Spring |  |  |  |
| :--- | ---: | :--- | ---: |
| PCs \& Their Uses | 3 | Physical Science | 3 |
| Sociology | 3 | Geography | 3 |
| English Lit | 3 | Social Science | 3 |
| Child Development or Psychology | 3 | Performing Art | 3 |
| Elective | $2-3$ | FIT | 1 |
| Subtotal | $14-15$ | Subtotal | 13 |

Bachelor of Science

## Speech-Language Pathology

## Sample Transfer Student Curriculum Plan*

| Fall |
| :--- | ---: | :--- | ---: |
| SPPA 113 Phonetics 3 SPPA 101 Speech \& Lang Dev  <br> SPPA 121 Intro to Comm Disorders 3 SPPA 241 Lang Disorders 3 <br> SPPA 214 Anatomic \& Physiologic Bases 3 SPPA 312 Speech Science 3 <br> SPPA 231 Intro Audiology 3 SPPA 361 Psycholinguistics 3 <br> General Education Elective 3 General Education Elective 3 <br> Subtotal 15 Subtotal 3 <br> Spring    <br> SPPA 342 Articulation \& Fluency 3 SPPA 414 Neurogenic Bases Comm 15 <br> PSY 301 or 311 3 SPPA 457 Intro Clin Pract-Lecture 3 <br> General Education Elective 3 SPPA 321 Comm \& Aging 3 <br> General Education Elective 3 SPPA 423 Multicultural Issues 3 <br> General Education Elective 3 General Education Elective 3 <br> Subtotal $\mathbf{1 5}$ Subtotal $\mathbf{1 5}$ |

# Sport Management 

College of Business, Management, and Economics<br>The Faculty of Hospitality, Leisure and Sport Management<br>Zimbar/Koehler Fieldhouse 570-422-3495 www3.esu.edu/academics/hshp/ss/ssoverview.asp

## Department faculty

Professors: Robert Fleischman (bfleischman@po-box.esu.edu)
Frank Pullo, Chair (fpullo@po-box.esu.edu)
Jerome Sheska (jsheska@po-box.esu.edu)
Associate Professor:
Assistant Professors:
Stephen Dittmore (sdittmore@po-box.esu.edu)
Dennis Douds (ddouds@po-box.esu.edu)
Paula Parker (pparker@po-box.esu.edu)
The Sport Management Department offers a Bachelor of Science degree with a major in Sport Management. This program prepares students for professional careers in the sport management industry. Course offerings are extensive and there are opportunities for internships in professional sports, college athletics, amateur and Olympic athletics, and recreational sport.

## Bachelor of Science with a Sport Management major- 53 semester hours

- Corequisites: ( 18 credits) CMST 126, CMST 235, ECON 111, ECON 112, EMGT 200, EMGT 204
- Additional requirements: Upon completion of the above prerequisites:

1) Students transferring into the program (on campus) must have a 2.0 overall quality point average and all grades "C" or better in major and corequisites.
2) SMGT 201 and all corequisites must be completed with a " C " or better before 60 credits.
3) Approval of Sport Studies Faculty as indicated by appropriate signatures on Sport Studies contract by completion of 60 credits.
4) Students majoring in Sport Management must fulfill the FIT requirements.

- Required Theory courses: (41 credits) SMGT 201, 302, 304, 346, 347, 408, 409, 445, 447, 486 (12 credits)
- Elective courses: (9-12 credits) SMGT 209, 327, 402, 404, 405, 406
- Please see the university requirements in this catalog.


## Course Descriptions

(Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title.)

SMGT 100 Introduction to Movement Studies and Exercise Science (3:2:2)
This course is designed to enable the student to understand movement studies and exercise science as fields of academic study, programs, and professional applications and to discriminate among these contexts and relate them by applying relevant knowledge and appropriate theoretical perspectives. Students will demonstrate the intrapersonal and interpersonal skills important for becoming a professional.

## SMGT 108 Athletic Coaching Education (1:1:0)

This survey course is designed to present the basic principles of coaching. The American Sport Education Program (ASEP) format will be followed. Upon successful completion of this course, the student will receive an ASEP leader level coaching diploma. This course is open to all students, regardless of major.

## SMGT 109 Sport Officiating Fundamentals (2:2:0)

This course is designed to provide the student with knowledge and understanding of the rules and procedures for officiating sport contests. Also included are the general and psychological aspects of the roles of sport officials in either the interscholastic and/or intercollegiate levels of competition.

## SMGT 120 Physical Conditioning (1:0:3)

This course provides for development of programs of exercise and activity and individual assessment of status, needs, and goals and is designed to enable each individual to determine realistic goals for his/her development and the use of activity throughout his/her life.
SMGT 121 Aerobic Fitness Activities (1:0:3)
This course is designed to introduce the student to the various aerobic fitness activities for adult populations. Techniques of fitness assessment, aerobic dance, jogging and aquacizing activities will be emphasized.

## SMGT 122 Strength Training (1:0:3)

This course is designed to give the student a broad background in the area of strength training. Various strength training programs, techniques, and trends will be examined. Students will have the opportunity to set up and become involved in various strength-training methods. Recommended prerequisite: SMGT 120
SMGT 201 Foundations in Sport Management (3:3:0)
This course is designed to present an overview of the structure of the sport industry, as well as issues facing sport organizations and how management techniques can be applied to solve sport business problems. A description of career opportunities in sport will be presented with special interest in helping the student design a course of study that best meets his/her goals. The development of effective communication skills will be emphasized through class presentations and written assignments. Prerequisite: SMGT 100
SMGT 209 Principles of Coaching (3:3:0)
This course is designed to provide insight into the coaching profession. It will examine the many facets of the area and provide suggested guidelines for prospective coaches to use in establishing their own style and method of coaching.
SMGT 286 Early Internship (1 to 3 credits)
This experience enables a student to explore the role of a professional in a sport fitness or rehabilitation setting under the close supervision of a work-site supervisor. Prerequisites: 30 semester hours; 2.0 QPA ; department approval.

## MSES 290 Special Topics (Semester hours arranged.)

These courses are designed to meet specific needs of groups of students or are offered on a trial basis in order to determine the demand for and value of introducing them as a part of the university curriculum.
SMGT 302 Psychosocial Aspects of Activity (3:3:0)
This course analyzes movement activities as psychosocial phenomena, including consideration of the symbolic and cultural nature of movement forms within a framework of human personality, motivation, and social values and organization. Prerequisite: SMGT 100.

## SMGT 304 Historical Concepts of Movement and Sport (3:3:0)

This course considers important themes, chronology, and biography in the study of the history of movement, sport, and physical education in the United States. Prerequisite: SMGT 100, SMGT 201 and advanced standing of 60 credits.

## SMGT 327 Stress Management in Exercise and Sport (2:1:2)

This course concerns the occurrence of stress in relation to exercise and sport settings, the potential for movement forms to serve as stress reducers, and other factors involved in stress and stress management. In laboratory experiences attention will be given to learning relaxation skills and leading others in relaxation and other stress reduction activities.

## SMGT 346 Computer Applications in Movement Studies and Exercise Science (3:2:2)

This course is designed to acquaint the student with computer applications in movement studies and exercise science. Course content includes applications in exercise, sport, and dance. Applications are discussed in light of their use in movement-related areas such as performing, teaching, coaching, administration, psychology, sociology, journalism, exercise science, and athletic training. Prerequisites: SMGT 100; 15 credits in SMGT.

## SMGT 347 Introduction to Sport Law (3:3:0)

This course is designed to address an increasing need for sport managers to be aware of the legal implications of their managerial performance. This course will provide an introduction to the legal issues facing those in the sports industry. Prerequisites: SMGT 100, 201, and EMGT 200.

## SMGT 370 Basketball Officiating (1:0:2)

The rules and procedures for officiating basketball will be the focus of the course; officiating in both practice and actual contests will be included. Prerequisites: PETE 170 or permission of instructor, SMGT 109 or concurrent enrollment.
SMGT 371 Field Hockey Officiating (1:0:2)
The rules and procedures for officiating field hockey will be the focus of the course; officiating in both practice and actual contests will be included. Prerequisites: PETE 171 or 271 or permission of instructor, SMGT 109 or concurrent enrollment.
SMGT 374 Soccer Officiating (1:0:2)
The rules and procedures for officiating soccer will be the focus of the course; officiating in both practice and actual contests will be included. Prerequisites: PETE 174 or 274 or permission of the instructor, SMGT 109 or concurrent enrollment.

## SMGT 377 Wrestling Officiating (1:0:2)

The rules and procedures for officiating wrestling will be the focus of the course; officiating in both practice and actual contests will be included. Prerequisites: PETE 177 or 277 or permission of the instructor, SMGT 109 or concurrent enrollment.
SMGT 380 Baseball-Softball Officiating (1:0:2)
The rules and procedures for officiating baseball-softball will be the focus of the course; officiating in both practice and actual contests will be included. Prerequisites: PETE 180, 181 or 280, 281 or permission of the instructor, SMGT 109 or concurrent enrollment.
SMGT 385 Volleyball Officiating (1:0:2)
The rules and procedures for officiating volleyball will be the focus of the course; officiating in both practices and actual contests will be included. Prerequisites: PETE 185 or 285 or permission of instructor, SMGT 109 or concurrent enrollment.
SMGT 402 Psychology of Sport and Exercise (3:3:0)
This course provides a broad overview for understanding the behavior of individuals in sport and exercise and focuses specific attention on the major sport and exercise concerns related to a psychological perspective. Content areas include personality and motivation factors, performance in groups, enhancing sport performance, and the psychological effects of participation in sport and exercise. Prerequisites: SMGT 201, 302, or two psychology courses.
SMGT 403 WS: Women, Sport and the Body (3:3:0)
This course examines women's socialized attitudes toward movement and the body and their participation and roles in sport at diverse levels of competition and organization; reference is accorded psychological data, legal provisions, and social factors as these are particularized for women. Prerequisites: 90 semester hours and/or SMGT 100, 302.

## SMGT 404 Philosophical Concepts of Movement and Sport (3:3:0)

This course concerns the philosophical problems and questions central to movement and to the movement experience, the comparison of Eastern and Western views relevant to movement, and ethical questions are considered. Attention is also directed to the implications of particular views for both performance and professional roles. Prerequisites: SMGT 100, 302, 304 or concurrent.

## SMGT 405 Comparative and International Issues in Sport and Physical Activity (3:3:0)

This course studies form, regularity, and explanation of physical activity and sport in selected countries compared with the United States. It examines comparative strategies which can be used to answer questions or test hypotheses about international and international problems related to physical activity and sport. Prerequisites: SMGT 100, 302
SMGT 406 Theory and Techniques of Coaching (3:3:0)
This course is designed to provide an overview of the theories and strategies necessary to become a successful coach. The welfare of the athlete will be the primary focus. Sport areas covered will be philosophy, pedagogy, physiology, medicine, and management. Prerequisite: 96 credits.
SMGT 408 Financing Sport Operations (3:3:0)
This course is designed to present an analysis of financial concepts and theories and their application in the professional, intercollegiate, recreational, and commercial sport industries. Topics include revenues and expenses of professional, intercollegiate, and private sport industries, issues affecting these revenues and expenses, fundraising at the intercollegiate level, ownership in sport, and public and private funding for non-profit sport programs. Prerequisites: SMGT 100 and 201, ECON 112, EMGT 200.
SMGT 409 Concepts of Sport Marketing (3:3:0)
This course is designed to build on the basic understanding of mainstream marketing concepts and apply such concepts in the sport setting. Doing so entails both comparison and contrast of mainstream marketing practices with sport marketing practices. Lectures and readings will examine the application of marketing principles to collegiate and professional sport, special events, international sport, broadcasting, and facility management. Sport marketing cases will require students to critically analyze business situations and recommend and support business decisions. Prerequisites: SMGT 100 and 201, ECON 112, EMGT 200.

## SMGT 440 Contemporary Sport (3:3:0)

This course is designed to enable the student to recognize sport as a phenomenon and social institution and to analyze the theoretical implications of sport in the contemporary world in relation to actual contexts and existing structures as they have developed and been modified in the twentieth century. Prerequisites: SMGT 100, 201, 302, 304 and advanced standing of 90 credits.

## SMGT 445 Organization and Administration of Physical Education (2:2:0)

This course is designed to enable the student to demonstrate ability to utilize accepted practices of administering physical education programs as well as intramurals, clubs, and interscholastic sport. It includes in-depth analysis of administrative concepts as they relate to practice. Prerequisites: SMGT 100; 201 and completion of 75 credits; for teacher certification students: PETE 100 and 400 (or concurrent registration in 400) and admission to HP-CTPE.
SMGT 447 Sport Facilities (3:3:0)
The principles and applications of facility design, maintenance and event management as they apply to indoor and outdoor sport facilities will be analyzed. Students will review existing sport facilities and complete related assignments. Prerequisites: SMGT 201, 445 and advanced standing of 90 credits.
SMGT 460 Analysis of Gymnastics I Workshop (3:3:0)
A critical analysis of biomechanical principles as they apply to both gross and fine gymnastic movement patterns will be studied. Additional emphasis will center around a presentation and analytic techniques specific to maximum realization of motor performance. Further research will be directed toward practical application of all research relevant to the gymnastic discipline. Both lecture-demonstration and seminar methods of instruction will be employed. Prerequisites: PETE 160, 260 or equivalent.

## SMGT 461 Analysis of Gymnastics II Workshop (3:3:0)

A quantitative analysis of biomechanical principles as applied to both gross and fine gymnastic movement patterns. Additional emphasis centers on a critical review of the research relevant to the gymnastic discipline. Both lecture-demonstration and seminar methods of instruction are employed. Prerequisites: PETE 160, 260, 360 or equivalent.

## SMGT 485 Independent Study (Semester hours arranged)

This course deals with independent research and study under the direction of a faculty member and is designed to deepen the student's interest in a particular area of an academic field. The directing faculty member will be available exclusively to the student for a minimum of five hours per credit. Approval for enrollment must be obtained from the faculty member and from the Department chair. Approval and granting of credit must be in accordance with procedures and standards established by the departmental faculty. The student must present a study prospectus prior to approval. Prerequisites: SMGT 100, 15 credits in SMGT.

## SMGT 486 Field Experiences and Internships (12:0:Semester hours arranged)

Requirements for Approval:
All internship sites must be approved by the department faculty. Each application for an internship must be approved by the faculty member in charge of the experience, the director/supervisor of the site where the internship will be done, and the department chair. Before application is made, students must meet the following requirements:

1. Have faculty recommendation based on qualities essential for success in the assigned environment.
2. Have successfully completed at least 90 semester hours of credit.
3. Have no incomplete grades in required courses.
4. Have a minimum average of 2.0 GPA overall and in the major.
5. Application deadlines are:
a. October 15 for spring semester internships
b. March 15 for fall and summer internships


## Theatre

School of Arts and Sciences
The Faculty of Arts and Letters
Fine and Performing Arts Center, Room 207
570-422-3759
www.esu.edu/theatre

## Department faculty

Professor:
Associate Professor:
Assistant Professor:

Susan O'Hearn, chair (so'hearn@po-box.esu.edu)<br>Q. Brian Sickels (bsickels@po-box.esu.edu)<br>Stephanie French (sfrench@po-box.esu.edu)<br>Margaret J. Ball (mball@po-box.esu.edu)

## Bachelor of Arts with a Theatre major- $\mathbf{3 8}$ semester hours

- Areas of Specialization: Acting/Directing; Technical Theatre.
- Required major courses: THTR 100, 102, 103 (2 s.h.), 230, 302, 304, 420.
- Required specialization courses: Acting/Directing-THTR 118, 211, 240, 310, 341, 343; Technical Theatre-THTR 235, 341, two of THTR 301, 331, 332, 430; six credits from ART 151, 152, 153, 201, 202, 220, 251, 321; THTR 200, 341, or 343.
- Please see the university requirements in this catalog.


## Bachelor of Arts with a Fine Arts major (core emphasis: Theatre)- $\mathbf{3 9}$ semester hours

- Required fine arts courses: ART 101 and 201 or 202, 3 additional semester hours; MUS 100 and 211 or 311, 3 additional semester hours.
- Required core courses for Theatre emphasis: THTR 101, 102, 163, 211, 230, $302,304,343,420,496$, and THTR 301, 331, 332, or 430.
- Please see the university requirements in this catalog.
- Participation in Stage II, the theatre production organization, is strongly recommended. Students enrolled in technical theatre courses are required to assist in theatre productions.


## Course Descriptions

(Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title.)

## §THTR 100 GE: Introduction to Theatre (3:3:0)

This course is an introduction to the basic elements of theatre which include the art of acting, directing, playwriting and scenic design. The course will examine major trends in theatre history and will focus on several plays in their historical context in order to better understand the origins and development of theatre as an art form. From this historical and analytical approach, the student will come to appreciate the theatre as a distinctive expression of human experience.

## $\ddagger$ THTR 101 GE: Play Production (3:3:0)

This course in the art and technique of play production is designed to enhance the student's understanding of the theatrical production process and to aid the prospective producer of school and amateur theatricals. The class covers theatrical organization, theatre facilities, types of staging, and a survey of the many technical elements involved in the production of plays and musicals. Participation in production is required.

## $\ddagger$ THTR 102 GE: Acting (3:3:0)

This course aims at the development of basic acting techniques. Emphasis is placed on developing greater confidence before an audience and increasing one's power of imagination, observation, and concentration. Beginning techniques of character development will be explored. Preparation of specific acting assignments is required.

## $\ddagger$ THTR 103 GE: Theatre Practicum (1:0:2)

This course is designed to allow students academic credit for participation in the theatre production program of the Theatre Department. Work in the technical and performance areas is included. Participation in production is required.
$\ddagger$ THTR 118 GE: Stage and Comic Technique (3:3:0)
This course explores comedy and comic techniques from the broadest, most physical form of farce to the intellectual wit of comedy of manners. It stresses the fundamental conventions and techniques found in the performance of comedy. The course also reinforces the basic techniques of performance, including relaxation observation, and concentration. Preparation of specific performance assignments is required. Offered in alternate years.

## §THTR 163 GE: Introduction to Film Study (3:3:0)

This course is designed to provide the students with an understanding of the elements necessary for film analysis toward a development of an appreciation for film as art. Representative films are screened in order to study the impact of the art form on modern society and on the individual.

## $\ddagger$ THTR 200 GE: Summer Theatre Workshop (Semester hours arranged)

The Workshop is open to high school and college students, teachers, and to anyone interested in theatre production. Students who enroll in this intensive Theatre Workshop will participate in all phases of Summer Theatre productions. Workshop students will participate in weekly critique sessions. Both self and group evaluative techniques will be utilized. Guest critics will be invited as participants in the critique sessions. The individual student's participation in the Workshop will be tailored to needs and abilities.
$\ddagger$ THTR 211 GE: Voice for Performance (3:3:0)
This course will focus on the development of physical awareness of the vocal process through exercises in relaxation, body alignment and support of tone. Further development of actor's voice in range, power, flexibility and articulation will also be explored. Preparation of readings in prose, poetry and dramatic monologue will be included.
$\ddagger$ THTR 220 GE: Children’s Theatre (3:3:0)
This course consists of selection, adaptation, and presentation by adults of plays for young audiences; it includes a study of plays with suitable moral and social values.
§THTR 228 GE: Theatre Tour of the Performing Arts (3:2:2)
This course is designed to enhance a student's understanding and appreciation of our theatre heritage by experiencing the theatre, arts and culture of a particular country and culture. The student will attend theatre productions, participate in discussions with leading professionals, tour facilities, and visit theatre exhibitions. Travel fees additional.
§THTR 230 GE: Stagecraft (3:3:0)
This course is an introduction to the theory and practice of contemporary set construction properties, stage engineering, lighting and sound. Students will be introduced to the tools and specialized equipment of both the scene and light shops. Participation in production is required.

## THTR 235 Drafting for the Performing Arts (3:3:0)

This course is designed to develop necessary skills in drafting for the stage. Students will learn how to draft floor plans, front and rear construction elevations, isometric drawings, orthographic projections, and perspective drawing for the stage.

[^9]
## §THTR 240 GE: Stage Make-Up (3:3:0)

This course is centered around the theory and practice of theatrical make-up techniques. The course allows students the opportunity to design and create performance make-up. Prerequisite: THTR 100 or permission of instructor. Offered alternate years.

## §THTR 267 GE: Art and History of the Film (3:3:0)

This course studies the historical and aesthetic developments of the cinema, emphasizing the aesthetic aspects of film in an attempt to develop critical standards through surveying the methods and problems of film. Narrative, non-narrative, fictional, and documentary films are screened and discussed. Prerequisite: CMST 163.

## THTR 290 Special Topics (Semester hours arranged)

These courses are designed to meet specific needs of groups of students or are offered on a trial basis in order to determine the demand for and value of introducing them as a part of the university curriculum.

## §THTR 301 GE: Costume Design (3:3:0)

This course emphasizes the design, history, and construction of costumes for theatre, television, and film. The emphasis will be on script analysis, research, and design concepts. Design construction projects allow the student to gain a greater understanding of the role of a costume designer in the theatrical process. Prerequisite: THTR 100 or 101

## §THTR 302 GE: History of Theatre I (3:3:0)

This course will provide an understanding of the history and literature of theatre from the ancient times through the 18th Century. Emphasis is placed on how the theatre has reflected the political, social, economic, and cultural trends in each era. Plays from the various periods are read and analyzed. Offered alternate years. Prerequisite THTR 100

## §THTR 304 GE: History of Theatre II (3:3:0)

This course will provide an understanding of the history and literature from the 19th Century to the present. Emphasis is placed on how the theatre has reflected the political, social, economic, and cultural trends in each era. With an emphasis on Western theatre, plays from the various periods are read and analyzed. Offered alternate years. Prerequisite: THTR 100.
\$THTR 310 GE: Advanced Acting (3:3:0)
This course provides further study of character development that includes contemporary scene study with additional focus on improvisation, concentration, observation and voice and movement techniques. These techniques are applied in the preparation and presentation of scenes and monologues. Prerequisite: THTR 102.

## §THTR 331 GE: Theatrical Lighting (3:3:0)

This course is concerned with the theory and practice of designing lighting for the performing arts. Students will be introduced to script analysis and conceptualization of plays, musicals, and dance and will learn to develop light plots in an experimental theatre setting. Students will provide their own drafting equipment. Prerequisite: THTR 230.

## §THTR 332 GE: Scene Painting (3:3:0)

This course is concerned with the theory and practice of scene painting. Students will explore a variety of scene painting techniques and how they can artistically be translated to the stage. Prerequisite: THTR 230.

## $\ddagger$ THTR 341 Stage Management (3:3:0)

This course is offered for students interested in production management areas. A study of audition, rehearsal and production management techniques will be made. Emphasis will be on planning and organizational skills for stage management. Prerequisite: THTR 100 or 101.

[^10]
## $\ddagger$ THTR 343 GE: Directing (3:3:0)

Basic principles and techniques of stage direction will be explored. This course will provide director, actor or designer the necessary methods and tools to analyze and synthesize the elements necessary to ringing a production to life before an audience. Topics include: play analysis, creating the ensemble, conceptual unity, metaphor and organizational responsibilities of director. Presentation of scenes will be required. Prerequisites: THTR 100, 102

## §THTR 370 GE: Film Genre (3:3:0)

This course will analyze significant films of either one or two genres in an attempt to define the characteristics of each genre and understand their cultural meanings. Readings will focus on the genres' historical development with emphasis on their relation to the social currents of the times. Representative films will be screened. Selected genres will vary with each offering of the course. Genres studies will include: the comedy film, the science fiction film, the musical film, the documentary film, the film noir, and the horror film. Prerequisite: CMST 163.

## THTR 420 Myth and Ritual in Theatre (3:3:0)

This course explores myth and ritual as they relate to theatre, both in their primitive foundations and in their modern applications. The use of masks and various primary aspects of theatre and acting will be examined, culminating in an informal performance reflecting elemental acting skills, as they relate to mythical and ritualistic foundations of theatre. Available for graduate credit. Prerequisites: THTR 100, 102.

## §THTR 430 GE: Scenic Design (3:3:0)

This course is concerned with the theory and practice of designing scenery for the performing arts. Students will be introduced to script analysis and conceptualization of plays and musicals and will learn to develop floor plans, models, construction elevations, finished color renderings of their design projects. Students will provide their own drafting equipment. Prerequisite: THTR 230 and 235

## THTR 485 Independent Study (Semester hours arranged)

This course consists of directed research and study on an individual basis. It is open to a limited number of students who are juniors and seniors or who have completed 12 credit hours in Theatre Arts and who received departmental approval. A student engaging in Independent Study will complete a minimum of five (5) hours per credit of exclusive conference time with the faculty member in charge of the Independent Study relative to the design, consultation, and evaluation of the study. The student must demonstrate competencies appropriate to the level of the course. The standards shall include performance in the subject, explication of that work by written or oral reports, and evidence of a willingness to meet the commitments of the discipline.

## THTR 486 Field Experience and Internship (Semester hours arranged)

This course provides field experience gained through placement in a practical on-the-job situation under professional supervision.

## THTR 496 Fine Arts Seminar (3:3:0)

A team-taught interdisciplinary capstone experience for senior Fine Arts majors. In conjunction with this seminar the student and faculty explore selected topics in the fine arts relative to the preparation of a thesis project in Art, Music, or Theatre through which the student will demonstrate a satisfactory level of performance and/or research skills. Prerequisites: Advanced standing of 90 credits, permission of instructor. Also offered as ART 496 and MUS 496.

## Women's Studies

## Women's Studies minor- 18 semester hours

- Required core course: CMST/ENGL 150.
- Electives: ART 412; CMST 220; CMST 466-H; ENGL 183, 393 (Wharton / Austen / Morrison); HIST 253; 282; HLTH 408; MSES 403; PHIL 260; POLS 243; PSY 292; RECR 241; SOC 325, 377.
- Required seminar: When the core course and 12 hours of Women's Studies electives have been completed, the student will enroll in CMST, ENGL, PSY, or SOC 498. At least 6 of the required 18 semester hours for the minor must be 300 or 400level courses.
- An internship option (3-15cr.) is an available as part of the Women's Studies minor. Students should contact the Women's Studies Coordinator and enroll in CMST 487. These credits are in addition to the required 18 credit hours indicated above.

Coordinator and Adviser: Professor Mollie Whalen, Women's Center, Rosenkrans East, 570-422-3472, mwhalen@po-box.esu.edu

## Suggested 4-year plan for scheduling Women's Studies courses to complete the minor.

Year 1: CMST/ENGL 150 followed by a 100- or 200- level elective Women's Studies/ General Education course.
Year 2: 6 credits of 100- or 200-level Women's Studies/General Education courses.
Year 3: 3 credits of 300- or 400-level Women's Studies elective
Year 4: CMST/ENGL/PSY/SOC 498

This is an interdisciplinary minor designed to enhance any degree program. Women's Studies seeks to recognize the diversity of human experience and examine the interplay of gender, race, class, and sexuality by focusing on the experience of women, the concept of gender, and the cultural productions by and about women within different contexts and across various identities and academic disciplines.

## Course Descriptions

(Credits in semester hours, classroom work, and laboratory or fieldwork are indicated by three numbers in parentheses immediately following the course title.)

## CMST/ENGL 150 WS: Introduction to Women's Studies (3:3:0)

This course provides an overview of the history, theories, and methodological approaches of Women's Studies; examines the implications of our cultural understandings of women, gender, race, class, and sexuality; raises questions about the goals and direction of social change; and reviews the impact of Women's Studies on traditional disciplines and knowledge. Prerequisite: ENGL 103 (may be taken concurrently).

## CMST/ENGL/PSY/SOC 498 WS: Seminar in Women's Studies (3:3:0)

This course is designed to enable students from various disciplines to analyze and synthesize data, ideas, and academic perspectives as they focus on the personal and societal dimensions of gender and roles as these differentiate and affect female experience and activities. Prerequisite: Completion of 9 credits of Women's Studies courses, including CMST/ENGL 150.

## CMST 487 WS: Fieldwork and Internship in Women's Studies (Semester hours arranged)

This course is designed to provide the student with a Women's Studies minor, practical experience in a feminist agency or organization, and to analyze the connections between feminist theory and praxis, between Women's Studies curricula and social activism. Credits from an internship cannot be applied to the elective requirements of the Women's Studies Minor. Prerequisite: 9 credit hours of Women's Studies coursework, including Introduction to Women's Studies; Junior standing; minimum QPA of 2.0; permission of Coordinator of Women's Studies. (Pass/Fail course)

## State and University Officials

## Pennsylvania State System of Higher Education Board of Governors

Kenneth M. Jarin, Newtown, Chair
Kim E. Lyttle, Indiana, Vice Chair
C.R. "Chuck" Pennoni, Bryn Mawr, Vice Chair

Rep. Matthew E. Baker, Wellsboro
Marie Conley Lammando, Harrisburg
Paul S. Dlugolecki, Mechanicsburg
Daniel P. Elby, York
Rep. Michael K. Hanna, Lock Haven
Sen. Vincent J. Hughes, Philadelphia
Joshua A. O'Brien, Harrisburg
Guido M. Pichini, Wyomissing

Gov. Edward G. Rendell, Harrisburg<br>Sen. James J. Rhoades, Mahanoy City<br>Christine J. Toretti Olson, Indiana<br>Aaron A. Walton, Allison Park<br>Gerald L. Zahorchak, Harrisburg<br>Four Vacancies<br>Judy G. Hample, Harrisburg, Ex-Officio

## Pennsylvania State System of Higher Education Office of the Chancellor

Judy G. Hample ............................ Chancellor
Peter H. Garland .............................. Vice Chancellor for Academic and Student Affairs
James Dillon ........................... Vice Chancellor for Administration and Finance
KhaliI Yazdi .................................. Vice Chancellor for Information Technology and Research
Thomas M. Krapsho ...................................ing Vice Chancellor Human Resources and Labor Relations
Jeffrey Cooper .................... Chiel

## East Stroudsburg University of Pennsylvania Council of Trustees

Amy Schaeffer Welch '85, New Hope, Chair
Dr. Darell T. Covington, East Stroudsburg, Vice Chair
L. Patrick Ross '66, Tannersville, Secretary

Trudi Denlinger '70, Bethlehem
Dr. Eli Berman, Stroudsburg
Kelly Dries, Coopersburg
Harry Lee, Stroudsburg
Dr. Hussain G. Malik, East Stroudsburg
Nancy V. Perretta, Stroudsburg
David M. Sanko '81, Harrisburg
Robert H. Willever '75, Bethlehem

Judy G. Hample, Harrisburg, Ex-Officio

## University Senior Administration

## President's Office

Robert J. Dillman
Victoria Sanders
Mary Frances Postupack
Douglas F. Smith

President of the University<br>Associate Vice President for Special Projects, Diversity and Equity<br>Chief Operating Officer/Executive Director, Center for Research and Economic Development<br>Director, University Relations

## Academic Affairs

Kenneth W. Borland, Jr.
Alberto J. Cardelle
Henry A. Gardner
Michael Southwell
Peter J. Hawkes
Mark J. Kilker
Patricia A. Miller
Alla L. Wilson
Alberto J. Cardelle
Curtis D. Bauman
David G. Schappert

> Provost/Vice President for Academic Affairs Interim Associate Provost for Academic Affairs Associate Provost for Enrollment Management Assistant Vice President for Instructional Support and Outreach Dean, School of Arts and Sciences Dean, School of Health Sciences and Human Performance Dean, College of Education Interim Dean, College of Business, Management and Economics Interim Dean, Graduate Studies and Research Director, Institutional Research and Planning Director, Library

## Finance and Administration

Richard A. Staneski
Donna Bulzoni
Robert D'Aversa
Dawn MacIntire Kohl
Christine Langlois
William P. Pierson
Robin Olson
Donna Bulzoni

Vice President for Finance and Administration
Director of Financial Affairs and Controller Director, Computing and Communication Services Director, Human Resource Management Interim Director, Facilities Management Operations Interim Director, Facilities Management Planning and Construction Chief of Police
Interim Director, Procurement and Contracting

## University Advancement

Isaac W. Sanders
Carolyn Bolt
Vincent Dent
Robert A. Kelley
John J. Ross
Michelle Dramé

Vice President for University Advancement Assistant Vice President for Development Director, Major Gifts and Planned Giving Manager, Major Gifts and Planned Giving Director, Alumni Engagement
Director, Corporate and Community Relations

## Student Affairs

Doreen M. Tobin
Maria Hackney
Fredric Moses
Robert Moses
Dennis B. Steigerwalt

Vice President for Student Affairs
Director, University Health Services
Director, Student Activity Association, Inc.
Director, Residence Life
Director, Career Services

## Senior Policy Administrators

Robert J. Dillman $(1996,1996)$
President of the University
B.S., 1963, SUNY at New Paltz; M.S., 1970, Pennsylvania State University;

Ph.D., 1976, Clark University
Kenneth W. Borland, Jr. $\mathbf{( 2 0 0 1 , ~ 2 0 0 5 )}$
Provost, Vice President for Academic Affairs
B.S., 1980, Toccoa Falls College; M.A., 1985, Southwestern Baptist Theological Seminary;
D.Ed., 1996, The Pennsylvania State University

Richard A. Staneski $(1998,1998)$
Vice President for Finance and Administration
B.A., 1972, Claremont McKenna College; M.A., 1974, California State University at San Jose

Isaac W. Sanders $\mathbf{( 2 0 0 0 , 2 0 0 0 )}$
Vice President for University Advancement
B.S., 1971, Tuskegee Institute; M.S., 1973, Cornell University;

Ph.D., 1984, Kansas State University
Doreen Tobin $(2006,2006)$
Vice President for Student Affairs
B.S., M.Ed., St. Lawrence University; Ed.D., 2003, Pennsylvania State University - Harrisburg

Alberto J. Cardelle $(1999,2006)$
Interim Associate Provost for Academic Affairs and Interim Dean of Graduate Studies and Research B.S., 1986, Tulane University; MPH, 1989, Boston University; Ph.D., 1999, University of Miami

Henry A. Gardner (2006, 2006)
Associate Provost for Enrollment Management
B.S., 1968, Kent State University; M.S., 1971, Indiana University;

Ed.D., 1974, Indiana University
Peter J. Hawkes $(1986,2004)$
Dean, School of Arts \& Sciences
B.A., 1968, Fordham University; M.A., 1972, New York University;
M.Phil., 1976, Ph.D., 1986, Columbia University

Mark J. Kilker $(1981,1991)$
Dean, School of Health Sciences and Human Performance
B.S.N., 1975, Trenton State College; M.S.N., 1980, University of Pennsylvania;

Ed.D., 1994, Teachers College, Columbia University
Patricia A. Miller $(\mathbf{2 0 0 7}, 2007)$
Dean, College of Education
B.A., 1978, Marian College; M.A., 1982, Kean College; Ed.D., 1994, Lehigh University

Alla L. Wilson $(2006,2007)$
Interim Dean, College of Business, Management and Economics
B.S., 1975, Illinois College of Optometry; M.B.A., 1988, University of Wisconsin-Milwaukee; Ph.D., 1996, University of Wisconsin-Milwaukee

David G. Schappert $(1993,1993)$
Director, Library
B.A., 1977, Michigan State University; M.L.S., 1983, Drexel University

## Faculty

This list of permanent faculty members is current as of May 30, 2007. Two dates follow each individual's name. The first indicates the year of appointment to the university and the second denotes the year of appointment to the academic rank or position indicated.
John A. Abbruzzese, III (1996, 2000)
Associate Professor, Psychologist and Director of Counseling and Psychological Services
A.B., 1978, Brown University

Ph.D., 1989, University of Pittsburgh

## Robert Ackerman $(1984,1998)$

Professor of Speech Pathology and Audiology
B.A., 1972, SUNY at Albany
M.S., 1976, Towson State University

Ph.D., 1982, Wichita State University
Elaine Ackroyd-Kelly $(2002,2002)$
Assistant Professor, Library
B.S., 1968, James Madison University
M.L.S., 1984, Rutgers University
M.A., 1995, Marywood University

Ian H. Ackroyd-Kelly $(1974,1977)$
Professor of Geography
B.A., 1966, Virginia Military Institute
M.A., 1972, University of North Carolina

Ph.D., 1975, University of North Carolina
Kimberly Adams $(2006,2006)$
Assistant Professor of Political Science
B.S., 1995, University of Southern Mississippi
M.S., 1997, University of Southern Mississippi

Ph.D., 2003, University of Mississippi

## Alfredo Ahumada (1996, 2000)

Associate Professor of Foreign Languages
B.A., 1983, Hunter College
M.A., 1988, Hunter College
M.Phil., 1993, City University of New York

Ph.D., 1995, City University of New York
Julianne Albiero-Walton (1995, 2002)
Associate Professor, Academic Enrichment and Learning and Disabilities Specialist B.S., 1988, University of Scranton
M.S., 1989, University of Scranton

Ed.D., 2001, Argosy University/Sarasota
Abdalla Aldras $(1997,2001)$
Associate Professor of Biological Sciences
B.S., 1981, Jordan University
M.S.P.H., 1987, Tulane University

Sc.D., 1991, Tulane University

Alberto Alegre $(2006,2006)$
Assistant Professor of Early Childhood and Elementary Education
B.S., 1980, Universitat de Barcelona
B.S., 1985, Universitat de Barcelona
M.S., 1991, Universitat de Barcelona
M.A., 2002, Goddard College

Mary Beth Allen $(1997,2002)$
Associate Professor of Reading
B.S., 1979, University of Maryland
M.Ed., 1989, Towson State University

Ed.D., 1995, Texas A \& M - Commerce
Susan Amirian $(2003,2003)$
Assistant Professor of Media Communication and Technology
B.F.A., 1974, Pratt Institute
M.A., 1986, New School University

Ed.D., 2002, Nova Southeastern University
Richard D. Amori $(1972,1983)$
Professor of Computer Science
B.S., 1964, University of Scranton
M.S., 1965, Bucknell University
M.S., 1974, New York University

Lesliee D. Antonette $(1996,2006)$
Professor of English
B.A., 1990, University of California at Riverside
M.A., 1992, University of California at Riverside

Ph.D., 1996, University of California at Riverside
Joseph Ashcroft $(1977,1992)$
Distinguished Professor of Communication Studies
A.B., 1969, University of Scranton
M.A., 1978, East Stroudsburg University

Ph.D., 1990, New York University
Margaret Ball $(2005,2005)$
Assistant Professor of Theatre
B.M., 1987, University of Toronto
M.M., 1992, McGill University

Ph.D., 1999, The Catholic University of America
R. Squier Ball $(1969,1973)$

Professor of Foreign Languages
B.A., 1959, Princeton University
M.A., 1963, Middlebury College
U. de Paris License es' Lettres; 1965
D.M.L., 1969, Middlebury College

Kathleen Barnes $(2004,2004)$
Associate Professor of Business Management
B.A., 1990, Hartwick College
M.B.A., 1991, Syracuse University

Ph.D., 2006, University at Albany, SUNY
Paul Bartoli $(\mathbf{2 0 0 1}, 2006)$
Associate Professor of Psychology
B.A., 1988, Pennsylvania State University
M.A., 1990, Marywood University

Ph.D., 2002, Walden University

Todd Behr $(1989,2003)$
Associate Professor of Economics
B.A., 1973, Gettysburg College
M.B.A., 1978, Lehigh University

Allan N. Benn $(1985,1995)$
Professor of English
B.A., 1974, Mercer University
M.A., 1976, Case Western Reserve University

Ph.D., 1983, Case Western Reserve University
Margaret L. Benson $(1996,2001)$
Associate Professor of Early Childhood and Elementary Education
B.A., 1975, University of Missouri at Kansas City
M.S., 1989, Florida State University

Ph.D., 1995, Florida State University
Leslie A. Berger (1979, 1986)
Assistant Professor, Librarian
B.A., 1975, Lebanon Valley College
M.L., 1976, University of South Carolina

Conrad H. Bergo $(1980,1994)$
Professor of Chemistry
B.A., 1965, St. Olaf College

Ph.D., 1972, University of Minnesota
Eli Berman $(1982,1982)$
Associate Professor of Exercise Science
B.A., 1952, New York University
M.D., 1957, University of Geneva, Switzerland

Adenike C. Bitto $(1998,1998)$
Associate Professor of Health
M.B., B.S., 1977, University of Ibadan, Nigeria
M.P.H., 1984, John Hopkins University

Dr.P.H., 1994, Johns Hopkins University
Renee Boburka $(2002,2002)$
Assistant Professor of Psychology
B.S., 1989, University of Pittsburgh
M.S., 1994, Pennsylvania State University

Ph.D., 1998, Pennsylvania State University
Gary Braman $(1983,1988)$
Associate Professor of Media Communication and Technology
A.A.S., 1972, Monroe Community College
B.S., 1975, Rochester Institute of Technology
M.S., 1977, Indiana University

Ed.S., 1978, Indiana University
Christina Brecht $(\mathbf{2 0 0 0}, 2000)$
Instructor of Health
B.S., 1976, Pennsylvania State University
M.P.H., 1981, University of Michigan

Christine Brett (2005, 2005)
Assistant Professor of Physical Education
B.S., 1993, Russell Sage College
M.S., 1998, University of Southern Mississippi

Ph.D., 2002, Ohio State University
William Broun $(2006,2006)$
Assistant Professor of English
B.A., 1989, Miami University of Ohio
M.A., 1993, Miami University of Ohio
M.F.A., 1998, University of Houston

Kathleen M. Brunkard $(1984,1997)$
Professor of Biological Sciences
B.S., 1977, Southern Connecticut State College
M.S., 1979, Syracuse University

Ph.D., 1982, University of Massachusetts
David Buckley $(1990,2000)$
Professor of Physics
B.A., 1981, Rutgers College
M.S., 1983, Pennsylvania State University

Ph.D., 1994, University of Massachusetts
Seewoonundun Bunjun $(1979,1989)$
Professor of Economics
B.A., 1968, University of Delhi
M.A., 1970, Delhi School of Economics

Ph.D., 1979, Penn State University
Teri L. Burcroff $(1992,2004)$
Professor of Special Education and Rehabilitation
B.A., 1981, SUNY at Fredonia
M.S., 1983; SUNY at Buffalo

Ph.D., 1991, SUNY at Buffalo
Joyce Burgener $(2006,2006)$
Assistant Professor of Special Education and Rehabilitation
B.A., 1968, Michigan State University
M.S., Valparaiso University

Ph.D., 2006, Michigan State University

## Elizabeth Abrams Buzzelli-Clarke $(1980,2003)$ Instructor of Music <br> B.M., 1975, Ithaca College <br> M.Ed., 1977, Indiana University of Pennsylvania <br> M.A., 1978, Indiana University of Pennsylvania

Sharmaine Cady $(1989,2001)$
Professor of Chemistry
B.S., 1970, Muhlenberg College

Ph.D., 1976, Michigan State University
Elzar Camper Jr. $(1972,1986)$
Professor of Media Communication and Technology B.S., 1970, Bloomsburg University of Pennsylvania M.L.S., 1975, Rutgers University
M.Ed., 1972, Temple University

Ed.D., 1983, Temple University

Alberto Jose Cardelle (1999, 2004)
Associate Professor of Health
B.S., 1986, Tulane University
M.P.H., 1989, Boston University

Ph.D., 1999, University of Miami
Olivia Carducci $(2005,2005)$
Assistant Professor of Mathematics
B.S., 1983, Saint Mary's College
M.S., 1985, Carnegie Mellon University

Ph.D., 1989, Carnegie Mellon University
Kevin Casebolt $(1999,2004)$
Associate Professor of Movement Activities
and Lifetime Fitness
B.S., 1992, Northern Illinois University
M.S. Ed., 1995, University of Kansas

Ph.D., 1998, University of Kansas
Domenico Cavaiuolo $(1998,2003)$
Associate Professor of Special Education and Rehabilitation
B.S., 1981 SUNY at Buffalo
M.S., 1987, SUNY at Buffalo

Ph.D., 1994, Temple University
Diane P. Cavanagh $(1991,2003)$
Professor of Special Education and Rehabilitation B.A., 1976, Marist College
M.Ed., 1977, Slippery Rock University

Ed.D., 1990, Columbia University
Joseph M. Cavanaugh $(1974,1981)$
Distinguished Professor of Mathematics
B.S., 1965, Siena College
M.A., 1967, Syracuse University

Ph.D., 1970, Syracuse University
Jyh-Hann Chang $(2006,2006)$
Assistant Professor of Psychology
B.S., 1990, Ursinus College
M.A., 1992, Beaver College
M.S., 1994, University of Connecticut

Ph.D., 1997 University of Connecticut
Constantinos A. Christofides $(1971,1981)$
Distinguished Professor of Economics
B.S., 1967, Rider College
M.S., 1968, Lehigh University

Ph.D., 1977, Lehigh University
Robert Cohen $(1994,2005)$
Professor of Physics
B.S., 1985, Penn State University
M.S., 1988, Drexel University

Ed.M., 1991, Temple University
Ph.D., 1993, Drexel University

Barbara G. Collins (1977, 1989)
Professor of Sociology
B.A., 1974, Kutztown University
M.S.W., 1975, Rutgers University

Ph.D., 1988, Rutgers University
Patricia M. Crotty $(1984,1992)$
Distinguished Professor of Political Science
B.A., 1961, College of New Rochelle
M.A., 1962, Boston College

Ph.D., 1985, SUNY at Binghamton
Catherine Culnane $(2002,2002)$
Instructor of Movement Activities and Lifetime Fitness
B.S., 1974, University of Minnesota;
M.Ed., 1996, East Stroudsburg University

Donald M. Cummings $(1985,2004)$
Professor of Exercise Science
B.S., 1984, College of Charleston
M.S., 1985, East Stroudsburg University

Ph.D., 1997, Temple University
Marianne Cutler (2005, 2005)
Assistant Professor of Sociology
B.A., 1985, Boston University
M.Ed., 1990, University of Massachusetts-Amherst
M.A., 1998, University of North Carolina-Chapel Hill

Ph.D., 2003, University of North Carolina-Chapel Hill
Shala E. Davis $(1996,2006)$
Professor of Exercise Science
B.S., 1987, University of Delaware
M.S., 1989, Wake Forest University

Ph.D., 1994, University of Virginia
Michael C. Decosmo $(1984,1993)$
Associate Professor of Business Management
B.S.A., 1976, Villanova University;
M.B.A., 1984, Lehigh University

Dominic (Don) J. Dellipriscoli $(2000,2005)$
Assistant Professor of History
B.S., 1993, East Stroudsburg University
M.A., 1995 East Stroudsburg University

Mary DeVito $(2001,2001)$
Associate Professor of Computer Science
B.S., 1984, East Stroudsburg University
M.S., 1987 East Stroudsburg University

Ph.D., 1998, Renesselear Polytechnic Institute
Stephen Dittmore $(\mathbf{2 0 0 6}, 2006)$
Assistant Professor of Sports Studies
B.A., 1991, Drake University
M.A., 1996 Drake University

Ph.D., 2007, University of Louisville

Michael P. Doherty $(1989,2000)$
Professor of Chemistry
B.A., 1979, Wabash College
M.S., 1982, Indiana University at Bloomington

Ph.D., 1989, Purdue University
Marie M. Donaghay $(1992,1992)$
Associate Professor of History
B.A., 1965, University of Delaware
M.A., 1967, University of Virginia

Ph.D., 1970, University of Virginia
Richard Donnelly $(2005,2005)$
Assistant Professor of Hotel, Restaurant, and Tourism Management
B.S., 1986, Florida International University
M.S., 1991 Florida International University

Ph.D., 2002, Colorado State University
Patrick C. Dorian $(1990,1999)$
Associate Professor of Music
B.M., 1978, Ithaca College;
M.M., 1979, Northwestern University

Corinna Dotter $(2006,2006)$
Assistant Professor of Nursing
B.S.N., 1983, Wilkes University
M.S.N., 1987, University of Pennsylvania

Dennis C. Douds $(1966,1966)$
Assistant Professor of Sports Studies
B.S., 1963, Slippery Rock University of Pennsylvania
M.S., 1966, West Virginia University

Anthony L. Drago $(1992,2002)$
Professor of Psychology
B.A., 1976, East Stroudsburg University
M.A., 1980, Marywood College

Ed.D., 1986, Lehigh University
Kathleen M. Duguay (1997, 2002)
Associate Professor of English
B.A., 1981, North Adams State College
M.A., 1985, SUNY at Binghamton

Ph.D., 1997, SUNY at Albany
Gregory B. Dwyer $(1998,2003)$
Associate Professor of Exercise Science
B.A., 1982, University of Texas at Austin
M.A., 1983, Wake Forest University

Ph.D., 1992, Indiana University
Sandra Eckard $(\mathbf{2 0 0 5}, 2005)$
Assistant Professor of English
B.A., 1994, Frostburg State University
M.A., 1996, West Virginia University

Ph.D., 2001, Indiana University of Pennsylvania

Johan Eliasson $(2005,2005)$
Assistant Professor of Political Science
B.S., 1997, California State University
M.A., 1999, Syracuse University

Ph.D., 2005, Syracuse University
John Elwood $(1999,2005)$
Associate Professor of Physics
B.A., 1991, Cornell University
M.S., 1993, California Institute of Technology

Ph.D., 1996, California Institute of Technology
James W. Emert (1981, 1981)
Assistant Professor of Computer Science
A.A., 1972, Montgomery County Comm. College
B.A., 1974, East Stroudsburg University
M.A., 1981, Temple University

Dennis J. Erb (1979, 1990)
Professor of Chemistry
B.A., 1973, East Stroudsburg University

Ph.D., 1978, SUNY at Buffalo
Sussie Eshun $(1996,2001)$
Associate Professor of Psychology
B.A., 1989, University of Ghana
M.A., 1992, SUNY at Stony Brook

Ph.D., 1996, SUNY at Stony Brook
Darlene Farris-LaBar $(2006,2006)$
Assistant Professor of Art
B.F.A., 1996, Indiana University of Pennsylvania
M.F.A., 1998, Purchase College, SUNY
A.A.S., 2001, College of Technology

Janet Ferguson Curley $(2003,2003)$
Assistant Professor of Early Childhood and Elementary Education
B.Ed., 1978, University of British Columbia

Ed.M., 1993, Washington State University
Ph.D. 1999, University of Oregon
Terry L. Flatt $(1985,1991)$
Associate Professor of Music
B.M.Ed., 1961, Phillips University
M.M.Ed., 1964, University of Oklahoma
M.S., 1979, Indiana University

Robert P. Fleischman $(1996,2005)$
Professor of Sports Studies
B.A., 1980, University of Michigan
J.D., 1985, Hofstra University School of Law
M.S., 1995, University of Massachusetts

Ed.D., 2006, Binghamton University
Kathleen Foster (1997, 2002)
Associate Professor of Professional
and Secondary Education
B.S., 1972, East Stroudsburg University
M.Ed., 1975, Kutztown University of Pennsylvania

Ed.D., 1992, Temple University

Germain E. Francois $(1979,1987)$
Distinguished Professor of Academic Enrichment and Learning
B.A., 1972, Tufts University

Ed.M., 1973, Tufts University
Ph.D., 1979, University of Connecticut
John Freeman $(2005,2005)$
Assistant Professor of Chemistry
B.S., 1983, Whitworth College

Ph.D., 1989, Arizona State University
Stephanie Daventry French (2001, 2006)
Associate Professor of Theatre
B.A., 1992, San Francisco State University
M.F.A., 1996, University of California, San Diego

Felix Friedman $(1982,1988)$
Professor of Computer Science
M.S., 1959, Leningrad University (U.S.S.R.)

Ph.D., 1975, Central Research Institute of Economics \& Mathematics of the Academy of Sciences of U.S.S.R., Moscow

Gloria Gadsden $(2006,2006)$
Associate Professor of Sociology
A.B., 1990, Columbia University, Barnard College
M.A., 1995, University of Pennsylvania

Ph.D., 1998, University of Pennsylvania
Yevgeniv V. (Eugene) Galperin (2003, 2003)
Assistant Professor of Mathematics
B.A., 1993, Connecticut College
M.S., 1996, University of Connecticut

Ph.D., 2000, University of Connecticut
Heather Garrison $(2006,2006)$
Assistant Professor of Special Education and Rehabilitation
B.S., 1995, East Stroudsburg University
M.Ed., 1998, East Stroudsburg University
M.Ed., 2002, DeSales University

Marcia L. Gasper (2003, 2003)
Assistant Professor of Nursing
B.S.N., 1976, Pennsylvania State University
M.S.N., 1982, University of Pittsburgh

Ed.D., 2003, University of Pittsburgh
Melissa Geiger $(2004,2004)$
Assistant Professor of Art
B.A., 1995, Manhattanville College
M.A., 1998, Pennsylvania State University

Ph.D., 2005, Pennsylvania State University
Glenn C. Geiser-Getz $(1994,2004)$
Professor of Communication Studies
B.A., 1988, University of Puget Sound
M.A., 1990, University of Arkansas

Ph.D., 1994, University of lowa

Elizabeth Gibbons $(1992,1997)$
Associate Professor of Movement Activities and Lifetime Fitness
B.F.A., 1978, University of North Carolina/Greensboro
M.F.A., 1981, University of North Carolina/Greensboro

Ph.D., 1989, Texas Woman's University
Alvin Gibson $(2006,2006)$
Assistant Professor of Business Management and Economics
B.S., 1986, Purdue University
M.B.A., 1991, Indiana University

Ph.D., 2000, University of Alabama
Thomas Gioglio (2004, 2004)
Associate Professor, Director of Athletics
B.S., 1986, Montclair State University
M.S., 1988, Mansfield University

Ed.D., 1993, West Virginia University
M.S., 1996, Northern State University

Marcia V. Godich $(1987,1996)$
Associate Professor of Communication Studies
B.A., 1964, University of Pittsburgh
M.A., 1969, University of Pittsburgh

Ph.D., 1994, University of Pittsburgh
Steven Godin $(1991,1997)$
Professor of Health
B.A., 1980, California State University-Fullerton
M.S., 1983, Illinois Institute of Technology

Ph.D., 1989, Illinois Institute of Technology
M.P.H., 1994, Robert Wood Johnson Medical School and Rutgers University

Jon S. Gold $(1995,2004)$
Professor of Chemistry
B.S., 1980, University of California at Santa Cruz
M.S., 1981, University of California at Santa Cruz

Ph.D., 1987, University of California at Santa Cruz
Beverlyn Grace-Odeleye $(2005,2005)$
Assistant Professor, Academic Enrichment and Learning
B.S., 1976, Southern Illinois University
M.Ed., 1980, Howard University

Ph.D., 2003, Regent University
Patricia Graham $(1977,1999)$
Professor, Academic Enrichment and Learning
B.A., 1972, Rutgers University
M.Ed., 1974, Antioch University
D.Ed., 1995, University of Massachusetts Amherst

Paul Graham $(1988,1994)$
Associate Professor, Librarian
B.A., 1971, SUNY at Fredonia;
M.L.S., 1975, SUNY at Albany

Mary Tod Gray $(1991,2004)$
Associate Professor of Nursing B.S.N., 1965, University of Michigan
M.A., 1969, New York University

Ph.D., 2003, New York University
Michael P. Gray $(2004,2004)$
Assistant Professor of History B.A., 1990, East Stroudsburg University M.A., 1991, East Stroudsburg University

Ph.D., 1998, Kent State University
Bonnie A. Green $(2004,2004)$
Assistant Professor of Psychology
B.S., 1986, Penn State University
M.S., 1998, Lehigh University

Ph.D., 2002, Lehigh University
Nancy Jo Greenawalt (2003, 2003)
Academic Coordinator for Intercollegiate Athletics
A.B., 1978, Albright College
M.S., 1981, Penn State University

Philip Griswold $(2002,2002)$
Associate Professor of Professional Studies
B.S., 1969, Cornell University
M.S., 1972, University of Vermont
M.Ed., 1978, Rutgers University

Ed.D., 1981, Rutgers University
Diane M. Haleem $(\mathbf{2 0 0 5}, 2005)$
Assistant Professor of Nursing
B.S., 1984, Boston College
M.N., 1990, University of California at Los Angeles

Ph.D., 2003, Boston College
Patty O. Hannon (1990, 1990)
Assistant Professor of Nursing
B.S.N., 1975, Medical College of Georgia
M.S.N., 1976, Medical College of Georgia

Ph.D., 2004, Pennsylvania State University
Jeffrey W. Hardy $(1998,2006)$
Associate Professor of Geography
B.S., 1991, Mississippi State University
M.S., 1993, Louisiana State University

Ph.D., 1998, Louisiana State University

## Susan Harlan $(1994,2002)$

Associate Professor of Early Childhood and Elementary Education
B.A., 1972, Millersville University of Pennsylvania
M.S., 1981, Marywood College

Ph.D., 1996, Rutgers University
Kelly A. Harrison $(1993,1996)$
Assistant Professor of Athletic Training
B.S., 1988, University of Delaware
M.S., 1989, Ohio University

John M. Hauth $(1985,2004)$
Associate Professor of Athletic Training
B.S., 1983, East Stroudsburg University
M.S., 1984, University of Arizona

Ed.D., 2001, University of Sarasota
T. Storm Heter $(2005,2005)$

Assistant Professor of Philosophy
B.A., 1997, University of Illinois
M.A., 1999, University of Illinois

Ph.D., 2003, University of Illinois
Kathleen S. Hillman $(1992,1997)$
Professor of Health
B.S., 1975, Ohio University
M.Ed., 1979, Xavier University

Ph.D., 1983, University of Toledo
M.P.H., 1999, East Stroudsburg University

Donna L. Hodge (1986, 1993)
Professor of Psychology
B.A., 1978, Connecticut College
M.A., 1981, University of Michigan

Ph.D., 1984, University of Michigan
Neil W. Hogan $(1970,1977)$
Professor of History
B.S., 1958, John Carroll University
M.A., 1965, John Carroll University

Ph.D., 1971, Ohio State University
Chin Hu $(2006,2006)$
Assistant Professor of Sociology B.A., 1990, National Taiwan University
M.A., 1997, Syracuse University
M.S., 1998, Syracuse University

Ph.D., 1999, Syracuse University
Shixiong Hu $(2004,2004)$
Assistant Professor of Geography
B.A., 1990, Henan University
M.S. 1995, South China Normal University

Ph.D., 2004, State University of New York at Buffalo
Jane E. Huffman $(1986,1995)$
Professor of Biological Sciences
B.A., 1973, University of Connecticut
M.S., 1976, University of Connecticut

Ph.D., 1983, Rutgers University
James Hunt $(2006,2006)$
Assistant Professor of Biological Sciences
B.S., 1988, University of Rochester

Ph.D., 1996, University of California
Ramona Hylton $(1999,1999)$
Assistant Professor, Librarian
B.A., 1979, Spelman College
M.S., 1983, Long Island University

Patricia J. Jersey $(1974,1991)$
Distinguished Associate Professor, Librarian
B.S., 1968, West Virginia University
M.L.S., 1969, University of Pittsburgh

Cert. of Advanced; Studies in Library Science, 1990, University of Pittsburgh

Jerilyn Jewett-Smith (2001, 2001)
Associate Professor of Biological Sciences
B.A., 1977, University of South Florida, Tampa
M.S. 1983, University of South Florida

Ph.D., 1989, University of Texas at Austin
Teresa Michelle Jones-Wilson (2000, 2005)
Associate Professor of Chemistry
B.S., 1988, Lafayette College
M.A., 1990, Washington University

Ph.D., 1995, Washington University
Mamadou K. Kane $(1973,1982)$
Associate Professor of Economics
B.A., 1970, New York University
M.A., 1972, New York University

Jonathan Keiter (2005, 2005)
Assistant Professor of Mathematics
B.A., 1995, Wittenberg University
M.S., 1999, University of Connecticut

Ph.D., 2003, University of Connecticut
Paula M. Kelberman (1990, 1999)
Professor of Early Childhood and Elementary Education
B.A., 1973, Douglass College
M.Ed., 1975, Rutgers University

Ed.D., 1988, Rutgers University
Martha S. Kellow $(1991,1996)$
Associate Professor of Early Childhood and Elementary Education
B.S.E.D., 1975, Bloomsburg University
M.S., 1980, Bloomsburg University

Ph.D., 1990, University of Pennsylvania
Richard Kelly $(2000,2005)$
Associate Professor of Chemistry
B.S., 1979, Davidson College

Ph.D., 1984, University of Vermont

## Patricia Kennedy $(\mathbf{2 0 0 5}, 2005)$

Assistant Professor of Communication Studies
B.A., 1971, State University of New York / Oneonta
J.D., 1981, Syracuse University

John Kercsmar $(1989,1995)$
Professor of Business Management
B.B.A., 1971, University of Texas at El Paso
M.B.A., 1981, University of Houston

Ph.D., 1985, University of Houston

Irina Khusid $(2006,2006)$
Assistant Professor of Psychology
B.A., 1998, Rhode Island College
M.A., 2000, Rhode Island College

Haklin Kimm $(1999,2006)$
Professor of Computer Science
B.S., 1979, Korea University at Seoul
M.S., 1984, University of Oklahoma

Ph.D., 1988, University of Oklahoma
Maria Kitchens-Kintz $(2002,2002)$
Assistant Professor of Biological Sciences
B.S., 1991, State University of West Georgia

Ph.D., 1999, University of South Carolina

## Stephen Koehn $(2006,2006)$

Assistant Professor of Media Communications and Technology
B.A., 1981, Virginia Polytechnic \& State University
M.A., 1993, Pepperdine University

Ph.D., 1997, West Virginia University
Pamela Kramer $(1991,2001)$
Professor of Early Childhood and Elementary
Education
B.A., 1978, Marian College
M.A., 1982, Kean College

Ed.D., 1994, Lehigh University
John Kraybill-Greggo (2004, 2004)
Assistant Professor of Sociology
B.S.W., 1984, Mansfield University of Pennsylvania
M.S.W., 1986, Marywood College

Ph.D., 2004, Rutgers University
Caroline P. Kuchinski $(1992,2003)$
Associate Professor of Physical Education
B.S., 1980, East Stroudsburg University
M.S., 1986, East Stroudsburg University

Ph.D., 2003, Marywood University
Thomas C. LaDuke (1997, 2000)
Associate Professor of Biological Sciences
B.S., 1981, Michigan State University
M.S., 1983, Michigan State University

Ph.D., 1991, City University of New York
Miharu Lane $(1998,1998)$
Assistant Professor of Art
B.A., 1991, East Stroudsburg University
M.F.A., 1995, Marywood University

Douglas Lare $(1998,2003)$
Associate Professor of Professional and Secondary Education
B.A., 1976, Macalester College
M.Ed., 1979, Harvard Graduate School of Education

Ed.D., 1995, Lehigh University

David A. Larrabee $(1995,1999)$
Associate Professor of Physics
B.S., 1976, Cornell University
M.S., 1978, Cornell University
M.B.A., 1993, Philadelphia College of Textiles
and Science
Ph.D., 1980, Cornell University
Gerard LaSalle $(2006,2006)$
Assistant Professor of Sociology
Ph.D., 2004, City University of New York
Mary Kay Lavelle $(1990,1990)$
Assistant Professor, Librarian
B.A., 1975, Marywood College
M.A., 1977, University of Denver
M.B.A., 1982, Wilkes College

Cynthia Leenerts $(\mathbf{2 0 0 5}, 2005)$
Assistant Professor of English
B.A., 1987, George Mason University
M.A., 1990, George Mason University

Ph.D., 1997, George Washington University
Donna L. Leitner $(1998,2004)$
Associate Professor and Psychologist of Counseling and Psychological Services
B.A., 1982, Lehigh University
M.A., 1985, Lehigh University
M.S., 1991, University of Pennsylvania

Ph.D., 1999, University of Georgia

## Denise LePage $(1992,1997)$

Associate Professor of Early Childhood and Elementary Education
B.S., 1975, Kutztown University of Pennsylvania
M.Ed., 1977, Kutztown University of Pennsylvania

Ed.D., 1991, Lehigh University

## Paul Lippert $(1985,1998)$

Professor of Communication Studies
B.A., 1977, University of Michigan
M.A., 1980, New York University

Ph.D., 1990, New York University
William M. Loffredo $(1994,2002)$
Professor of Chemistry
B.S., 1982, Lebanon Valley College;

Ph.D., 1988, Ohio State University
Richard Madigan $(1995,1999)$
Associate Professor of English
B.A., 1989, University of Florida
M.F.A., 1990, Indiana University

Robert E. Marmelstein $\mathbf{( 2 0 0 5 , 2 0 0 5 )}$
Associate Professor of Computer Science
B.S., 1985, Michigan Technological University
M.S., 1991, University of Lowell

Ph.D., 1999, Air Force Institute of Technology

James F. Maroney $(2002,2006)$
Associate Professor of Music
B.S., 1978, Western Connecticut State College
M.M., 1981, Ithaca College

Artist Diploma, 1987, Hartt School, University
of Hartford
Ed.D., 1995, Teachers College, Columbia University
Kenneth M. Mash $(1997,2006)$
Professor of Political Science
B.A., 1987, Queens College, City University of N.Y.
M.A., 1990, Penn State University

Ph.D., 1997, Penn State University
Terry L. Master $(1992,1998)$
Professor of Biological Sciences
B.S., 1976, Muhlenberg College
M.S., 1980, East Stroudsburg University

Ph.D., 1989, Lehigh University
Claranne Mathiesen $(1995,1995)$
Assistant Professor of Nursing B.S., 1985, East Stroudsburg University M.S., 1993, Villanova University

Mary Ann Matras $(1988,1998)$
Professor of Mathematics
B.S., 1970, University of Illinois
M.A., 1974, Governors State University

Ph.D., 1988, University of Maryland
Andrea McClanahan $(2003,2003)$
Assistant Professor of Communication Studies
B.A., 1998, Bloomsburg University
M.A., 1999, Ball State University

Ph.D., 2003, Ohio University
Michael J. McCorkle $(2003,2003)$
Assistant Professor of Hotel, Restaurant and Tourism Management
B.S., 1975, Rutgers University
M.B.A., 1985, University of New Haven

Ed.D., 1998, University of Kentucky
Kim L. McKay $(1992,1995)$
Associate Professor of English
B.S., 1984, East Stroudsburg University
M.A., 1987, Lehigh University

Ph.D., 1990, Lehigh University
Robert M. McKenzie $(1992,2000)$
Professor of Communication Studies
B.A., 1984, Millersville University
M.A., 1987, Penn State University

Ph.D., 1990, Penn State University
Maureen McLaughlin $(1990,1996)$
Professor of Reading
B.A., 1973, Marywood College
M.S., 1976, Marywood College

Ed.D., 1983, Boston University

Robert A. McMullin (1987, 2001)
Professor of Hotel, Restaurant and Tourism Management
B.S., 1980, Bloomsburg University of Pennsylvania
M.B.A., 1987, Philadelphia College
of Textile \& Science
M.A., 1994, East Stroudsburg University

Ed.D., 1998, Widener University
Ronald Meyers $(1966,1970)$
Professor of English
A.B., 1957, Brooklyn College
A.M., 1959, Columbia University

Ph.D., 1963, New York University
Barbara Miccio $(1997,2006)$
Professor of Academic Enrichment and Learning
B.A., 1984, Rutgers College
M.A., 1987, Radford University

Ph.D., 1993, The American University
Joseph L. Miele (1990, 1995)
Associate Professor of Psychology
B.A., 1982, Rider College

Ph.D., 1986, SUNY at Albany
Raymond G. Milewski $(1979,1987)$
Associate Professor of Biological Sciences
B.S., 1970, University of Pittsburgh

Ph.D., 1976, University of Pittsburgh
Carol Miller $(1991,1997)$
Associate Professor of Hotel, Restaurant and Tourism Management
B.S., 1981, East Stroudsburg University
M.B.A., 1990, Seton Hall University

Edith F. Miller (1987, 2000)
Professor, Academic Enrichment and Learning,
and Director of Disability Services
B.A., 1968, Gettysburg College
M.Ed., 1985, East Stroudsburg University

Ed.D., 1994, Temple University
Robert W. Miller $(1977,1985)$
Distinguished Professor of Music
B.M., 1973, University of Michigan
M.M., 1974, Peabody Conservatory of Music
D.M.A., 1979, Peabody Institute of Johns Hopkins University

Ann F. Millett (1987, 1993)
Assistant Professor of Speech Pathology and Audiology
B.S., 1979, College of St. Rose
M.S., 1980, College of St. Rose

## Fred Misurella $(1978,1985)$

Professor of English
B.A., 1962, Montclair State College
M.A., 1963, University of lowa

Ph.D., 1975, University of lowa

Irene Mitchel $(1961,1969)$
Professor of Art
B.S., 1954, Kutztown University of Pennsylvania
M.S., 1958, Penn State University
D.Ed., 1968, Penn State University

Gavin Moir $(2005,2005)$
Assistant Professor of Exercise Science
B.S., 1996, Leicester University
M.M.S, 1997, The University of Sheffield

Ph.D., 2004, University of Edinburgh
Jesse C. Moore ( 1975,1980 )
Distinguished Professor of Reading
B.A., 1964, Ursinus College
M.A., 1966, Lehigh University
D.Ed., 1974, Lehigh University

Mary Ann Moore (1999, 2006)
Associate Professor of Physics
B.M., 1973, State University at Potsdam
M.S., 1976, University of Tennessee
B.A., 1983, University of Tennessee

Ph.D., 1988, University of Tennessee
Albert J. Moranville $(1986,2003)$
Associate Professor of Hotel, Restaurant and Tourism Management
B.S., 1983, East Stroudsburg University
M.B.A., 1986, University of Scranton

Suzanne Mueller $(1972,1999)$
Professor of Physical Education
B.S., 1969, East Stroudsburg University
M.Ed., 1973, East Stroudsburg University
D.Ed., 1997, Lehigh University

Reto Muller $(2002,2002)$
Assistant Professor of Sociology
B.A., 1980, University of Massachusetts
M.A., 1984, Boston College

Ph.D., 1997, Boston College
Shawn Munford $(2006,2006)$
Instructor of Movement Activities and Lifetime Fitness B.S., 2001, Bloomsburg University
M.S., 2004, East Stroudsburg University

Michael Muth (1990, 1990)
Assistant Professor of Sociology
B.G.S., 1972, Ohio University
J.D., 1975, University of North Carolina School of Law

Jacqueline Myrie-Nichols $\mathbf{( 2 0 0 6 , 2 0 0 6 )}$
Assistant Professor of Nursing
A.A.S., 1969, Bronx Community College
B.A., 1982, Long Island University
M.S., 1987, Central Michigan University
M.S.N., 1997, State University of New York, Brooklyn

Marilyn Narey $(2006,2006)$
Assistant Professor of Early Childhood and Elementary Education
B.S., 1977, Indiana University of Pennsylvania
M.S., 2001, Duquesne University

Pattabiraman Neelakantan $(1992,2002)$
Professor of Economics
B.S., 1981, Indian Institute of Technology
M.S., 1983, National Institute for Training
in Industrial Engineering
Ph.D., 1992, State University of New York, Buffalo
Gary Neist $(2004,2004)$
Assistant Professor of Physical Education
B.A., 1969, Luther College
M.A., 1975, Minnesota State University at Mankato

Ph.D., University of Nebraska at Lincoln
Richard Nyamwange $(1987,2003)$
Professor of Economics
B.A., 1978, Jersey City State College
B.S., 1979, Jersey City State College
M.B.A., 1980, Long Island University
M.A., 1982, Long Island University

Ph.D., 1991, Fordham University
Susan P. O'Hearn $(1992,2004)$
Professor of Theatre
B.S., 1980, East Stroudsburg University;
M.F.A., 1985, Catholic University

Joni Oye-Benintende $(1998,1998)$
Assistant Professor of Art
B.F.F., 1972, Washington University;
M.F.A., 1985, Tama Fine Art University, Japan

Jane Page (1984, 2000)
Professor of Speech Pathology and Audiology
A.B., 1962, Hunter College
M.S., 1964, University of Michigan

Ph.D., 1991, Temple University
John Paolini $(2006,2006)$
Instructor of Athletics
A.S., 1999, Niagara County Community College
B.S., 2002, SUNY at Cortland
M.S., 2005, East Stroudsburg University

Paula Parker $(2005,2005)$
Assistant Professor of Sport Studies
B.A., 1999, The University of North Carolina at Chapel Hill
M.A., 2005, West Virginia University

Ed.D., 2005, West Virginia University
S. Hooshang Pazaki $(2005,2005)$

Associate Professor of Sociology
B.S., 1977, University of Esfahan
M.S., 1981, University of Missouri-Columbia

Ph.D., 1992, University of Missouri-Columbia

Richard F. Pekala $(1988,1997)$
Professor of Biological Sciences
B.S., 1974, University of Vermont
B.A., 1978, North Adams College
M.S., 1981, University of Vermont

Ph.D., 1983, University of Massachusetts
Fernando Perez (1991, 1991)
Assistant Professor, Academic Enrichment and Learning/Director of Student Support Services
B.A., 1974, Johnson State College
M.S., 1982, Florida State University

Margaret A. Persia $(1992,1994)$
Assistant Professor of Hotel, Restaurant and Tourism Management
B.A., 1973, Penn State University
M.S., 1990, Penn State University

Ph.D., 1994, Clemson University
Laurel Pierangeli $(\mathbf{2 0 0 6}, 2006)$
Associate Professor of Nursing
R.N., 1974, University of Pennsylvania
B.S., 1981, Marywood University
M.S., 1987, SUNY at Binghamton

Ph.D., 2006, SUNY at Binghamton
Patricia Anne Pinciotti $(1985,1995)$
Professor of Early Childhood and Elementary
Education
B.A., 1971, Edgecliff College

Ed.M., 1979, Rutgers University
Ed.D., 1982, Rutgers University
Suzanne Fischer Prestoy $(2006,2006)$
Associate Professor of Nursing
B.S., 1978, Wilkes University
M.S.N., 1980, University of Pennsylvania

Ph.D., 1993, New York University
Janet Primrose $(1992,1992)$
Assistant Professor of Nursing
B.S., 1977, East Stroudsburg University
M.S., 1981, Northern Illinois University

Deborah E. Prince $(1981,1993)$
Distinguished Professor of Mathematics
B.A., 1965, College of Wooster
M.A., 1966, University of Kansas

Ph.D., 1970, University of Kansas
Peter Pruim $(1997,2002)$
Associate Professor of Philosophy
B.A., 1976, Hope College
M.A., 1985, University of Wisconsin at Madison

Ph.D., 1989, University of Wisconsin at Madison

Frank Michael Pullo $(1974,1993)$
Professor of Sport Studies
B.S., 1973, East Stroudsburg University
M.Ed., 1974, East Stroudsburg University

Ed.D., 1989, Temple University
Samuel E. Quainoo $(1998,2002)$
Associate Professor of Political Science
B.A., 1982, University of Ghana

ICSA, Level 1, 1990, England
M.A., 1993, SUNY at Binghamton

Ph.D., 1996, SUNY at Binghamton
Rhonda Ray $(1989,2001)$
Professor of English
B.A., 1974, North Carolina State University
M.A., 1986, Emory University

Ph.D., 1989, Emory University
Kimberly Razzano $(2004,2006)$
Assistant Professor of Health
B.S., 1993, Springfield College

MPH, 1994, East Stroudsburg University
David C. Rheinheimer $(1983,2000)$
Professor of Academic Enrichment and Learning
B.S., 1970, Drexel University
M.S., 1978, East Stroudsburg University
M.S., 1989, Rutgers University

Ed.D., 1999, Rutgers University
Linda K. Rogers $(1998,2003)$
Associate Professor of Early Childhood and Elementary Education
B.A., 1969, Blackburn College
M.S., 1988, University of Scranton

Ed.D., 1997, SUNY at Binghamton
Susan Elaine Rogers $(1978,1985)$
Professor of Recreation and Leisure Services Management
B.S., 1972, North Georgia College M.S.Ed., 1975, Northern Illinois University M.S., 2004, East Stroudsburg University
D.Ed., 1978, University of Oregon

Stephanie A. Romano $(2002,2002)$
Assistant Professor of Reading
B.S., 1972, Shippensburg University
M.Ed., 1984, East Stroudsburg University

Ed.D., 1999, Lehigh University
Gerard Rozea $(2006,2006)$
Assistant Professor of Athletic Training B.S., 1996, East Stroudsburg University M.S., 1997, East Stroudsburg University

Ph.D., 2005, University of Florida

Jeffrey Ruth $(\mathbf{2 0 0 1}, 2005)$
Associate Professor of Foreign Languages
B.A., 1981, Northwestern University
M.A., 1990, New York University

Ph.D., 2002, City University of New York
Alison Rutter $(2005,2005)$
Assistant Professor of Early Childhood and Elementary Education
B.A., 1978, Vassar College
M.A., 1994, Columbia University
M.Ed., 1994, Columbia University

Ed.D., 1999, Columbia University
Gina Scala $(1993,2002)$
Professor of Special Education and Rehabilitation B.S., 1979, Bloomsburg University of Pennsylvania
M.Ed., 1981, Lehigh University

Ed.D., 1988, Lehigh University
Jeffrey T. Scheetz $(2003,2003)$
Assistant Professor of Professional
and Secondary Education
B.A., 1971, Montclair State College
M.A., 1980, Fordham University

Ed.D., 1990, Fordham University
N. Paul Schembari $(1991,2001)$

Professor of Computer Science
B.S., 1984, Long Island University
M.A., 1987, Syracuse University
M.Phil., 1989, Syracuse University

Ph.D., 1991, Syracuse University
Robert F. Schramm $(1970,1975)$
Distinguished Professor of Chemistry
B.S., 1964, St. Joseph's College

Ph.D., 1969, University of Pennsylvania
Bradford S. Seid (1980, 1996)
Professor of Recreation and Leisure Services
Management
B.S., 1976, SUNY at Albany
M.S., 1980, Michigan State University

Ed.D., 1994, Temple University
Angelo Senese $(2005,2005)$
Assistant Professor of Professional and Secondary Education
B.S., 1974, Central Connecticut State College
M.A., 1985, Kean University

Ed.D., 1994, Nova Southeastern University
Alan A. Shaffer $(1999,2004)$
Associate Professor of Chemistry
B.A., 1973, Otterbein College
M.S., 1975, Miami University of Ohio

Ph.D., 1988, Memphis State University

Mertice M. Shane $(1974,1978)$
Associate Professor of Athletic Training B.S., 1973, University of Evansville M.A.Ed., 1974, Tennessee State University M.A., 1991, Marywood University

Jerome W. Sheska $(1988,1996)$
Associate Professor of Sport Studies
B.S., 1968, East Stroudsburg University
M.Ed., 1981, East Stroudsburg University

Niandong Shi $(1992,2003)$
Professor of Mathematics
M.S., 1982, Henon University

Ph.D., 1992, University of Illinois at Chicago
Steven Shive $(2003,2003)$
Assistant Professor of Health
B.S., 1985 , University of Scranton
M.T.S., 1996, Berkley Seminary
M.A., 1996, Fordham University
M.P.H., 1997, East Stroudsburg University

Ph.D., 2000, Temple University
Colleen Shotwell $(2002,2002)$
Assistant Athletic Trainer
B.S.,1997, University of Pittsburgh
M.S., 2000, University of Pittsburgh

Elaine M. Shuey $(1984,1996)$
Professor of Speech Pathology and Audiology
B.S., 1978, Clarion University of Pennsylvania
M.A., 1980, Kent State University

Ph.D., 1990, Kent State University
Q. Brian Sickels (1993, 2000)

Associate Professor of Theatre
B.A., 1975, Central Michigan University
M.F.A., 1980, Michigan State University

Eugenia Skirta $\mathbf{( 2 0 0 5 , ~ 2 0 0 5 )}$
Assistant Professor of Mathematics
Ph.D., 1983, Kharkov State University
Patricia S. Smeaton $(1994,2004)$
Professor of Professional and Secondary Education
B.S., 1971, SUNY at Brockport
M.Ed., 1977, Millersville University of Pennsylvania

Ed.D., 1993, Lehigh University
Elizabeth Leigh Smith $(\mathbf{2 0 0 2}, 2002)$
Assistant Professor of English
B.A., 1991, Rice University
M.A., 1994, University of Houston

Ph.D., 1999, University of Houston
John S. Smith $(1998,1998)$
Assistant Professor of Biological Sciences
B.A., 1975, University of South Florida
M.A., 1980, University of South Florida

Ph.D., 1990, University of Texas at Austin

Robert Smith (1993, 1993)
Associate Professor of Physical Education
B.S., 1973, East Stroudsburg University
M.Ed., 1985, East Stroudsburg University

Ph.D., 1998, University of lowa
Carey J. Snyder (1987, 1994)
Associate Professor, Associate Athletic Director
B.S., 1976, Springfield College
M.A., 1981, University of Southern California

Ph.D., 1985, University of Southern California
Beth Sockman $(2006,2006)$
Assistant Professor of Media Communications and Technology
B.A., 1991, University of Pennsylvania

Lawrence Squeri $(1988,1988)$
Professor of History
B.A., 1964, Fordham University
M.A., 1965, Columbia University

Ph.D., 1976, University of Pennsylvania
M.A., 1986, Temple University

Lucy E. Stanovick $(2003,2003)$
Assistant Professor of English, English Education
B.S., 1987, Shippensburg University
M.Ed., 1995, University of Missouri - Columbia

Ph.D., 2002, University of Missouri - Columbia
Michelle P. Star $(1992,1997)$
Assistant Professor, Librarian
B.A., 1980, SUNY at Oswego
M.L.S., 1989, Clarion University of Pennsylvania

Daniel E. Steere (1995, 2005)
Professor of Special Education and Rehabilitation
B.S., 1977, Southern Connecticut State
M.Ed., 1978, Rutgers University

Ph.D., 1987, University of Connecticut
Craig Kee Strete (1999, 1999)
Assistant Professor of English
B.A., 1975, Wayne State University;
M.F.A., 1978, University of California at Irvine

Georgios Stylianides $(2006,2006)$
Associate Professor of Exercise Science
B.S., 1987, University of Tennessee
M.S., 1988, Purdue University
M.S., 1997, Illinois State University

Ph.D., 1998, University of Toledo
Rhonda Sutton $(2006,2006)$
Assistant Professor of Reading
B.S., 1984, Hunter College
M.S., 1989, Hunter College

Ph.D., 2005, Nova Southeastern University

Sharon Switzer $(2004,2004)$
Assistant Professor of Early Childhood and
Elementary Education
B.A., 1969, Fontbonne College
M.Ed., 1975, Lesley College

Ph.D., 2003, Lesley College
Monica Thomas (2005, 2005)
Assistant Professor of Physical Education
B.S., 1990, Slippery Rock University
M.S., 1994, Elmira College

Ph.D., 2005, Marywood University
George W. M. Thompson Jr. $(1972,1975)$
Professor of Philosophy and Religious Studies
B.A., 1954, Virginia Union University
M.Div., 1957, Southern Baptist Theological Seminary
M.A., 1962, University of Chicago

Ph.D., 1974, University of Chicago
Daniel Tripp $(\mathbf{2 0 0 5}, 2005)$
Assistant Professor of English
B.A., 1996, State University of New York at Buffalo
M.A., 1998, West Virginia University

Jack H. Truschel $(1989,2004)$
Associate Professor, Academic Enrichment and Learning/Undeclared Major Adviser
B.A., 1981, King's College
M.A., 1983, M.P.A., 1985, Marywood College

Ed.D., 1996, Temple University
Psy.D., 2004, Philadelphia College of Osteopathic
Medicine
Margot Vagliardo (2000, 2005)
Associate Professor of Early Childhood and
Elementary Education
B.S., 1970, SUNY at Oneonta
M.S., 1974, SUNY at Oneonta

Ed.D., 2000, SUNY at Binghamton
Nancy P. VanArsdale $(1990,1999)$
Professor of English
B.A., 1979, Bucknell University
M.A., 1981, New York University

Ph.D., 1991, New York University
Linda Van Meter $(1994,1995)$
Assistant Professor and Psychologist of Counseling and Psychological Services
B.A., 1972, East Stroudsburg University
M.A., 1985, Marywood College

Keith Vanic $(2005,2005)$
Assistant Professor of Athletic Training B.S., 1994, East Stroudsburg University
M.S., 1996, James Madison University

Ph.D., 1998, University of Southern Mississippi

Angela Vauter $(1989,2000)$
Associate Professor of Recreation and Leisure
Services Management
B.A., 1974, Wilkes College

Ed.M., 1981, Temple University
Ed.D., 1998, Temple University
Ralph Vitello $(1989,1989)$
Associate Professor of Foreign Languages
B.A., 1971, SUNY at Buffalo
M.Phil., 1976, Yale University

Ph.D., 1980, Yale University
Victor S. Walker (1987, 1991)
Associate Professor of English
B.S., 1969, University of Illinois
M.F.A., 1973, Bowling Green State University

Matthew Wallace $(2003,2003)$
Assistant Professor of Biology
B.S., 1995, University of Connecticut
M.S., 1999, North Carolina State University

Ph.D., 2003, North Carolina State University
Charles R. Warner (1991, 1999)
Professor of Communication Studies
B.A., 1978, Kent State University
M.A., 1983, Kent State University

Ph.D., 1993, Bowling Green State University
Faith Waters $(1989,1994)$
Professor of Professional and Secondary Education
B.S., 1971, Bucknell University
M.Ed., 1973, Trenton State University

Ed.D., 1983, University of Pennsylvania
Laura Waters $(2006,2006)$
Assistant Professor of Nursing
B.S.N., 1983, College Misericordia
M.S., 1996, Wilkes University

Martin Weatherston $(1992,2003)$
Professor of Philosophy and Religious Studies
B.A., 1979, University of Toronto
M.A., 1982, University of Toronto

Ph.D., 1988, University of Toronto
Jeffrey Weber $(2005,2005)$
Assistant Professor of Political Science
B.A., 1983, Citadel Military College of South Carolina
M.P.A., 1993, Western Kentucky University

Ph.D., 1999, Pennsylvania State University
Herbert M. Weigand $(1986,2000)$
Professor of Art, Director, Madelon Powers Art Gallery
B.A., 1973, Southampton College
M.F.A., 1979, Syracuse University

Ph.D., 1984, Penn State University

Richard K. Wesp $(1997,2006)$
Professor of Psychology
B.A., 1972, Washington College
M.A., 1975, West Virginia University

Ph.D., 1978, West Virginia University
Mollie B. Whalen $(1992,2001)$
Distinguished Professor and Coordinator of Women's
Studies, Director of Women's Center
B.A., 1978, East Stroudsburg University
M.A., 1980, Fairleigh Dickinson University

Ph.D., 1992, New York University
Wendy Wheeler $(2006,2006)$
Instructor of Athletics
B.A., 2000, University of Kentucky
M.S., 2004, West Virginia University

Howard Whidden $(2002,2002)$
Assistant Professor of Biology
B.S., 1981, Hobart College
M.S., 1987, University of Vermont
M.S., 1989, University of Florida, Gainsville

Ph.D., 1995, University of Massachusetts
Gene D. White Jr. $\mathbf{( 2 0 0 0 , ~ 2 0 0 5 )}$
Associate Professor of Physical Education
B.S., 1975, West Chester University
M.Ed., 1980, West Chester University

Ph.D., 1999, Temple University
Jennifer White $(2005,2005)$
Assistant Professor of Biological Services
B.A., 1986, Dartmouth College

Ph.D., 1993, State University of New York / Stony Brook
Andrew Whitehead $(2002,2002)$
Assistant Professor of Early Childhood and Elementary Education
B.A., 1986, Pennsylvania State University
M.A., 1993, Marywood University
M.S., 1996, Marywood University

Ph.D., 2002, Marywood University
Tracy A. Whitford $(1995,1995)$
Assistant Professor of Biological Sciences
B.S., 1984, Wright State University

Ph.D., 1993, SUNY at Stony Brook
Alla L. Wilson $(2006,2006)$
Associate Professor of Business Management
B.S., 1975, Illinois College of Optometry
M.B.A., 1988, University of Wisconsin-Milwaukee

Ph.D., 1996, University of Wisconsin-Milwaukee
Craig A. Wilson $(1992,1997)$
Associate Professor of Early Childhood and Elementary Education
B.S., 1971, Baptist Bible College
M.A., 1982, University of Toledo

Ph.D., 1988, University of Toledo

Martin W. Wilson $(2002,2006)$
Associate Professor of History
B.A., 1976, Lock Haven University
M.A., 1984, East Stroudsburg University

Ph.D., 2000, Temple University
Paul B. Wilson (2000, 2000)
Assistant Professor of Biological Sciences
B.S., 1988, Lafayette College

Ph.D., 1996, Washington University
Terry C. Wilson $(2004,2004)$
Associate Professor of Business Management
B.B.A., 1971, University of Miami
M.A., 1973, University of South Florida

Ph.D., 1976, Michigan State University
Chad A. Witmer $(2000,2005)$
Assistant Professor of Movement Activities and Lifetime Fitness
B.S., 1995, East Stroudsburg University
M.Ed., 1998, East Stroudsburg University

Wenjie Yan $(1993,2006)$
Professor of Communication Studies
B.A., 1984, 1986, Shanghai Int'I Studies University
M.A., 1990, SUNY at Buffalo

Ph.D., 1992, SUNY at Buffalo
Jennifer K. Young $(2002,2002)$
Assistant Professor, Counseling and Psychological Services
B.A., 1994, Marist College
M.A., 1998, Suffolk University

Ph.D., 2002, Suffolk University
William A. Yurvati $(2003,2003)$
Assistant Professor, Librarian
B.A., 1982, Kutztown University of Pennsylvania
M.S., 1984, Millersville University
M.L.I.S., 2003, University of Pittsburgh

Andrzej Zarach $(1991,1997)$
Professor of Mathematics
M.S., 1971, Warsaw University

Ph.D., 1973, Warsaw University
Cem Zeytinoglu $(2006,2006)$
Assistant Professor of Communication Studies
B.A., 1993, Anadolu University
M.A., 1995, Anadolu University
M.A., 1999, Morehead State University
A.B.D., 2004, Duquesne University

## Faculty Emeriti

This recognition is awarded for outstanding service during the faculty members' University Tenure. The criteria considered for Faculty Emeriti rank include the following:

- a minimum of 10 years of service at ESU;
- retirement from the State System of Higher Education;
- recommendation of the appropriate ESU department;
- recommendation of the Faculty Emeriti Committee; and
- Presidential approval.

The following list represents faculty awarded the rank as of May 2007.

Paul Allen III
Neil Anderson
Angella Angelini
Arthur E. Arnold, II
Mary Sue Balducci
Mary E. Banzhof
Charles O. Baughman
John J. Baxevanis
M. Paul Beaty, Jr.

Peter Bedrosian
Alvin C. Berger
Anne Berkman
Donald R. Bortz
Lester J. Bowers
Joseph Brennan
Philip J. Briggs
Blossom S. Brooks
Helen G. Brown
Deidre Burnstine
Barbara J. Burris
William Burt
Jone J. Bush
Orrin Cafferty
David S. Campbell
Roseanne Cappella
Angelo Carniel
Joseph Catanzaro
Cecile B. Champagne
C. S. Cheng

Cheng Y. Cheng
Merlyn Clarke
Charles Cole
John H. Condit
Quentin P. Currie
Edward P. Demansky
Richard L. DeSchriver
Donna Deutsch
Albert DiJohnson
Fred Dixon
Nova S. Dowden
John R. Eiler
Thomas Eshelman
Lura E. Evans
Frederick Fedorko
Judith Feller
Walter Feller
Jan Felshin
Jack D. Ferrara
Donald P. Fetterman

Larry Fisher James Leiding
David S. Forth
Henry N. Fremount
Beverly A. Fuller
Beverly H. Gaglione
Janet Garman
John Garman
Marion Gates
Norman Gelber
William E. Gessner
Terry C. Giffel
Arnold J. Goldfuss
Aurora A. Gonzalez
David Gumpper
Bruce L. Haase
John Haddon
Wilbur Hahn
Harrison G. Hartman
Mary Hartman
Glenn Hayes
James N. J. Henwood
Edward Hogan
Aimee Hossler
Paul Houle
Ardath E. Houser
Robert Howell
Harold Jacobs
Joseph Jarvis
Robert H. Jones
Lewis A. Judy
Karen Karner
Stuart Katzman
Theodore Keller
Michael L. Kelly
R. Clifford Kelsey
C. David Kern

Joseph B. Kernaghan
Peter Kidman
A. Beatrice Kingsbury

Bruno Klaus
Joseph Kovarick
David B. Kresge
Mark Eric Kruger
Jamie Kushman
John B. Lalley
Linda J. Lambert
George A. Learn, Jr.
Hamilton H.T. Lee

Richard W. Leland
Michael Liberman
Nettie K. Lind
Daniel G. Luongo
Charles Maclay
Robert F. Macmillan
Arthur Mark
Mary McClanahan
Florence McCormick
Nina McCullough
Robert A. McDonald
Kathryn B. McFarland
John M. McIntyre
John McLaughlin
Rosemary McMahon
John A. Mikula
Mary Ann Mogus
Tara N. Mohfanz
Paul Morton
John Muncie
Betty Lou Murphy
Clarence J. Murphy
Theodore Newton
Barbara J. Oberlander
Arne L. Olson
Philip H. Pfatteicher
Cummings A. Piatt
John C. Pooley
Clifford Poutre
Mary Faith Puskar
Spas T. Raikin
Swamini Ramananda
Balakrishna Rao
Robert W. Reed
Charles R. Reese
Gwynne H. Reese
Ellis Riebel
Joanne Riebel
Peter Roche de Coppens
Sally A. Ross
Larry M. Rymon
Richard Salch
Maryanne Schumm
Richard L. Sheeley
Earl Shive
Joseph Shultz
Ha Shwe

Frank D. Sills
Neal Simpson
Kenneth Sisson
Dolores Smith
James A. Smith
Joanne L. Smith
Judith A. Smith
Elizabeth Snyder
Numa J. Snyder
Eugene S. Stine
Margaret Stish
Jane W. Stoddard
Nicholas Stowell
Robert Sutton
Robert T. Sweeney
Frank N. Tancredi
John R. Thatcher
David Trainer
Donald Tshudy
Carol Sue Underwood
Raymond A. Vanderslice
Ouseph Varkey
Feno S. Volpe
Lois Wagner
Timothy Wagner
Robert C. Walker
J. Marguerite Wallace

Samuel P. Wallace
Berticia Waring
David C. Wartinbee
Michael W. Weaver
Herbert Weber
Clifford Wester
Mildred A. Wheatley
Charles F. Wieder
Barbara J. Wilke
Phyllis Williams
Robert L. Williams
Robert Willis
Florence J. Wills
Kurt Wimer
Kenneth Winfield
Clyde H. Witman
Mary Jane Wolbers
Leonard Zettlemoyer
Susan Ziegenfus
Leon Zinkler
Index
A
Academic Advisement ..... 36
Academic Dismissal/Suspension ..... 17, 32
Academic Enrichment and Learning ..... 36
Academic Faculty ..... 355-368
Academic Passport ..... 11
Academic Probation ..... 17, 32
Academic Programs \& Course Descriptions ..... 71-351
Academic Progress Policy ..... 30
Academic Regulations. ..... 15-20
Accounting (Business Management) ..... 109-114
Accreditation ..... 8-9
ACT 101 ..... 36
Administrative Personnel ..... 353
Admission ..... 10-14
Admission of Undergraduate Students to Graduate Courses ..... 14
Advanced Placement ..... 13
Air Force ROTC ..... 57
Allied Health Education (also, see Health) . ..... 214, 220
Alumni Association ..... 33
American Democracy Project ..... 55
Application Process ..... 27
Army ROTC ..... 57
Art ..... 71-74
Art and Design ..... 71
Asian Languages ..... 197
Associate of Science Degree ..... 45
Athletic Training ..... 75-82
Athletics ..... 33-34
ATM Services ..... 34
Attendance ..... 15
Auditing Courses ..... 16
B
Bachelor of Arts Degree ..... 45-46
Bachelor of Science Degree ..... 46-47
Biochemistry ..... 83, 126
Biological Sciences ..... 83-108
Biotechnology ..... 90, 108
Board of Governors ..... 352
Business Management ..... 109-114
C
Calendar ..... 4-5
Campus Activities Board ..... 34
Career Resources Center ..... 37
Chancellor's Office ..... 352
Changes of Registration ..... 15-16
Chemical Biotechnology ..... 108, 125
Chemistry ..... 115-126
Child Care Center ..... 37
Class Standing ..... 19
College-Level Exam Program (CLEP) ..... 13-14
College of Business, Management and Economics ..... 62-64
College of Education ..... 64-68
Communication Studies ..... 127-133
Community Band ..... 37
Community Dance Program ..... 37
Commuter Lounge ..... 37
Commuter Newsletter ..... 37
Commuter Parking ..... 42-43
Commuter Student Services ..... 37-38
Community Health (also, see Health) ..... 214, 221
Computer Science ..... 134-142
Computer Security ..... 134
Concert Choir ..... 37
Continuing Education ..... 57
Council of Trustees ..... 352
Counseling \& Psychological Services (CAPS) ..... 38
Course Credit ..... 49
Course Numbers ..... 48
Course Prefix Key ..... 70
Course Repeats ..... 16
Credits (maximum for B.A., B.S.) ..... 48
Criminal Justice Administration. ..... 143, 325-326
Cultural Activities ..... 41
D
Dance ..... 144-145
Dance, Community ..... 38
Deadline for Applying ..... 10
Degrees Offered ..... 45-47
Delinquent Accounts ..... 25
Disability Services ..... 41
Distributive Electives ..... 54
Diversity (see Office of Diversity \& Equal Opportunity) ..... 39-40
Double Degrees ..... 19
E
Early Childhood Education ..... 146-149
Earth and Space Science ..... 151-152
ESU Council of Trustees ..... 352
ESU Senior Administration ..... 353
ESU Senior Policy Administrators ..... 354
Economics ..... 153-157
Education, Elementary ..... 158-165
Education, Professional and Secondary ..... 294-299
Educational Trips ..... 38
Eligibility Requirements, Financial Aid ..... 27
Engineering Transfer Program ..... 166-167
English ..... 168-179
(372) Index
Environmental Studies ..... 90-91, 180
Equal Opportunity ..... 39
Exercise Physiology (also, Exercise Science)181, 186
Exercise Professional (also, Exercise Science) ...... 181 ..... 81
Exercise Science181-187
F
Faculty ..... 355-368
Faculty Emeriti ..... 369
Fees and Deposits ..... 21-26
Finance (Business Management) ..... 109-114
Financial Aid ..... 27-32
Financial Assistance ..... 28-29
Fitness Program ..... 188-192
Foreign Languages ..... 193-206
Foreign Language Competency ..... 52
Fraternities ..... 39
French ..... 193-206
Freshmen Applicants ..... 10
G
General Education Program ..... 53-55
General Information ..... 7-9
General Science ..... 207-208
Geography ..... 209-212
German ..... 195, 199-200
Gerontology Certificate Program ..... 213
Grade Reports ..... 16
Graduate Degrees ..... 47
Graduation Honors ..... 18
Graduation Requirements ..... 48
H
Harrisburg Internship Semester ..... 58
Health ..... 214-223
Health Education (also, see Health) ..... 214-215
Health Education Teacher Certification (also, see Health) ..... 216
Health Services ..... 43
Health Services Administration (see Health) 215-216
High School Access Program ..... 57
History ..... 224-229
Home Study ..... 48
Honors Program ..... 56
Hotel, Restaurant and Tourism Management230-234
Housing ..... 11, 22, 25, 35
Housing Information ..... 35
I
Incompletes ..... 16
Industrial Physics ..... 234
Intercollegiate Athletics. ..... 33-34
Interdisciplinary Studies ..... 234
International Programs ..... 58
International Students ..... 13
International Studies ..... 235
Internship Opportunities ..... 58
Italian ..... 200-201
Judicial and Student Commuter Affairs ..... 37
L
Latin ..... 201
Law School Express Admissions Program ..... 59
Learning Center ..... 39
Location ..... 9
M
Management ..... 109-114
Marine Science ..... 91, 103-108
Marine Science Consortium ..... 59
Marketing (Business Management) ..... 109-114
Mathematical Skills Competency ..... 49-51
Mathematics ..... 236-244
Meals ..... 22, 26
Media Communication and Technology ..... 245-248
Media Paraprofessional Program ..... 248
Medical Technology ..... 91, 248
Movement Activities and Lifetime Fitness (see Fitness Program) ..... 188-192
Music ..... 249-255
N
National Honor Societies ..... 20
National Student Exchange ..... 58
Non-Matriculating Students ..... 12-13
Notification of Admission ..... 10-11
Nursing ..... 256-265
0
Office of Diversity \& Equal Opportunity ..... 39-40
Orchestra Program ..... 37
Orientation ..... 35
Out-of-State Students ..... 25
P
Parking, Commuter. ..... 42
Payment Information ..... 25
Payment Policy ..... 21
Personal Interview ..... 12
Pennsylvania State System of Higher Education Board of Governors ..... 352
Pennsylvania State System of Higher Education Office of the Chancellor ..... 352
Philosophy and Religious Studies ..... 266-269
Physics ..... 279-286Podiatric Medicine Transfer Program86-87
Political Science
Program Offerings
Q
Quality Point System ..... 16
R
Radio Station ..... 35287-293 Student Government42
Physical Education Teacher Education
270-278
270-278
279 Physical Science ..... 36
Pre-Pharmacy Program ..... 116-126, 2
Student Handbook ..... 36
Professional and Secondary Education 294-299 Student Life ..... 33-44
Program Changes ..... 19 ..... 4260-69 Student Support Services
Programs for Academic Support 36, 39 Student Teaching ..... 67-6842
Psychology 300-308 Study Abroad
Public Health Administration 214-223 Summer School Enrollment ..... 31
Reading ..... 309-310
Readmission ..... 12
Recreation and Leisure Services Management ..... 311-315
Recreation Center Leagues. ..... 34
Refund Policies ..... 25
Rehabilitative Services ..... 316-318
Religious Life ..... 40
Residence Hall Association ..... 41
Residence Requirements ..... 13
Resident Status Guidelines ..... 23
Russian ..... 201-202
S
Scholarship Standing ..... 17
School of Arts and Sciences ..... $.60-62$
School of Health Sciences and Human Performance ..... 68-69
Second Bachelor's Degree. ..... 20
Senior Citizens ..... 13
Service Learning ..... 29, 56
Social Activities ..... 41
Social Studies ..... 319-320
Social Work Concentration ..... 320, 326-327
Sociology and Spanish ..... 328
Sociology ..... 321-327
Sororities ..... 39
Spanish ..... 193-196, 202-206, 328
Special Academic Opportunities ..... 57
Special Education and Rehabilitation ..... 329-334
Speech and Hearing Center ..... 41
Speech-Language Pathology ..... 335-339
Sport Management ..... 340-345
Sport Studies ..... 340-345
Standards of Behavior ..... 36
Summer Sessions ..... 25-26, 59
Summer Sessions Fees ..... 25
Summer Sophomore Seminar ..... 56
T
Teacher Certification ..... 65-68
Theatre ..... 346-349
Theatre Program ..... 42
Transfer Applicants ..... 11-12
Transfer of Credit ..... 11, 18
Transfer Student Housing ..... 11
Transportation ..... 42-43
Tuition ..... 21-26
Tutoring ..... 36, 39, 43
U
Undergraduate Catalog Policy ..... 18-19
University Academic Initiatives ..... 53-56
University Programs ..... 53-56
University Requirements ..... 48-52
University Store ..... 44
Upward Bound ..... 59
V
Veterans Affairs ..... 44
W
When to Apply ..... 10
Women's Center ..... 44
Women's Studies ..... 350-351

## Campus Map Key

Following is a key to campus buildings located in the map on the facing page.

1 DeNike Center for Human Services
2 LaRue Hall
3 Abeloff Center for the Performing Arts
4 One College Circle [President's Residence]

5 Reibman Administration
6 Gessner Science Hall
8 Computing Center
9 Stroud Hall
10 McGarry Communication Center
11 Eiler Martin Stadium
12 Rosenkrans Hall
13 Zimbar-Liljenstein Hall
14 Center for Hospitality Management
15 University Center
16 Facilities Management Complex
17 Utility Plant
18 Institutional Storeroom \& Garage
19 Dansbury Commons
20 D.G.S. Field Office
21 Facilities Management Annex
22 Flagler-Metzgar Center
23285 Normal Street [Upward Bound Center]
Laurel Residence Hall
Monroe Hall
Minsi Residence Hall
Shawnee Residence Hall
Linden Residence Hall
University Police Station
Hawthorn Residence Hall
Hemlock Residence Hall
Lenape Residence Hall
Koehler Fieldhouse \& Natatorium
34 Dave Carlyon Pavilion
35 Observatory
36 Kemp Library

37 Moore Biology Hall
38 Fine and Performing Arts Center
39208 Smith Street
40420 Normal Street
42106 Smith St. (Spangenburg) Farm Barn \& Storage
43 Mitterling Field Storage
45 Whitenight Field Storage
53103 Smith Street [United Campus Ministries]
54 University Apartments
55216 Smith Street
59 Joseph H. \& Mildred E. Beers Lecture Hall

96 Normal Street
434 Normal Street
411 Normal Street
427 Normal Street
162 Marguerite Street
417 Normal Street
432 Normal Street
68 The Henry A. Ahnert, Jr. Alumni Center (108 Smith St.)
69 Student Recreation Center
70 Science and Technology Center
72403 Normal Street
73428 Normal Street
74407 Normal Street

## East Stroudsburg University Campus Map



East Stroudsburg University of Pennsylvania
200 Prospect Street
A member of the Pennsylvania State System of Higher Education



[^0]:    * Summer 2008 dates subject to change

[^1]:    § Courses with the § symbol fulfill the requirements for Fine Arts.

[^2]:    § Courses with the § symbol fulfill the requirements for Fine Arts.
    $\neq$ Courses with the $\ddagger$ symbol fulfill the requirements for Performing Arts.

[^3]:    TOTAL CREDITS

[^4]:    TOTAL CREDITS

[^5]:    § Courses with the § symbol fulfill the requirements for Fine Arts.
    $\neq$ Courses with the $\ddagger$ symbol fulfill the requirements for Performing Arts.

[^6]:    § Courses with the § symbol fulfill the requirements for Fine Arts.
    $\neq$ Courses with the $\ddagger$ symbol fulfill the requirements for Performing Arts.

[^7]:    § Courses with the § symbol fulfill the requirements for Fine Arts.
    $\neq$ Courses with the $\ddagger$ symbol fulfill the requirements for Performing Arts.

[^8]:    * Workshop Courses

[^9]:    § Courses with the § symbol fulfill the requirements for Fine Arts.
    $\neq$ Courses with the $\neq$ symbol fulfill the requirements for Performing Arts.

[^10]:    § Courses with the § symbol fulfill the requirements for Fine Arts.
    $\ddagger$ Courses with the $\ddagger$ symbol fulfill the requirements for Performing Arts.

